



William Sims Bainbridge

Dynamic Secularization

Information Technology
and the Tension Between
Religion and Science

Dynamic Secularization

William Sims Bainbridge

Dynamic Secularization

Information Technology and the Tension
Between Religion and Science



Springer

William Sims Bainbridge
Arlington, VA, USA

ISBN 978-3-319-56501-9 ISBN 978-3-319-56502-6 (eBook)
DOI 10.1007/978-3-319-56502-6

Library of Congress Control Number: 2017940634

© Springer International Publishing AG 2017

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

Many pundits hoped that the Internet and the World Wide Web would unify humanity, yet they seem to be causing fragmentation. It is far too early to know if we have entered a dangerous new period of cultural, political, and military conflict such as that which poisoned the first half of the previous century, because the new information and communication technologies may be magnifying the images of real problems, rather than contributing to a growing global disaster. Many questions need to be asked, but they cannot be answered definitively until many paths toward answers have been explored. A great transition has begun, but we cannot yet predict the result. Are we headed toward the best or worst of times?

Googling “the best of times” with “the worst of times” reminds us they come from the 1859 novel *A Tale of Two Cities* by Charles Dickens, a novel that compared Paris with London during the French Revolution at the beginning of the Industrial Revolution. This book compares two realms of culture, religion, and science, early in the information revolution. Both Paris and London survived the eighteenth and nineteenth centuries, and even the more dangerous twentieth, so our null hypothesis is that both religion and science will survive the twenty-first century. Yet each may be transformed, and the desperate survival of Athens and Rome during the fall of classical civilization was hardly a triumph of wisdom. Perhaps, we have entered a period of dynamic secularization, in which both religion and science might disintegrate or evolve into entirely new forms.

The form of wisdom expressed through the world’s great religions has come into question, gradually and haltingly, over the centuries. But today, many nations experience rapid secularization, as churches fade into the background of social life, and increasing fractions of the population tell pollsters they lack faith. Partisans for science may privately believe that their very different form of wisdom has triumphed and that gods will soon be of interest only to archaeologists or even paleontologists. Yet somehow science has not yet answered the great questions human beings ask about the meaning of their lives and the fundamental nature of the universe. Given how little most people seem to understand about any of the sciences, it may be that they primarily experience them through technologies and their apparent enthusiasm for science may just be optimism that invention will continue to advance.

Yet the last human voyage to the Moon took place in 1972 when three quarters of the current human population had not yet been born, and the value of nuclear power remains controversial, even before the dangers of nuclear weapons are factored into the equation. At present, hope remains that genetic sequencing will vastly improve medicine even as the effectiveness of antibiotics declines, and some visionaries imagine that nanotechnology will somehow facilitate immortality. The most obvious transformations in daily life of the past two decades are the results of information technology, so it makes sense to look at the dynamics of current secularization through the lens of a computer.

This book will explore a tangle of questions about the dynamics of dual secularization, affecting both religion and science but often in different ways, by examining many forms of computer-assisted communication, primarily online but also within an ordinary user's personal computer. Web sites, Wikipedia, Facebook, YouTube, and massively multiplayer online role-playing games all offer data, ideas, and emotional experiences specifically categorized as religious, even while the same media promote and critique the sciences. Perhaps ironically, or reflecting a fundamental poetic truth, social sciences are central to this quest in two contradictory ways. First, they offer theories and methodologies necessary for conducting research, even containing specific subfields like the sociology of religion and the sociology of science. Second, among the sciences, they seem to be the least rigorous, perhaps being nothing more than rhetorical replacements for the religions whose malaise they document. Thus, no work of social science can claim to offer salvation from the growing chaos, yet perhaps it takes an anarchist to know the dark heart of anarchy.

“Things fall apart; the centre cannot hold; mere anarchy is loosed upon the world.” So wrote William Butler Yeats in 1919, contemplating the bloody disaster of the First World War. His title, “The Second Coming,” hinted that Christ would soon return to bestow upon humanity the gift of salvation. Yet the poem ends with a question: “And what rough beast, its hour come round at last, slouches towards Bethlehem to be born?” Questioning faith may not be a bad thing, and what looks at first glance like a rough beast may turn out to be a lamb or a phoenix.

Arlington, VA, USA

William Sims Bainbridge

Contents

1 Fragmentation: Online Evidence About Religious Innovation.....	1
1.1 Secularization of Religion	5
1.2 Parapsychology	11
1.3 A Virtual Religion.....	18
References.....	24
2 Humanization: The Crash or Reboot of Social Psychology	27
2.1 Conservative Curmudgeonism.....	28
2.2 Religious Innovation.....	32
2.3 A Nineteenth-Century Science of the Mind	36
2.4 The Current Crisis.....	40
2.5 Subconscious Pathologies.....	44
2.6 Countercultures.....	47
References.....	53
3 Paganization: The Virtual Revival of a Cult Online.....	59
3.1 Animal Welfare	65
3.2 Musical Variations	68
3.3 Virtual Scriptures	72
3.4 A Book of Faces	75
3.5 Repeating a Revisit	78
3.6 A Virtual Second Life	82
References.....	86
4 Residualism: Online Survival of Rejected Religions	89
4.1 Children of God	92
4.2 The Shaking Quakers.....	101
4.3 Twilight of the Gods	106
4.4 Biorhythms: The Skeleton of Astrology.....	113
References.....	119

5 Jediism: The Most Popular Online Virtual Religion	121
5.1 Origins of a Religious Movement.....	123
5.2 From Movies to Videos.....	129
5.3 Temple of the Jedi Order	131
5.4 The Jedi Church.....	137
5.5 The Virtual Force	143
References.....	148
6 Pessimism: Critiques of Religion and Technology in the <i>Fallout</i> Games	151
6.1 Preludes and Fugues	154
6.2 Isomorphic Apocalypse	159
6.3 Virtual Scientography	163
6.4 Aleatoric Adventuring.....	166
6.5 Radioactive Beltway	169
6.6 Institutionalized Technology.....	172
6.7 The Wider Fallout	176
References.....	178
7 Optimism: Religious Diversity in the <i>WildStar</i> Massively Multiplayer Online Game	181
7.1 Flying to Nexus.....	184
7.2 The Demography of Planet Nexus.....	189
7.3 Church of the Dominion	191
7.4 Paganism and Mechanism in the Dominion	192
7.5 Secularism of the Exiles	195
7.6 Nature and Technology in the Exiles.....	199
7.7 Technological World Building	202
References.....	207
8 Transhumanism: An Online Network of Technoprogressive Quasi-Religions	209
8.1 The Birth of Superman	211
8.2 Institute for Ethics and Emerging Technologies.....	215
8.3 The Terasem Movement	219
8.4 The Turing Church.....	224
8.5 Adaptive Radiation	230
References.....	234
9 Transcendence: Virtual Artificial Intelligence.....	237
9.1 Robotics	243
9.2 Calibrating Personhood	248
9.3 Virtual Friends, Virtual Gods	252
9.4 The Argument from Design	258
References.....	265

Chapter 1

Fragmentation: Online Evidence About Religious Innovation

Abstract Creative innovations that can be studied especially well on Internet illuminate the dynamics of issues central to a double secularization: the decline of religion and the decline of science. Secularization is often conceptualized as a war between religion and science, yet wars sometimes destroy both belligerents rather than resulting in a triumphant victor. Conventional measures of religiosity, like frequency of attendance at religious services, seem to indicate a decline in the significance of religion. Earlier in this secularization process, specifically in the 1960s and 1970s, the weakening of conventional religion seemed to stimulate innovation, and the birth of novel religious cults. Yet if we are to believe the Wikipedia article that lists new religious movements, their birth rate seems to have crashed near zero, especially if we do not count parodies that express hostility to religion rather than innovation within it. Despite the supposed triumph of secular science, pseudoscience seems ever more popular, for example as illustrated by a set of YouTube videos about telepathy. New cultural forms enabled by Internet offer dozens of simulated religions, such as the sacred quests and migration of souls in the Asian multiplayer role-playing game, *Echo of Soul*. How can social science help us understand what is really happening?

Four centuries have passed since the most powerful religious organization in the world declared astronomy to be heresy, dramatized in the infamous trial of Galileo. Yet the proper relationship between faith and truth has still not been decided, and both seem endangered by the controversies that rage in many sectors of life. Religious scholars and social scientists have been debating the extent to which secularization is eroding personal religious beliefs, versus merely reducing the influence of long-established churches, versus representing a major socio-cultural transformation in which the very meanings of basic terms are open to redefinition [1, 2]. While many public debates currently rage about the potential harm from specific technologies, such as pollution from energy industries and unemployment caused by information technologies, there seems to be little awareness that fundamental science is also in difficulty, as progress in many areas seems to have halted. Secularization is often conceptualized as a war between religion and science, yet wars sometimes destroy both belligerents rather than resulting in a triumphant victor.

This book will seek to understand the dynamics of issues central to a double secularization: the decline of religion and the decline of science. It will focus on creative innovations that can be studied especially well on Internet, rather than looking closely at the possible decline of conventional religious organizations. Yet that decline does seem to be happening. Since it began in 1972, the General Social Survey (GSS) has asked a representative sample of American adults, “How often do you attend religious services?”¹ In 1972, 41.2% of respondents said they attended religious services nearly every week or more often, compared with 28.5% in 2014. The fraction attending once a year or less often was 29.1% in 1972 and 47.1% in 2014. The question refers to “religious services,” rather than more specifically “church services,” so logically if non-Christian religions were filling the secularization gap, the numbers would not have dropped so severely.

The situation of science is not so obvious. In 2012, 41% of a small GSS subsample agreed with this statement: “Scientists are not likely to be very religious people.” But 59% disagreed. Significant levels of religious belief have been found among scientists, yet specific scientific principles like biological evolution by natural selection from random variation conflict with the beliefs of particular religions. This book will document a range of ways in which sciences and pseudosciences may perform some of the societal or psychological functions that religion traditionally performed. However, we shall also consider the possibility that scientific progress has neared its natural limits, at least in some fields. Two decades ago, John Horgan published a thoughtful book based on interviews with scientists, provocatively titled, *The End of Science* [3]. Are we indeed now much closer to his conclusion?

If we set aside our natural human optimism, and insulate ourselves from the enthusiastic hype that science journalists and government research grant seekers broadcast, we can see some evidence that the end is near in some areas of science-based technology. Consider this very specific example from Wikipedia: “A supersonic transport (SST) is a civil aircraft designed to transport passengers at speeds greater than the speed of sound. The only supersonic civilian aircraft to see service were the Soviet produced Tupolev Tu-144 which first flew in 1968 and was retired in 1997; and the Franco-British produced Concorde, which first flew in 1969 and remained in service until 2003. Since 2003, there have been no supersonic civilian aircraft in service.”² The last human voyage to the Moon occurred in 1972, the same year that the NERVA nuclear rocket program was cancelled [4]. For half a century, enthusiasts have predicted that nuclear fusion reactors could provide safe, cheap electric power, yet today we seem as far away from that achievement as ever. It is possible to argue that medical techniques based on gene sequencing will achieve breakthroughs, so it is possible that some sciences and technologies still have great futures, even as many stall permanently.

This book will explore dynamic secularization through science-based information technologies, which obviously have had tremendous impact since Horgan

¹ sda.berkeley.edu/sdaweb/analysis/?dataset=gss14, using the unweighted data.

² en.wikipedia.org/wiki/Supersonic_aircraft, accessed September 24, 2016.

wrote, chiefly deriving relevant data from a variety of online communities and information archives made possible by Internet. Each methodological innovation is admittedly minor, such as tracing connections between Facebook groups based on members who belong to more than one, or exploring novel forms of culture that have religious content, such as massively multiplayer role-playing games. In the aggregate, however, these methods offer an innovative approach to new questions that can give new life to old theories even as they permit conceptual innovation. However, the value of new data sources is limited by any fundamental flaws in the sciences that use them, and we shall also consider the degree to which highly relevant academic fields like social psychology and cultural anthropology are in crisis mode and thus of limited value themselves.

In the 1980s, Rodney Stark and I offered a theory of religious organizations in the modern age that postulated a dynamic interaction of secularization, revival, and cult formation [5–7]. Within religion, secularization chiefly affected mainstream denominations that had already made their peace with the non-religious institutions of society. They would weaken and shrink in membership. However, new *sects* would break away from the denominations, intensify their dedication to supernatural beliefs and practices, and gain members. On balance, this church-sect cycle of secularization and revival would usually involve no net weakening of religion. Under unusual circumstances however, the system could get out of balance, leaving many people unaffiliated with either denominations or sects within the main religious tradition of the society, opening the sacred marketplace for new competition in the form of religiously innovative groups often called *cults* [8]. Clearly, the church-sect cycle is out of balance today, reflected in weakening public devotion to traditional religious organizations, so we would expect new cults to proliferate. How could we have been so wrong?

Aside from the remarkable emergence of radical Islamist movements in the Middle East, and the ability of some of them to dominate the mass media news, very little is heard today in Europe and North America about new religious movements, even though there is extensive evidence that traditional religions are weakening in influence. Even in the relatively religious United States, poll data indicate increases in the non-religious population, and the Roman Catholic church struggles to recruit sufficient clergy [9]. Under such conditions, the theory of the 1980s would predict waves of revival, as new sects arise, and of particular interest for this book, the emergence of many new cults. It is possible that indeed new religious movements are numerous, but they are not visible, because one effect of secularization is erosion of the meaning of the word “religion.”

A major theme of this book is that secularization is multidimensional and dynamic, therefore difficult to measure and to comprehend. In the past, when state-supported established churches dominated the religious landscape, they defined most terms of any debate about religion. One dimension that has been the focus of much social science research, described in publications that will be cited through this book, is the distinction between religion and magic, with the mainstream Christian denominations minimizing claims that they could magically solve human problems such as disease and disability. From the standpoint of science, this issue

concerns the definition and status of pseudoscience, which will be considered in many chapters.

If secularization loosens definitions, then it suggests reconceptualization of the past. For example, if there was a moral imperative to be a good Christian, then many citizens of Christian societies in the past were under pressure to overstate the extent of their own piety. Whatever trends the opinion poll data show over the years, we cannot be sure they are real rather than changes in the societal expectations for what answers people should give to intrusive questions [10]. In my earlier book, *Across the Secular Abyss*, I referred to the principle called *pluralistic ignorance* – in this case the situation when non-believers are unaware of how many of their neighbors are also non-believers – and cited Garth Taylor’s concept of the *spiral of silence* [11]. If secularization dominates popular culture, then we may have the opposite of the situation I described a decade ago:

In a religious society, Atheism is a system of beliefs that rejects the consensus of most citizens, thus standing in opposition to the dominant culture. This may cause many Atheists to conceal their beliefs, in fear of formal or informal punishment. This may lead to a *spiral of silence*, in which Atheists think they are a smaller minority than they really are, thereby gaining even more motivation to conceal themselves, and the majority never confronts the fact that many of their friends and neighbors are unbelievers [12].

With respect to cults, this may mean that many of them avoid the label of *religion*, and the line between religion and science fades. Among familiar examples, Transcendental Meditation presented itself as a science rather than a variant of Hindu religion, and Scientology presented itself as religion rather than as a secular psychotherapy [13, 14]. This is not to say that either of them was wrong, if *religion* is a socially constructed category. But in this area, lack of clarity may have many consequences, from ambiguities in applications of legal regulations to confusion for individuals seeking a new principle on which to build their lives.

Another perhaps less obvious ambiguity concerns the line between fact and fiction, already blurred in literature and the arts [15]. Mainstream Christian denominations tend to treat some of the stories in the bible as fables, true in their ethical or spiritual content but not necessarily reporting actual events. Today we treat ancient European religions as collections of fables, such as concerning the Greek or Norse gods, even as we are forced to recognize the sacredness of contemporary Hindu religion which belongs to the same Indo-European cultural tradition. In my earlier book, *eGods: Faith Versus Fantasy in Computer Gaming*, I had cited the literally marvelous approach Samuel Taylor Coleridge had taken to fiction [16]. We all know that Santa Claus is a fable, yet one valuable to celebration of the bond between children and their parents, so why not consider God and Jesus also as beloved fables? That form of secularization quickly leads to the deep question of the extent to which people benefit in religious ways from intense participation in supernatural fiction:

Religion has always been deeply implicated in the creative arts, but the relationships among them are changing. Perhaps we shall come to see religion merely as an especially solemn artform. Suspension of disbelief is the essence of art, according to Samuel Taylor Coleridge, and electronic games are a new and powerful artform that often depicts religion. Yet we may

wonder whether suspension of disbelief is really very different from belief itself. Traditional religions took their faith very seriously, and pious believers today would be shocked if told their God was not very different from an elf's image on the computer monitor. Yet much may be gained by thinking from that admittedly radical perspective [17].

This chapter will begin the process of exploring these issues, with three admittedly superficial examples: (1) What Wikipedia reports about very new cultic religious movements, (2) What YouTube offers about the spiritualist pseudoscience of telepathy, and (3) How an online role-playing game defines souls and other fundamentally supernatural concepts. Thus, this chapter illustrates research using information technology through three pilot studies that prepare for deeper exploration in later chapters. The second chapter is also introductory, exploring the painful possibility that social psychology, the science most relevant for the understanding of the emergence of cults and recruitment of members is in little better shape than the cults themselves.

1.1 Secularization of Religion

The evidence about recent religious innovations in the United States and other post-industrial societies is remarkably weak. On April 9, 2016, I checked the Wikipedia page that purports to list all the noteworthy New Religious Movements (NRMs), copying the roster over into a spreadsheet and finding 240 for which approximate founding dates were given.³ The data are far from ideal, as will be seen, but for a pilot study, they permit comparison of the current rate of religious innovation with that of earlier decades.

The nineteenth century had contributed 33 to this total, but of course many more small religious movements had come into existence then but were not significant enough to have Wikipedia pages, or if they did have pages were not noticed by the list's editors. The page itself says, "Scholars have estimated that NRMs now number in the tens of thousands world-wide, with most in Asia and Africa. Most have only a few members, some have thousands, and very few have more than a million." Wikipedia's criteria require citation of reliable information sources, so one limitation is whether scholars have written about a particular group. The observation that Asia and Africa are contributing the greatest numbers today is offset by the fact that the list in the English-language version of Wikipedia emphasizes groups that have become very visible in English-speaking nations, thus in post-industrial rather than developing societies. Yet we can learn much from comparison of the numbers of groups dating from different decades.

The total from the years 1900–1999 is 203, so each decade would have about 20, if the annual birth rate and population were constant. The decade 1900–1909 contributed 14 NRMs, and the population of the world was smaller then so the birth rate for new religious movements may not have been especially low. Oddly, only 7 were

³ en.wikipedia.org/wiki/List_of_new_religious_movements, accessed April 9, 2016.

listed for 1910–1919, although the First World War may have damped formal establishment of new movements even as it magnified the human problems that drive people to see supernatural solutions. The “roaring twenties,” 1920–1929, counted fully 27, and the Great Depression 1930–1939 was essentially identical with 26. Perhaps because of the Second World War, the decade 1940–1949 showed a decrease to 16, which rose modestly to 21 in 1950–1959, and again back up to 27 in 1969–1970.

In *Getting Saved from the Sixties*, Stephen Tipton argued that the cultural chaos of the 1960s ripped many young people away from conventional society, motivating them to seek religious salvation in the following decade [18]. Indeed, the number of Wikipedia-listed new religious movements jumped to 43 for 1970–1979. The rate fell rapidly to only 13 in the 1980s. Of course, these numbers are only very rough estimates, and many factors filtered additions to the Wikipedia list. Yet as a tool for beginning to think about religious innovation in the introductory chapter of this book they are a good starting point. Strikingly, the number for 1990–1999 was only 9, most of them clustered in the early part of the decade. Each of the most likely explanations for this collapse in the NRM birthrate is relevant to major themes of this book. Two deserve mention now.

First, there may have been a real and rapid decline in the establishment of new religious movements, especially in the parts of the world where most contributors to the English-language version of Wikipedia live. The simplest if most extreme theory of secularization might say that religion in general is becoming extinct, and the lack of a new generation of religions is rather direct evidence of this accelerating death of faith. A more sophisticated theory would say that secularization was first manifested by a weakening of the established religious denominations, which in the short term liberated religious people to create new movements. A proponent of this theory might cite cases like Eliphas Lévi (1810–1875), who first studied to become a Catholic priest, and then morphed into one of the most influential early leaders of the European occult movements [19]. Only later, once the established denominations had become very weak, did the cultic birthrate drop, because few entrepreneurial individuals were sufficiently religious to do their innovating in a religious context.

Second, there may have been a wave of interest among scholars and social scientists in new religious movements in the 1970s, that caused them to document the ones born in that decade, suggesting that the Wikipedia numbers measure fluctuating academic interest more than real trends in religious innovation. The first high quality database on numbers of new religious movements was the first edition of *Encyclopedia of American Religions* by J. Gordon Melton, published in 1978 [20]. My own ethnographic field research in Scientology and the related Process Church of the Final Judgement was done in 1970–1976 [21–25]. When I decided in the late 1990s to study a new religious movement by administering a questionnaire with items derived from the General Social Survey, which required some preparatory field research plus the cooperation of a group that was already well organized, the best available choice was the Children of God (or the Family International), which emerged in the decade beginning in 1968 [26, 27]. If the trends in the Wikipedia list

are merely reflections of waxing and waning interest among academics, then the factors at work probably deserve social-scientific study, but may not be of great practical importance. But there is another way to look at this issue.

Both of these theories raise the question of how the definition of “religion” might change, during a process of secularization. Perhaps many new social movements have emerged that have many of the characteristics of religion, but do not call themselves *churches* or *temples*, and do not register with the government under laws regarding religion. Some of the groups I studied directly raised this issue. Scientology is recognized in the United States and several other countries as a religion, yet it evolved from Dianetics which defined itself as a psychotherapy. As we shall explore more fully in the following chapters, Psychoanalysis defined itself as a medical treatment, yet some authors have suggested it drew upon Jewish mystical traditions. Transcendental Meditation was rather ambivalent about whether to claim scientific versus religious identity, and a great variety of meditation and yoga practices currently present themselves in secular terms. Perhaps the apparent decline in the birth of new religious movements simply reflects the fact that the label “religion” is not applied to a very large number of movements that it might fit. Many of them may prefer the rhetorical advantage in the modern world of being called *sciences*.

This is a good point to clarify the term “new religious movement.” At the time it was introduced among researchers, it was a less pejorative synonym for *cult*. Journalists used *cult* to inflame popular interest in some scandalous movement, including outrageous examples such as the murder and suicide deaths of 918 souls by People’s Temple in 1978, and the suicide of 39 members of Heaven’s Gate in 1997. Scholars really used two four-letter words, *cult* and *sect*, to distinguish two kinds of new religious movement. A *cult* is a new organization, recruiting members from scratch and possessing a somewhat novel culture. A *sect* is a break-away group that left an existing religious organization, taking some of its members and much of its culture with it. In fact, founders of cults tend to have served an apprenticeship in an earlier existing religious organization, and as part of their salesmanship may exaggerate the novelty of the beliefs and practices of their new group. Wikipedia may be listing primarily cults, and ignoring both sects that arise through relatively peaceful schisms, and newly built local non-denominational churches whose beliefs and practices never enter public debate.

Setting abstractions aside, we can look at Wikipedia’s list of NRMs founded in the 1990s, in Table 1.1, and consider how they may be categorized. Given that the data date from 2016, there was ample time for a really active new religious movement to be recognized as such and added to the list. Yet what we find is really dismal, and the first case is even tragic. I encountered Falun Gong briefly in Washington DC, but it was an indigenous religious movement in China, rather popular apparently among well educated people in many cities, prior to its suppression by the government.

Two of the nine listings refer simply to the migration of existing religious traditions from one part of the world to another. Yes, the Isha Foundation is a new organization, founded in India and evangelizing in the United States. But the Hindu religious tradition employed a rather different range of organizational forms from

Table 1.1 New religious movements of the 1990s, according to Wikipedia

Name	Date	Description from the Group's own Wikipedia page
Falun Gong	1992	A Chinese spiritual practice that combines meditation and qigong exercises with a moral philosophy centered on the tenets of Truthfulness, Compassion, and Forbearance. The practice emphasizes morality and the cultivation of virtue, and identifies as a qigong practice of the Buddhist school, though its teachings also incorporate elements drawn from Taoist traditions.
Isha Foundation	1992	A non-profit, spiritual organization founded in 1992 by Sadhguru Jaggi Vasudev. It is based at the Isha Yoga Center near Coimbatore, India and at the Isha Institute of Inner Sciences at McMinnville, Tennessee in the United States.
The New Message from God	1992	Marshall Vian Summers is the central figure among a movement calling itself the Worldwide Community of people of the New Message from God. His seminal books constitute the beliefs of this new religious movement and are categorized as warnings of extreme change and outside threat, spiritual blessing, and preparation.
Women's Federation for World Peace	1992	An organization whose stated purpose is to encourage women to work more actively in promoting peace in their communities and greater society. It was founded in 1992 by Hak Ja Han, the wife of Unification Church founder Sun Myung Moon, and is supported by the church.
Madkhanism	Early 1990s	Madkhanism is a strain of Islamist thought within the larger Salafist movement based on the writings of Rabee al-Madkhali... Though originating in Saudi Arabia, the movement lost its support base in the country and has mostly been relegated to the Muslim community in Europe
Family Federation for World Peace and Unification	1994	A new religious movement founded in South Korea in 1954 by Sun Myung Moon. Since its founding, the church has expanded throughout the world with most members living in Korea, Japan, the Philippines, and other nations in East Asia.
Toronto Blessing	1994	The revival and associated phenomena that began in January 1994 at the Toronto Airport Vineyard church, known as the Toronto Airport Christian Fellowship (TACF) until 2010, now Catch the Fire Toronto, a neo-charismatic evangelical Christian church located in Toronto, Ontario, Canada.
Million Man March	1995	A gathering en masse of African-American men in Washington, D.C., on October 16, 1995... The National African American Leadership Summit, a leading group of civil rights activists and the Nation of Islam working with scores of civil rights organizations, including many local chapters of the National Association for the Advancement of Colored People
The Way of the Livingness (Universal Medicine)	1999	An alternative medicine and self proclaimed religious organisation providing “esoteric healing” products, music, publications, workshops and courses. None of the healing modalities are evidence-based or have been proven effective by scientific research... The organization is principally located in Goonellabah and Wollongbar, NSW, Australia.

those in Christianity, which was highly centralized under the domination of Roman Catholicism. It is common for religious organizations in Asia to consist of chains of discipleship, in which each new generation is like a new organization, or to be organized like Paganism in ancient Europe on the geographically distributed basis of local shrines. Madkhali might be described as a recent sect of Salafism, led by a Sunni intellectual named Rabee al-Madkhali, and there can be no doubt that the Muslim world is generating new movements at a rapid pace, although few of them made their way into Wikipedia's list.

Two of the other groups are actually manifestations of the same movement, the Unification Church, a Korean missionary NRM which first entered American social science in the 1960s through research primarily by John Lofland but assisted by Rodney Stark [28–30]. Wikipedia dates Family Federation for World Peace and Unification to 1994, but its own page calls it the Unification Church, dated to four decades earlier. Whether this is an error on the part of a Wikipedia editor, or the date of that particular name for the church, we cannot tell. The Women's Federation for World Peace is simply one of the suborganizations of the Unification Church. This was among the most intensely studied of the new religious movements that really established that field of scholarship. But it was founded well before 1990, so 2 of the 9 groups should be removed from the list.

The Million Man March should be removed as well, because it was simply a one-day civil rights event, having some connection to the pre-existing African-American religious movement called the Nation of Islam, but really does not itself fit the definition of an enduring NRM. The Way of the Livingness can be defined as alternative medicine, perhaps using the religious label to avoid the government regulations applying to secular medical treatments. Its own Wikipedia page says it incorporates beliefs about reincarnation and is at least in part derived from the Theosophy movement of earlier years in Europe and America. Toronto Blessing seems to be just an independent Evangelical church that gained publicity through a particular revival episode. The New Message from God raises a difficult question we shall encounter again: Is a mass media fad, such as popular books by a mystical author, really a significant movement?

What about the four cases Wikipedia lists for the twenty-first century? One is the Global Peace Foundation, which is simply an offshoot of the Unification Church, founded by one of the sons of its founder, Sun Myung Moon. Its own website says, “The Global Peace Foundation is an international non-sectarian, non-partisan, non-profit organization, which promotes an innovative, values-based approach to peace-building, guided by the vision of One Family under God.”⁴ Without having studied this Foundation, we cannot know its true nature, or the extent to which it functions as a cohesive religious movement of members sharing distinctive beliefs and practices. But its stated principles are interesting to contemplate, implying that it explores the moral territory beyond the boundaries of religion:

All people have intrinsic value, dignity, and fundamental rights, as endowed by the Creator.
Every person has, as his or her highest attribute, a spiritual and moral essence.

⁴ www.globalpeace.org/our-vision, accessed May 5, 2016.

Our human nature finds its fullest expression and meaning in relation to others.

People develop their innate potential through their choices and actions. Freedom and responsibility are intrinsically linked.

Understanding our shared identity and common aspirations as members of the human family establishes the basis for lasting peace. It is the foundation for respect, empathy and shared responsibility beyond the boundaries of ethnicity, religion, and nationality.

Two of the four recent cases definitely require going beyond the traditional boundaries of religion, past sects and cults to parodies. Wikipedia explains that the Church of the Flying Spaghetti Monster is both a parody of religion and a serious attempt to limit religion's influence in public life: "The 'Flying Spaghetti Monster' was first described in a satirical open letter written by Bobby Henderson in 2005 to protest the Kansas State Board of Education decision to permit teaching intelligent design as an alternative to evolution in public school science classes. After Henderson published the letter on his website, the Flying Spaghetti Monster rapidly became an Internet phenomenon and a symbol of opposition to the teaching of intelligent design in public schools."⁵ As of September 10, 2016, its Facebook group had 55,362 members, of whom 21 were administrators of the page.⁶ Its self-description on that Facebook page begins with a quotation from its obscure scripture: "In the beginning was the Word, and the Word was 'Arrrgh!' – Piraticus 13:7."

The other parody, Missionary Church of Kopimism, is also serious, requiring some contemplation. A major issue related to the informatics themes of this book concerns who owns information, especially cultural products. In ancient days, legends belonged to the entire community, and Sophocles was no plagiarist when he adapted existing stories for his dramas. Intellectual property rights may be an arbitrary convention that today serves mass media distribution companies better than it serves individually creative authors and musicians, as I once contemplated in a think-piece published in the journal *Science* [31]. Kopimism originated in Sweden, where thoughtful innovators have attacked the notion of intellectual property rights as a delusion, the equivalent of a malicious modern superstition, and all information (with the possible exception of personal secrets) should be free to copy [32]. A comparable movement framing the same values in political rather than religious terms is the Pirate Parties International, which also originated in Sweden [33]. Kopimism's Wikipedia page explains⁷:

The followers of the religion are called *Kopimists* from *copy me*. A "Kopimist" or "Kopimist intellectual" is a person who has the philosophical belief that all information should be freely distributed and unrestricted. This philosophy opposes the monopolization of knowledge in all its forms, such as copyright, and encourages file sharing of all types of media including music, movies, TV shows, and software. In its spiritual emphasis on copying as an ideal, Kopimism shares values with Chinese aesthetic traditions, in which "copying is valued not only as a learning tool (as it is in the West) but as artistically satisfying in its own right," a concept also called *dupliciture*.

⁵ en.wikipedia.org/wiki/Flying_Spaghetti_Monster, accessed May 5, 2016.

⁶ www.facebook.com/groups/181753425298669/, accessed September 10, 2016.

⁷ en.wikipedia.org/wiki/Missionary_Church_of_Kopimism, accessed May 5, 2016.

According to the church, “In our belief, communication is sacred.” No belief in gods or supernatural phenomena apart from Kopimi itself is mentioned on their web site. CTRL+C and CTRL+V, the common computer shortcut keys for “Copy” and “Paste,” are considered sacred symbols. Some groups believe that Kopimi is considered to be a god, and others believing it to be a sacred symbol and spirit residing within every living being.

Kopimism made simple:

All knowledge to all;
The pursuit of knowledge is sacred;
The circulation of knowledge is sacred;
The act of copying is sacred.

The fourth and final recent NRM on Wikipedia’s list will seem like a parody, or like commercial violation of a copyright, yet is a very serious quasi-religious movement, extremely appropriate for an era in which the very concept of *religion* is disintegrating. Called *Jediism*, it is based on the fictional Jedi religion in the vastly popular *Star Wars* mythos. Wikipedia dates it from roughly the 2000s, although saying “Jediism attracted public attention in 2001 when a number of people recorded their religion as ‘Jedi’ on national censuses, although most such submissions were thought to be protests or jokes.”⁸ In Chap. 5 we shall find that specific Jedi congregations exist, that they make extensive use of online communications, and indeed that Jediism may be what we could call a *virtual religion*.

Some virtual religions exist in *virtual worlds*, most of which are massively multiplayer online roleplaying games like *Echo of Soul* which will be described below. There will be much to say about the wider meaning. But consider how religion can be viewed from a secular perspective: as a serious work of art. It may inspire us to lead better lives; it may express our fundamental values; it may offer feelings of hope. Yet it is not “real.” That is how people generally view the extinct religions of the ancient world, even as many works of art involve supernatural culture from the ancient Norse or Egyptians. If conviction in religion fades, at a certain point, in different moments for different people, it will be indistinguishable from fiction. The dynamic becomes more complex, however, when religion is redefined as science.

1.2 Parapsychology

As Christopher Bader, F. Carson Mencken and Joseph Baker have demonstrated in the second edition of *Paranormal America*, a great diversity of unconventional beliefs in the cultural territory between religion and science have proliferated and gained increasing credibility with the American public. These include extra-sensory perception (ESP), astrology, and sightings of UFOs and Bigfoot humanoids. Paranormal phenomena were defined as “Beliefs, practices, and experiences that are not recognized by science and not associated with mainstream religion.” They were distinguished from religious beliefs, which are: “Beliefs, practices, and experiences

⁸ en.wikipedia.org/wiki/Jediism, accessed May 5, 2016.

that are not recognized by science but associated with mainstream religion.” [34]. In addition to many qualitative field observations, their study employed quantitative data from surveys, notably three waves of the Baylor Religion Survey from 2005, 2011 and 2014 that permitted measurement of increasing interest in these pseudo-scientific ideas. The first statistics offered in Paranormal America measure the increasing number of paranormal “reality” shows on television, so we may well wonder how the new Internet-based communication media are promoting paranormal beliefs.

In order to study pseudoscience, this section will do some. So, what is a good pseudoscientific way to study ESP today? Given that it is a popular mythology, between science and religion, we should start with a recent popular medium, YouTube, a television network for videos created by absolutely anybody, thus representing vast cultural diversity. On April 9, 2016, I entered the word “telepathy” into the YouTube search field, and Table 1.2 lists the first 20 videos in the order they came up. The year the video was uploaded and its length in minutes are listed, and the counts of how many times people had viewed each video were done on May 5.

The very first YouTube hit proves in its mere 32-seconds running time that telepathy is real! Just that very day, I had ordered a blue-ray copy of the new movie, *Star Wars: The Force Awakens*, as part of my research for Chap. 5. The collective mind of YouTube had read my own, personal, individual mind. Or not, as the case may be. The first two hits were actually labeled as advertisements. Most likely, when I went to the website selling the movie, it sent a message to YouTube to push an advertisement for that movie to me, in case I did not buy it during my first visit to the online store. Why does this particular theory come to mind? On May 5, 2016, as I was finishing this section, I checked the number of views each of the first two videos had received, both of which were advertisements for fantasy movies. The 2 minute and 25 second promo for the *Huntsman* movie got nearly 24 times as many views as the one for *Star Wars*, suggesting that it was pushed to a much wider segment of the YouTube audience, perhaps all those who used a search term related to fantasy. This is a parable for how people are often not fully aware of the paths information can take, from one mind to another.

The third video is an episode of the television program, *Naked Science*, a series described thus by Wikipedia: “an American documentary television series that premiered in 2004 on the National Geographic Channel and ran through November 2011. The program featured various subjects related to science and technology. Some of the views expressed might be considered fringe or pseudo-science, and some of the scientists may present opinions which have not been properly peer-reviewed or are not widely accepted within their scientific communities, in particular on topics such as Bermuda Triangle or Atlantis for example.”⁹ The program winds up saying that the existence of telepathy has not been proven scientifically, yet all its scenes focus on the emotional responses of people photographed in a manner that emphasizes their body language and other expressive features of their appearance, suggesting the appeal of feelings, not an appeal to reason.

⁹ en.wikipedia.org/wiki/Naked_Science, accessed May 10, 2016.

Table 1.2 A sample of YouTube videos about telepathy

YouTube ID	Title	Year	Length	Views
7wghx6Ev4sc	Star Wars: The Force Awakens – Bring home a piece of history!	2016	0:32	292,566
F2-_OQL9fBk	The Huntsman: Winter's War – Trailer 2 (HD)	2016	2:25	6,967,066
AdmyUEVLRAM	Naked Science – Telepathy	2013	49:55	484,263
N7dDMfSFfLY	"Telepathic" Genius Child Tested By Scientist	2015	5:21	2,265,041
AXzQ-jr7qnY	How To Become Telepathic	2014	8:42	25,346
0LK-qad-MNU	Twin Telepathy Test – Merrell Twins 2014	2014	8:13	1,474,139
Fl8GvPRvikM	Michio Kaku: Telepathy Is Easier Than You Think	2011	1:05	1,290,866
t0IXGCFO91k	A 1 minute Telepathy test to check your Psychic power	2015	4:18	12,986
O4F-18gu314	Telepathy Rape – WGTOW	2016	1:32	40,769
9yQiyRJNAo8	TWIN Telepathy Challenge	2016	7:09	775,958
3lB7b3_IJXc	Telepathy – How to be a Telepath and Communicate with the Mind	2014	3:56	107,820
08Uy8zX4UGA	how to send someone you love a mental message or telepathic message	2015	9:48	133,452
LT3sgAwMMWA	Telepathy Fifth Dimension Documentary on Mental Telepathy	2015	48:52	9,513
LRBo9E1fp0s	Scientist Study 5 Year Old With Telepathy!?	2015	5:12	170,200
kUV89At3Fxg	Telepathy, global consciousness and how we humans are connected	2013	54:42	85,830
IBVIDx9hF5Q	Theta Binaural Beats for Telepathy	2014	59:59	42,319
_7KcBnCDziM	Professor Albert Ignatenko demonstrates telepathy and telekinesis	2013	6:40	28,249
o4tpaCKvQAs	Real-Life Telepathic Children	2014	3:41	207,944
jIvjgzV5tjs	Telepathy (Theta)	2013	29:43	250,957
dUilx0K-iBk	Are Psychic Powers and Telepathy Real? Dr. Devi Shetty with Sadhguru	2014	7:08	282,831

The text connected to the *Naked Science* video in YouTube summarizes the first scenes: “Unsubstantiated claims are not proof, so several experiments are conducted to put the phenomenon to the test. This includes exploring the telepathic connection that some twins claim to experience through a series of tests on one twin and recording the other twin’s reaction, and a Ganzfeld test where a person in one room attempts to transmit mental pictures to another person in a different room.” The Ganzfeld test involves sensory deprivation of people receiving telepathic transmissions, presumably rendering them more sensitive to vague impressions from the

sender in another room.¹⁰ The scene about it focused on parapsychology research by Paul Stevens at the University of Edinburgh, but the program does not mention that this very respectable institution has a connection to psychic research only because funding for such work was donated in the response to the suicide of popular author Arthur Koestler, an advocate for the existence of paranormal phenomena.¹¹

A similar example later in the long program was performed at a “university” whose name was practically unintelligible in the audio, but could be read from a sign briefly visible on a door in the video: Bastyr University. Its website proclaims a doctoral program in naturopathic medicine, and its Wikipedia page lists its fields of emphasis: “naturopathy, acupuncture and Oriental medicine, nutrition, herbal medicine, ayurvedic medicine, psychology, and midwifery among others.”¹² Later parts of the video focus on remote viewing, briefly interviewing Harold E. Puthoff, identified by Wikipedia as a physicist and parapsychologist, known for his gravitational and paranormal research, and especially prominent in the Stargate Project of the US military, that explored the use of parapsychology in espionage.¹³ More time was devoted to a telepathic remote viewing demonstration by Joseph McMoneagle, who also had been involved in Stargate.¹⁴ Clearly, popular television programs cannot be relied upon to offer scientific truth about issues in which viewers have invested their emotions, but neither can we rely upon Wikipedia, which itself is a reflection of the popular culture of the volunteers who contribute to it.

Early scenes in the *Naked Science* video show pairs of identical twins, sitting close to each other, often embracing or touching each other, and responding intensely to each other. Two of the other videos in the list of 20 were made by pairs of identical twin sisters, critiquing as well as exploring the idea that they themselves possess telepathic connections. One was performed by the highly talented Merrell Twins, celebrity YouTubers with a million subscribers, whose own website has this epigram: “Our Passion: We love to make people laugh and inspire others to never give up! One of our favorite quotes: ‘Don’t let the noise of others’ opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition. They somehow already know what you truly want to become.’ – Steve Jobs.”¹⁵ In 2015, they became the creative directors of We Heart It, “an image-based social network for inspiring images,” that claims 40 million online users.¹⁶ Their video shows them enthusiastically comparing their very similar responses to written stimuli they drew at random from a pot. The other twin telepathy challenge listed in Table 1.2 was posted by a commercial advertiser, DisneyCar Toys, and

¹⁰ en.wikipedia.org/wiki/Ganzfeld_experiment, accessed May 10, 2016.

¹¹ thepsychologist.bps.org.uk/volume-19/edition-7/20-years-koestler-parapsychology-unit, accessed May 10, 2016.

¹² www.bastyr.edu, en.wikipedia.org/wiki/Bastyr_University, accessed May 10, 2016.

¹³ en.wikipedia.org/wiki/Harold_E._Puthoff, en.wikipedia.org/wiki/Stargate_Project, accessed May 10, 2016.

¹⁴ en.wikipedia.org/wiki/Joseph_McMoneagle, accessed May 10, 2016.

¹⁵ www.merrelldtwins.com, accessed May 10, 2016.

¹⁶ weheartit.com, en.wikipedia.org/wiki/We_Heart_It, accessed May 10, 2016.

shows another pair of sisters doing a telepathy test, in which wrong answers cause the son of one to throw water balloons at them.

The *Fifth Dimension* video about telepathy, like *Naked Science*, was a TV info-tainment documentary, in this case broadcast by the Discovery Channel in the six episode 2006 series, *5th Dimension – Secrets of the Supernatural*.¹⁷ It begins with a quote from Shakespeare's Hamlet: "There are more things in heaven and earth... than are dreamt of in your philosophy." This is followed by stock footage of a Saturn V rocket launch, introducing Apollo astronaut Edgar Mitchell's experiment to transmit thought telepathically from the Moon. The next research the program mentions is at the seemingly respectable "government funded Cognitive Science Laboratory," until we check its website and learn that the government funding was long ago through Stargate, and McMoneagle is one of the eight "laboratory personnel."¹⁸ Another member perhaps inaccurately called a "physicist" is briefly interviewed, then dramatic warfare footage introduces Stargate and interviews McMoneagle, identified as Stargate's "superstar." He reported relying upon his psychic ability to sense danger, which developed during his traumatic experiences in the Vietnam war. As the narrator observed, "Having a sixth sense is a potent weapon on the battlefield." Stargate, in competition with its Soviet equivalent, was the chief focus of this video, although a brief visit to the Koestler Unit in Edinburgh demonstrated the Ganzfeld method, while the narrator kept asserting that parapsychology could not be proven, but conventional scientists should not reject it.

The nearly hour long academic lecture titled "Telepathy, global consciousness and how we humans are connected," was given in a lucid and authoritative manner by Michael Persinger. His Wikipedia page begins, "Michael A. Persinger (born June 26, 1945) is a cognitive neuroscience researcher and university professor with over 200 peer-reviewed publications. He has worked at Laurentian University in Sudbury, Ontario, since 1971. He is primarily notable for his experimental work in the field of neurotheology, work which has been increasingly criticized in recent years. In 2016, Persinger was controversially removed as the instructor of a first year psychology course. Officials at Laurentian stated that they objected to his document which warns students that course materials may contain vulgar language."¹⁹

It may be a pure coincidence that Laurentian University has a religious affiliation, with the Roman Catholic Church, but Persinger's theory of telepathy is not framed in terms of a competing supernatural mythology. Rather, he is of the opinion that the electrical activity of the human brain diffuses into the Earth's magnetic field, from which other sensitive brains can perceive it. His publications are indeed numerous, on topics as diverse as fundamental physics and the causes of cancer. Often rather technical in style, containing mathematics, many of his articles were indeed published in respectable academic journals, but several of the more recent

¹⁷ en.wikipedia.org/wiki/5th_Dimension_%E2%80%93_Secrets_of_the_Supernatural, accessed May 10, 2016.

¹⁸ www.lfr.org/lfr/csl/, accessed May 10, 2016.

¹⁹ en.wikipedia.org/wiki/Michael_Persinger, accessed May 15, 2016.

ones were in new online journals of the type that have received serious criticism [35].

A very recent article on which he was co-author used statistical methods that are rather common in social science to suggest that rates of the disease cancer are low in counties of the United States that have low population densities. This apparent finding would be consistent with the theory common in the medical profession around 1900 that cancer was an infectious disease, although leading cancer researchers had abandoned this theory shortly afterward [36]. The article offers Persinger's general theory as an explanation for why cancer rates jump if population density rises above a low threshold: "Calculations indicated average distances between the electric force dipole of the brains or bodies of human beings generate forces known to affect DNA extension and when distributed over the Compton wavelength of the electron could produce energies sufficient to affect the binding of base nucleotides." [37] Setting aside possible flaws in the statistical analysis, an alternate explanation of course would be that in very low population counties of the United States reporting of disease rates and causes of death are less complete or accurate than in more populated counties that can afford better record keeping systems.

The article was published in *American Journal of Cancer Research*, which sounds like a normal scientific publication until one reads its own self-description: "an independent open access, online only journal to facilitate rapid dissemination of novel discoveries in basic science and treatment of cancer. It was founded by a group of scientists for cancer research and clinical academic oncologists from around the world, who are devoted to the promotion and advancement of our understanding of the cancer and its treatment."²⁰ A number of the people listed on its website seem to have respectable credentials, so at least provisionally we must classify it as a publication that intentionally explores the borderlands of science, without being inherently pseudoscientific.

Persinger's online lecture offers only anecdotal evidence for the reality of telepathy, for example emphasizing studies done with a research subject named Ingo Swann. According to his Wikipedia page, Swann "was a claimed psychic, artist, and author known for being the co-creator, along with Russell Targ and Harold Puthoff, of remote viewing, and specifically the Stargate Project."²¹ Another related Wikipedia page describes the *God helmet*, a research tool Persinger helped develop: "The apparatus, placed on the head of an experimental subject, generates very weak magnetic fields, that Persinger refers to as 'complex'."²² The effect supposedly is like that of the Ganzfeld method, increasing the subject's sensitivity to telepathic transmissions.

The two other very long videos listed in Table 1.2 are not documentaries, lectures or demonstrations featuring human beings, but audio files of tones possibly matching the theta rhythm of the human brain, with the intention that listening to the sound could increase telepathic sensitivity as with the God helmet or Ganzfeld

²⁰ www.ajcr.us/Aboutus.html, accessed May 15, 2016.

²¹ en.wikipedia.org/wiki/Ingo_Swann, accessed May 15, 2016.

²² en.wikipedia.org/wiki/God_helmet, accessed May 15, 2016.

method. “Theta Binaural Beats for Telepathy” was one of many similar YouTube postings by a mysterious user named Binaural Beats, White Noise & Other Healing Sounds, which had over 20,000 subscribers. Its “about” page gives few clues as to the real world identity of the poster, but proclaims: “Listen to our tracks, because we are the leaders in Sleep Music, Relaxing Music, Study Music, Meditation Music (including Tibetan Music and Shamanic Music), Healing Music, Reiki Music, Zen Music, Spa and Massage Music, and Yoga Music.”²³ Googling found an equally unrevealing website, Brainwave, with this incoherent personal statement: “i’m just a human want to share about brain waves, binaural beats, and let you know the power of mind :D. Control your mind.”²⁴ “Telepathy (Theta)” is similar, one of many such videos posted by FreeIsochronic Tones, which could not be identified. An apparently different set of free isochronic tone files is available via the website of Spiritual Healing Arts, which reports: “Lots of people use them for spiritual development by achieving the specific mind states great for relaxation, meditation, lucid dreaming, astral projection, chakra healing, self-hypnosis, pituitary stimulation and other things.”²⁵

The scientist who studied the telepathic genius child, Dianne Hennacy Powell, says on her website, “Science was my religion growing up.”²⁶ Her “formal bio” calls her “an author, public speaker, researcher and practicing psychiatrist.”²⁷ The video lower in the list about a “telepathic 5 year old” is a juvenile commentary that reports Powell hopes telepathy can help parents communicate with autistic children. Further down the list, a series called *Strange Mysteries* also publicizes Powell in the video about supposedly real-life telepathic children. Michio Kaku is a well-known professor of theoretical physics and science popularizer, who mentions brain scanning as a step in technology-supported “telepathy.”²⁸ Professor Albert Ignatenko appears to be a Ukrainian hypnotist. Dr. Devi Shetty with Sadhguru promote a form of Yoga-related meditation called Isha Kriya.²⁹

“How to Become Telepathic” is a brief lecture by Nicky Sutton, who sells “spiritual guidance and consultation” online at her Spiritual Awakening website.³⁰ “How to be a Telepath and Communicate with the Mind” is one of many videos from JBittersweet, whose website offers the various meaning of prayers to eleven different archangels, and that explains she is “a YouTuber making videos on meditation and spiritual awareness for people who wants [sic] to improve their health, explore their spirituality and develop their psychic abilities.”³¹ The “1 minute telepathy test” is a demonstration of ESP Zener cards, promoting an ebook titled *The Dreaming of*

²³ www.youtube.com/user/TheMusicrelaxation/about, accessed May 15, 2016.

²⁴ brainwave.site/about, accessed May 15, 2016.

²⁵ www.spiritualhealingarts.org/isochronic-tones, accessed May 15, 2016.

²⁶ diane'hennacypowell.com/meet-dr-powell/, accessed August 2, 2016.

²⁷ diane'hennacypowell.com/press-kit/formal-bio/, accessed August 2, 2016.

²⁸ en.wikipedia.org/wiki/Michio_Kaku, accessed August 2, 2016.

²⁹ isha.sadhguru.org/us-en/isha-usa/isha-kriya/, accessed August 2, 2016.

³⁰ www.spiritual-awakening.net/p/spiritual-awakening.html, accessed August 2, 2016.

³¹ [www.jbittersweet.com/about.html](http://jbittersweet.com/about.html), accessed August 2, 2016.

*Avalon Guide to Becoming Intuitively Awake.*³² The video about sending someone you love a mental message is one of the vast number of amateur postings on YouTube that express an individual's feelings or beliefs, while "Telepathy Rape" may be a parody. Despite appearances, this section of the chapter was not intended to be a parody, but a sampling of modern popular parapsychology.

1.3 A Virtual Religion

Religion is clearly a cultural phenomena, and this book will highlight the ways in which science is a cultural phenomenon as well, although both religion and science typically claim objective truth for their beliefs and values. But another important component of culture does not claim this objectivity: the arts. As we shall consider more closely in Chap. 4 when viewing his quasi-religious *Ring* operas, the composer Richard Wagner said his operas were *total works of art*, that combined multiple artforms but also expressed the unrealized dreams of the general population, and entered into major political and cultural transformations [38]. The point of mentioning Wagner here is that today's tremendously influential new artform, massively multi-player online role-playing games (MMORPGs or MMOs), fulfills his definition of total work of art even more than his operas did.

Given the information technology theme of this book, it makes sense to examine this new cultural genre as a vehicle for convergence of religion, science, and artistic culture. These games are actually *virtual worlds*, in which an avatar representing the player explores vast computer-generated territories of forests and villages, undertaking *quests* which are story-based missions rather like the traditional legends on which the *Ring* was based and often with heroic music playing in the background. Later chapters of this book will use many kinds of online community to analyze the creative tension between religion and science, including one non-game virtual world, *Second Life*, one solo-player gameworld, *Fallout*, and five social game-worlds: *Echo of Soul*, *Star Wars: The Old Republic*, *WildStar*, *World of Warcraft* and *TERA*. We can begin with one that failed to achieve much popularity but makes excellent points for this introductory chapter.

Echo of Soul: Wrath of the Goddess is a Korean online gameworld that launched for its home country in 2013 and in a translated version for North America in 2015. As is true for most Asian MMOs, there is a heavy emphasis on action, mostly killing warriors and monsters, and making one's way through a labyrinth of dangers. To provide a sense of wider meaning, the user's quest database has two components. The first simply lists the active missions and links to a full description of each, while the second is called History and provides a conceptual background. Its first paragraph explains how souls can echo:

³² dreamingofavalon.yolasite.com/, accessed August 2, 2016.

Souls are the source of all life. They create life, and eventually... they destroy life. They flow above us in a mighty river that circles and churns and froths with the power of being. It is in this river that new souls are born... this "Soul Stream." What was born of the Soul Stream shall eventually return. Life and death form a never-ending cycle, and souls left behind by the dead meld with the new to give birth to the next generation.

This concept of *soul* does not belong to the Christian tradition, and the hint of a cycle of reincarnation in this paragraph suggests Asian traditions. However, the full essay on History draws upon Norse culture, saying that the Aesir and Vanir tribes were one with the Soul Stream, depicting Valhalla, naming Odin, Frigg, Loki, and Ymir, and giving existential prominence to the World Tree, Yggdrasil. This might seem simply a Wagnerian marketing ploy, translating some utterly different set of Asian gods into rough European equivalents. But the Korean website used names like Loki and Ymir, merely spelled out in the Korean alphabet, indicating that *Echo of Soul* was not radically altered when it was adapted for North America. Of course the motivation that inspired Koreans to adopt a few names from Norse mythology may have been commercialism in a world market. Yet whatever the cause, the result is contributing to a universal mythology, drawing upon the legends of many nations, and seeking commonalities like the concept of Soul Stream. The souls are not personalities, but elements of spiritual existence, as the English-language website explains:

After each encounter with a monster or an evil spirit, you can receive a Chaos Soul from the fallen creature. As it comes from a corrupted source, you will need to purify it in one of the Soul Sanctums or with another player to transform it into a beneficial source of power for your quest. Four Soul skills are available: Hope, Innocence, Courage and Peace. Each of them gives you the ability to trigger a powerful buff during battle. Your achievements will be measured by the number of souls you collect and enemies you defeat.³³

As Wikipedia explains, "*Buff* is the term generically used to describe a positive status effect that affects mainly player or enemy statistics (usually cast as a spell)."³⁴ Effectively, it raises or lowers a number in the computer algorithm that determines the outcome of a series of actions, usually a battle between a player's avatar and an enemy, which may be the avatar of another player or the very common simulated beings in role-playing games called *non-player characters* or NPCs. The exact mathematical structure of the algorithm is almost always concealed from the players, but they can deduce its general characteristics, and the user interface in most of these games does report some of the statistics for the player's own avatar and whatever buffs happen to be in effect at the moment. Thus, the religious concept of *soul* becomes algebra, only slightly less mysterious for having been drained of its spiritual quality.

To study a role-playing game, one must play a role, and there are different ways to do this. The most common relevant distinction is between an avatar and a character. An *avatar* is a fairly pure representation of the player, whereas a *character* has an identity of its own. The word *avatar* is fundamentally religious, coming from

³³ www.aeriagames.com/playnow/eosus/mob_world, accessed April 30, 2016.

³⁴ en.wikipedia.org/wiki>Status_effect, accessed April 30, 2016.

Hindu traditions, and suggests the partial investment of the player's soul into a character.

Many videogames are like scripted dramas in which one plays the role of a pre-defined character, such as Mario the mustached Italian plumber in many Nintendo games. In massively multi-player online games like *Echo of Soul*, a player can assign a name, so I could have used William and made an avatar rather directly representing myself. But players of these games often create multiple characters, each with its own characteristics and name. In this case I decided to create a representation of my maternal grandmother Mildred Sims, the one of my four grandparents I knew least well. In an earlier study of how virtual world characters can be used to memorialize deceased family members, I had run a character based on her in partnership with another character based on William Sims, her husband, through the complex fantasy world, *Guild Wars 2* [39].

To resurrect Mildred, I needed to select one of six *classes*, in the *Echo of Soul* character system, each with its own special characteristics. Three would not be appropriate, because they must be male: warrior, rogue and warlock. One of the three female classes, guardian, would not suit Mildred, because it is violent and comparable to a warrior. The other two, archer and sorceress actually fit my research playing style, in which my character tends to stand at a distance from the enemies, observing their movements, then taking advantage of an opportunity to shoot an arrow or magic spell at one, when other enemies are not too near. Sorceress fit the topic of this book better than archer, given its supernatural or pseudoscientific connotations.

Mildred entered this virtual world in Breya Town near the southern end of the Nicaea continent, which is really like four connected continents composed of many zones, in ascending order of difficulty: Levens, Heliana, Portus and Rodby. To progress, she needed to ascend a ladder of experience, from level 1 to 70, increasing her abilities and the quality of her equipment. Given that I tend to spend extra time studying the environment, the full ascent took her nearly 200 hours of real time, during which my main method for recording data was taking 3007 screenshot pictures of everything displayed at the moment on the computer screen.

She immediately encountered a non-player-character, or simulated human being, called Levina the Soulkeeper, whom she would encounter frequently in many locations. Mildred's first action assignment was killing a couple of attackers of the town, and after that came missions to kill huge numbers of monsters. She did not initially understand the meaning of the attack, but gradually she learned that a magical orb called the Sloth Soul had been hidden in or near Breya Town, and the attackers were trying to seize it. In ancient times, the evil giants had waged war against the good gods, leading to the defeat of the giants but exhaustion of the gods. Odin, king of the gods, took the Shadow Soul from the corpse of the giant leader, Ymir, which was the source of all chaos. Odin tried to destroy it, but the best he could do was break it into six parts which he hid across the world. The power of the gods faded, and humanity inherited a world that was disintegrating into chaos, almost as if the giants had triumphed.

Mildred reached experience level 5 rather quickly, at the moment she delivered magic crystals to Levina, which would be used to sanctify an altar. At level 7 she learned how to purify the *chaos souls* she had gathered from killing monsters, 37 of which were already in her soul satchel. Purification at a Soul Sanctum would combine pairs of chaos souls, each pair making one of them at random: Hope, Innocence, Courage, or Peace. The more profitable alternative is to partner with another player, not necessarily near a Soul Sanctum, combining one Chaos Soul from each to generate one Purified Soul for each.

During especially dangerous combat, Mildred could use a pair of the same kind of purified soul to enhance specific abilities. She decided always to use Hope souls for this purpose, and save the other three types for a different purpose, crafting. During battle, clicking an icon on the computer screen would use up two Hope souls and give her a magic buff called Light of Hope, which for 30 seconds increased the speed and accuracy of her attacks, and well as her speed in casting defensive spells. She did not use Shield of Innocence which improved general defense, Flame of Courage which improved attack, or Hand of Peace that strengthened her immunities.³⁵

Souls were also valuable for the peaceful professions, three of which were dependent upon each other, thus encouraging cooperation between players because one player could practice only one of this triad: resource collector, alchemist, jeweler. At first, Mildred learned resource collector, which allowed her to gather minerals and herbs from nodes in the environments she was passing through while on her quests. Then rather late in her progress she switched over to alchemist which involved manufacturing magical potions. Also, from early on she practiced a fourth profession that could be done simultaneously with any of the triad, soul expert, of obvious importance for this research study. Each of these required gaining skill through practice, working with increasingly difficult materials, and climbing a status ladder: neophyte, apprentice, practitioner, adept, artisan, master, guru, ace, and godly. At level 70 of general experience she completed the soul expert ascent, becoming godly. Work as an alchemist required materials from resource collection as well as from soul expert, but Mildred could not have two skills of the triad simultaneously, so she was forced to buy materials from other players, and ran out of virtual money when she achieved alchemist artisan status.³⁶

At experience level 15, Mildred actively began the vast quest arc to secure the six fragments that could combine to form the Shadow Soul. Led by Commander Vertinik, evil Motrolls had been able to Steal the Sloth soul, but at level 17 she was able to track him to Vanguard Terrace in the Levenswood region of Levens, where enemies are at a level of difficulty appropriate for players whose characters are levels 16–17 of experience. Immediately after killing him and retrieving the Sloth Soul, she crossed into the second major virtual territory, Heliana, designed for level 18–35 avatars, and visited the first main city of this world, Ignea. There she visited the Soulkeeper Anteroom for an initiation ritual, shown in Fig. 1.1.

³⁵ echoofsoul.wikia.com/wiki/Soul_Skills, echo-of-soul.eu/soul-systems, accessed April 30, 2016.

³⁶ echoofsoul.wikia.com/wiki/Alchemy, accessed May 10, 2016.



Fig. 1.1 Dedication to the Soulkeeper virtual religion in *Echo of Soul*

The elderly lady leaning forward is Marie, the Head Soulkeeper, while the woman and the man in similar clerical uniforms are Gertie and Ackem, her Soulkeeper Adjuncts. The red-haired woman in the center, who is casting a weak healing spell, is Mildred. She has just completed her first major initiation, while the blond woman leaping at the left is in the midst of one. Marie thanks the initiate for helping reclaim the Soul of Sloth, and speaks of a new goal of preventing the Soul of Arrogance from falling into evil hands. The main text of the initiation ritual is:

- Marie: It is your choice. Should you choose to help us and officially join our ranks as a Soulkeeper, speak to Ackem and Gertie Keller and make the Soulkeeper's Vow.
- Ackem: Do you give unto the Soulkeeper order your life that you may rid this world of darkness and corruption?
- Gertie: Do you give unto the Soulkeeper order your life that you may purify the world of its Chaos Souls and protect the weak?
- Marie: To bring peace to this world is the desire of every Soulkeeper. We shall fight for the hopes and dreams of future generations. Each and every fledgling Soulkeeper is a new seed for spreading the undying will of the gods.

At level 26 Mildred defeated the monstrous Motroll Contractor to retrieve the Soul of Arrogance, in the ancient tower. Ten levels later, she teamed up with another player to kill the Wagnerian monster Fafnir and secure the Soul of Jealousy, but a chaotic battle failed for Mildred while succeeding for the other player. So she retreated, built up her strength, and returned at level 40, easily defeating Fafnir in solo combat. Sadly, she soon learned that enemies had again stolen the Sloth,

Arrogance and Jealousy souls. The next chapter of the vast arc of main quests, “Soul Wars,” required her to seize the Rage Soul, and only after that could she regain the three souls she had already battled enemies to retrieve once before. The next goals were seizing the Soul of Discord and the Soul of Despair, which took her up through geographic regions called Portus (levels 36–50) and Rodby (51–60). Once all seven fragments of the Shadow Soul were in the possession of the Soulkeeper, their plan was to accomplish what even the great god Odin had failed at, destroying them utterly to remove evil from the world. Experience levels 60–70 were staged on a trio of islands that had been added to *Echo of Soul* after the game’s launch, and involved yet another transcendent concept, the Souls of Agony that an evil magician was extracting from captives by torturing them.

This section of the introductory chapter has emphasized what might be called the *theology* of *Echo of Soul*, or perhaps the *personality psychology* because the concepts all concerned the emotional dimensions of human existence. While the emphasis has not been on social interaction between players, Mildred certainly did observe a good deal of it. Over the 200 hours of her exploration, she three times joined a guild, which is a voluntary but persistent organization of players whose main goal is to form a combat team in player-versus-player competition, but who also help each other in ordinary quests and economic exchange. Gameworlds follow a variety of different designs for cooperation and competition, and the one in *Echo of Soul* is somewhat unusual. A guild may form alliances called *amity* with as many as ten other guilds, and may designate itself as either peaceful or hostile with respect to other alliances. The guilds Mildred joined were ambitious, so they were hostile, so occasionally she would be unexpectedly attacked and killed by a player who belonged to an enemy guild. Thankfully, the soul system allowed her to be resurrected at a safe place, where she could recover from her wounds.

The last guild she joined had 120 members and was ranked 12th out of 146 competitive guilds. It had the remarkable name GODisAFK. GOD is God, and AFK stands for Away From Keyboard, a standard term for gamers and users of other realtime online communities, referring to the temporary absence of a person. If I were running the software, and Mildred was left standing somewhere as I did some errand in real life, I would be listed as AFK in the text chat. If God is AFK, he is ignoring human suffering, and his soul has abandoned our world, at least temporarily. The leaders of GODisAFK had recently set up a Facebook group, so I asked them about the origin and meaning of this name. They did not invest much meaning in the name, and one commented, “Also we don’t know how it was chosen. The current leader was given it from the previous leader who was given it from someone else.” As it happens, Mildred was the first member to reach maximum level 70 during a particular week-long “guild leveling event,” so she won a very honorable prize, even though for my research project this meant that her soul would cease to echo inside this particular virtual world.

References

1. Gorski, P.S., Altinordu, A.: After secularization? *Annu. Rev. Sociol.* **34**, 55–85 (2008)
2. Evans, J.H., Evans, M.S.: Religion and science: beyond the epistemological conflict narrative. *Annu. Rev. Sociol.* **34**, 87–105 (2008)
3. Horgan, J.: *The End of Science*. Addison-Wesley, Reading (1996)
4. Bainbridge, W.S.: *The Spaceflight Revolution*. Wiley Interscience, New York (1976)
5. Stark, R., Bainbridge, W.S.: *The Future of Religion*. University of California Press, Berkeley (1985)
6. Stark, R., Bainbridge, W.S.: *A Theory of Religion*. Toronto/Lang, New York (1987)
7. Stark, R., Bainbridge, W.S.: *Religion, Deviance and Social Control*. Routledge, New York (1996)
8. Robbins, T.: The sociology of contemporary religious movements. *Annu. Rev. Sociol.* **5**, 75–89 (1979)
9. Smith, G.A. (ed.): *U. S. Public Becoming Less Religious*. Pew Research Center, Washington, DC (2015)
10. Gorski, P.S.: Historicizing the secularization debate: Church, state and society in Late Medieval and Early Modern Europe, ca. 1300 to 1700. *Am. Sociol. Rev.* **65**(1), 138–167 (2000)
11. Garth Taylor, D.: Pluralistic ignorance and the spiral of silence: a formal analysis. *Public Opin. Quart.* **46**, 311–335 (1982)
12. Bainbridge, W.S.: *Across the Secular Abyss*, p. 154. Lexington, Lanham (2007)
13. Bainbridge, W.S., Jackson, D.H.: The rise and decline of transcendental meditation. In: Wilson, B. (ed.) *The Social Impact of New Religious Movements*, pp. 135–158. Rose of Sharon, New York (1981)
14. Bainbridge, W.S., Stark, R.: Scientology: to be perfectly clear. *Sociol. Anal.* **41**, 128–136 (1980)
15. Wuthnow, R.: The contemporary convergence of art and religion. In: Clarke, P.B. (ed.) *The Oxford Handbook of the Sociology of Religion*, pp. 360–374. Oxford University Press, Oxford (2009)
16. Coleridge, S.T.: *Biographia Literaria*. Kirk and Merein, New York (1817)
17. Bainbridge, W.S.: *eGods: Faith Versus Fantasy in Computer Gaming*, pp. 3–4. Oxford University Press, New York (2013)
18. Tipton, S.M.: *Getting Saved from the Sixties: Moral Meaning in Conversion and Cultural Change*. University of California Press, Berkeley (1982)
19. McIntosh, C.: *Eliphas Lévi and the French Occult Revival*. Rider, London (1972)
20. Gordon Melton, J.: *Encyclopedia of American Religions*. Wilmington, McGrath/Consortium (1978)
21. Bainbridge, W.S.: *Satan's Power: A Deviant Psychotherapy Cult*. University of California Press, Berkeley (1978)
22. Bainbridge, W.S.: Science and Religion: The Case of Scientology. In: Bromley, D.G., Hammond, P.E. (eds.) *The Future of New Religious Movements*, pp. 59–79. Mercer University Press, Macon (1987)
23. Bainbridge, W.S.: Social construction from within. In: Richardson, J.T., Best, J., Bromley, D. (eds.) *The Satanism Scare*, pp. 297–310. Aldine de Gruyter, New York (1991)
24. Bainbridge, W.S.: The process Church of the final judgement. In: *The Sociology of Religious Movements*, pp. 241–268. Routledge, New York (1997)
25. Bainbridge, W.S.: The cultural context of scientology. In: Lewis, J.R. (ed.) *Scientology*, pp. 35–51. Oxford University Press, New York (2009)
26. Bainbridge, W.S.: The family (Children of God). In: *The Sociology of Religious Movements*, pp. 208–240. Routledge, New York (1997)
27. Bainbridge, W.S.: *The Endtime Family: Children of God*. State University of New York Press, Albany (2002)

28. Lofland, J., Stark, R.: Becoming a World-saver: a theory of conversion to a deviant perspective. *Am. Sociol. Rev.* **30**, 862–875 (1965)
29. Lofland, J.: Doomsday Cult. Prentice-Hall, Englewood Cliffs (1966)
30. Barker, E.: The Making of a Moonie: Choice or Brainwashing? Blackwell, Oxford (1984)
31. Bainbridge, W.S.: Privacy and property on the net: research questions. *Science*. **302**, 1686–1687 (2003)
32. Nilsson, P.-E., Enkvist, V.: Techniques of religion-making in Sweden: The case of the missionary Church of Kopimism. *Crit. Res. Relig.* **4**(2), 1–15 (2015)
33. Hall, B. (ed.): No Safe Harbor. United States Pirate Party, No place (2012)
34. Bader, C., Carson Mencken, F., Baker, J.: Paranormal America, 2nd edn. New York University Press, New York (2017)
35. Bohannon, J.: Who's afraid of peer review?. *Science* **342**(6154), 60–65, persingerpublications.com. Accessed 15 May 2016 (2013)
36. Bainbridge, W.S.: The Cancer Problem. Macmillan, New York (1914)
37. Vares, D.A.E., St-Pierre, L.S., Persinger, M.A.: Correlations between U.S. County annual cancer incidence and population density. *Am. J. Cancer Res.* **5**(11), 3467–3474 (2015), p. 3467
38. Wagner, R.: The art-work of the future. In: Richard Wagner's Prose Works, pp. 69–213. K. Paul, Trench, London (1895 [1849])
39. Bainbridge, W.S.: An Information Technology Surrogate for Religion: The Veneration of Deceased Family Members in Online Games. Palgrave Macmillan, New York (2014)

Chapter 2

Humanization: The Crash or Reboot of Social Psychology

Abstract If the situation were not already confusing enough, some of the social sciences that study religion seem to have entered extended periods of crisis. For example, as measured by references in historical newspapers available online, in the period 1840–1919, psychology rose from nowhere to overshadow both religion and the pseudoscience of phrenology. Today, however, social psychology, that gave us valuable conceptual frameworks like the Lofland-Stark model of recruitment to religious movements, is losing credibility. George Homans and Satoshi Kanazawa theorized that humanity already understood everything there is to learn about human interaction in the prehistoric state of nature, which would imply that social psychology could at best formalize folk wisdom. New social realities may emerge, such as those caused by communication technologies, but they may be too varied to be studied with small, non-random samples in brief laboratory experiments. In August 2015, the journal *Science* reported that only a quarter of studies in the *Journal of Personality and Social Psychology* could be replicated, and those that did give reliable results may merely have reproduced traditional findings couched in new terminology. Leading social psychologists like James House and William Sewell have expressed concern over the years that their field has not achieved the progress they had expected. Organizational fragmentation is another sign of chaos, such as the gap between sociological and psychological social psychology, or within psychology the schism of the Association for Psychological Science from the American Psychological Association, or the schism between psychology more generally and cognitive science. Computer-based cultural phenomena like Netflix movies, video-games, and Facebook groups now promulgate countercultures critical of both religion and science.

An essential requirement for fully understanding religion and computer-based communications is a rigorous social science, the core which may be social psychology. Yet the journal *Science* almost never publishes social psychology research, but has published several studies fundamentally criticizing its qualifications to be called a science. If science is to be questioned, can that be done objectively from the viewpoint of a discipline that itself claims to be a science? Certainly, philosophy habitually criticizes itself, but oddly there is no Philosophy Program at the National Science Foundation, and such self-criticism seems to belong to the humanities, not the sciences. Perhaps that will be the fate of the academic departments that currently

call themselves social sciences, to be revealed as genres of literature that write sonnets following strict iambic pentameter, but do not qualify as sciences despite this artistic rigor. Interestingly, a report titled *One Culture*, from the Council on Library and Information Resources, urged unification of social science and the humanities, through transforming both into computationally intensive forms of creative scholarship [1].

Many of the standard theories of the dynamics of new religious movements are within the domain of social psychology, although the fields that bracket it, sociology and psychology, have very different orientations toward the study of novel religion, or indeed of religion more generally. For example, one psychological theory of recruitment to cults invoked *brainwashing*, with implications of exploitative deception and psychopathology, while sociology tended to see cult recruitment in more normal terms [2, 3]. One reason may be sociology's kinship with cultural anthropology, in which sympathetic research on exotic religions was part of the classical tradition, for example in James Frazer's *The Golden Bough*, Bronislaw Malinowski's *Magic, Science, and Religion*, and E. E. Evans-Pritchard's *Nuer Religion* [4–6]. Another, less respectable reason may be that Auguste Comte, arguably the founder of sociology, intended it to be a replacement for Christianity. His book title, *The Catechism of Positive Religion*, implied that social science should assume the function of sanctifying society, but with “positivistic” or “scientific” qualities [7].

Although many schools of thought exist within and around the boundaries of social psychology, it is not too much of a simplification to say there are two social psychologies, psychological and sociological [8]. Within sociology, there have been many schools of thought, although the broad and imprecise term *Symbolic Interactionism* is often used to describe several of them [9]. In the 1960s, a school of thought became popular that seemed rather mystical to outsiders, Phenomenology or Ethnomethodology [10, 11]. As in cultural anthropology, some sociologists practice post-modernism, which implies a degree of cultural relativism or pessimism whether objective answers to key questions can be found. If society is socially constructed, then is it not the case that social constructivist sociology is also socially constructed, leading perhaps to an infinite regress of relativism? [12]

2.1 Conservative Curmudgeonism

At the opposite extreme from poetic Symbolic Interactionism in sociological social psychology stood George Caspar Homans, who prided himself on being a Behaviorist and a Reductionist, writing poetry only as a hobby [13]. He believed that it was both possible and necessary to develop a rigorous deductive theory of human behavior, that reduced social phenomena to the interactions between individuals, who behaved in accordance with psychological or economic axioms that could be precisely stated. Two of his books were especially influential, *The Human Group* published in 1950, and *Social Behavior*, first published in 1961 and revised in 1974 [14, 15]. In other books he argued two controversial points [16, 17]. First,

all the social and behavioral sciences should be unified, including even history. However, he vehemently opposed his own university's main attempt to unify the social sciences, the Harvard Department of Social Relations, because it was based on concepts he considered mystical, including *values*, *culture*, and *the subconscious mind* [18–21]. Second, within social psychology there were no further discoveries to be made. Humans already understood the principles of social interaction, or the evolution of society would have been impossible. All that social scientists could contribute was more rigorous statement of what everybody already knew. This is an important theory, that will be implicit throughout this book:

Social psychology is the rigorous formalization of folk knowledge about human interaction.

Another pioneer of sociological social psychology, whom Homans incidentally admired, was Jacob Moreno, who like Comte originally wanted to establish a new religion through a kind of social psychology he called *Sociometry*. His 1934 book *Who Shall Survive?* was a creative reaction to the disaster of the First World War, expressing utopian hopes that a science of social networks could bring lasting peace [22]. Despite the radicalism of the title, this was the best early presentation of social network research, and Moreno soon founded a journal he named *Sociometry* that still exists, but under the bland title *Social Psychology Quarterly*, and published by the American Sociological Association. Its early issues present an innovation Moreno called *Psychodrama*, a rival to Sigmund Freud's Psychoanalysis which Moreno despised. Moreno was a pioneer of group psychotherapy, and Psychodrama was a technique through which members of a therapy group could act out their inner conflicts, developing their own insights rather than having doctrines imposed upon them as in Psychoanalysis. Thus, the combination of Sociometry and Psychodrama – social networks and social roles – was a secularized form of religion, intended to save humanity from the horrors of bloody conflict [23–28].

The complexities of networks and roles are obviously greater today than in previous centuries, most recently complicated by the extensive use of online communication media which both impose their designers' theories on the users, and facilitate relationships among large numbers of people at great distances, many of whom never meet directly. This raises many questions about the evolution and even fragmentation of folk knowledge, relevant to this study because much folk knowledge has traditionally been encoded into popular religions. Especially relevant here is the work of Satoshi Kanazawa, who proposed what he called the *Savanna Principle*, originally expressed in two forms in different publications:

A hypothesis about human behavior fails to the extent that its scope conditions and assumptions are inconsistent with what existed in the ancestral environment [29].

The human brain has difficulty comprehending and dealing with entities and situations that did not exist in the ancestral environment [30].

The *Savanna* refers to the area of East Africa where the human species evolved, and the implication is that the human brain evolved various social capabilities in the context of small, hunter-gatherer bands who lived their entire lives together, inter-

acting occasionally and perhaps intermarrying with adjacent bands, but without very large social structures or any of the technologies that resulted from the so-called Neolithic Revolution marked by the invention of agriculture [31]. At a first approximation, there exist two kinds of laws governing human behavior: (1) Cognitive and behavioral propensities largely coded into our genes that determined social behavior in the prehistoric era of the Savanna, and (2) Propensities encoded in the culture and technology of a society and thus varying significantly over time and space.

It may be possible to study Savanna propensities in scientific laboratories, although some may require a sufficiently complex surrounding environment that as a practical matter they need to be studied in a natural setting. Non-Savanna propensities may be impossible to study in scientific laboratories, unless very great care is taken in selection of research subjects and collection of additional data, because these propensities are not ingrown but will vary significantly across the human population and the demand characteristics of the setting. Thus, the Savanna Principle is a powerful critique of laboratory social psychology, because the Savanna-propensities are already known and the non-Savanna principles should be studied by methods other than the fashionable running of cheap experiments in academic laboratories.

Kanazawa does not assume that human brains are all identical, and he has even suggested that people vary in their biological tendency to be religious [32]. Summarized in metaphoric form, imagine that the human brain has two competing modules that govern behavior relevant to religion. One is the “mirror neurons” or other structure that helps people empathize with how other people feel. This module will tend to read phenomena as being the product of another humanoid mind, such as a god, and motivates attachment to other people. Therefore it will favor religion, as it encourages one person to seek the other person who defines reality. The second module is a cognitive calculator, requiring extensive factual memory and a systematic processing unit like the CPU of a computer. This module analyzes phenomena in terms of mechanical processes of cause and effect, and thus works against religious beliefs. If this second module is dominant in a person, religion will be unattractive. Kanazawa summarizes the supportive empirical data in the title of his article: “Why Liberals and Atheists Are More Intelligent.” Whatever we may think of this aspect of his theory, it stimulates thought. If society becomes secularized, how will the social module express itself? Perhaps in terms of a pseudoscientific codification of folk knowledge, like conventional social psychology.

There are many ways to understand the pressures that render contemporary psychology problematic, but especially obvious are the organizational fragmentations. In 1988, a faction within the American Psychological Association broke away to form what was initially called the American Psychological Society, then as it expanded internationally, the Association for Psychological Science. Its main complaint about the APA was that it had become a guild of practitioners, chiefly educational psychologists, councilors who often preached to college classes rather than advising individual clients, and clinical psychologists who performed psychotherapy. The APS sought to revive the scientific approach to psychology [33]. A large frac-

tion of the articles in the APS's journal, *Perspectives on Psychological Science*, are intense meditations on why the field of psychology is in such perilous condition today, such as the need to include the influence of the social environment in any psychological explanation, and avoiding premature reliance on neurological explanations for behavior [34, 35].

Over the same period of time, a rival to psychology has arisen to prominence, *cognitive science*, often described as a convergence of six fields: psychology, artificial intelligence, linguistics, neuroscience, anthropology, and philosophy [36, 37]. However, in its purest form, cognitive science includes only small regions of those six traditional fields, for example cognitive psychology rather than psychology generally, and in my experience seems increasingly dominated by computational neuroscience, at least in terms of government-funded research. In 2013, the gulf between cognitive science and psychology became painfully obvious, when the National Institute of Mental Health strongly criticized the updated Diagnostic and Statistical Manual of the American Psychiatric Association, arguing that rigorous diagnosis of mental illness cannot be based upon observations of behavior, especially within the frameworks associated with traditional psychology. Rather, the director of the NIMH asserted, scientific diagnosis must be based on definitive biological tests, employing a combination of genetics and scanning of brain structures, both of which are highly computational rather than based on fallible human judgment [38].

One of the most popular books that introduced the general public to cognitive science, *How the Mind Works* by Steven Pinker, dismisses the notion of God as a cognitive error, and is equally dismissive of Psychoanalysis [39]. Another leader in cognitive science who also wrote for the general public, Paul Bloom, argued that the religious concept of soul was also an error, and perhaps even the psychological concept of self, too [40]. In a chapter contributed to a book about the New Atheism, I argued that cognitive science strongly supported this radical attack on religion:

Consider this sentence: "I believe in God." To a first approximation, it is a combination of three elements: 1) *I*, 2) *believe in*, and 3) *God*. Traditional Atheism questions the third element, God. The new Atheism based in cognitive science questions all three elements. To be sure, most Atheists doubt that individual humans possess immortal souls or spirits, but the very notion of a unitary self is questionable from the standpoint of modern research. Belief is certainly an object of study in cognitive science, and the results of research do not closely match popular notions of faith. With respect to God, cognitive scientists can legitimately ask: If a god did exist, how would its own cognitive functions operate, and what material basis would enable them? [41]

The issue about belief concerns the possibility that the memories contained within the human mind are not structured in terms of any coherent system of overarching categories, but are very situation-dependent – eidetic or episodic – a problem that may afflict the minds of academics as much as those of ordinary people. To their credit, leaders within social psychology have occasionally admitted their field is suffering one or another kind of crisis. As recently as 2008, James House noted that by many measures social psychology was in decline, compared, for example, with economics [42]. He cited a similar meditation by William Sewell three decades

earlier, who said social psychology had long been in crisis for four reasons: (1) This bridge between psychology and sociology threatened the departmental structure of universities. (2) Funding was inadequate to support comprehensive research. (3) It had achieved no theoretical breakthroughs. (4) Methodological advances had failed to make discoveries [43].

In 2010, three Canadian psychologists complained that the research subjects typically used in experiments are *weird*: “Behavioral scientists routinely publish broad findings about human psychology and behavior in the world’s top journals based on samples drawn entirely from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies.” [44] Many other researchers chimed in, mainly agreeing. This means the research is vulnerable to long-term *priming effects*, which is to say that some connections between variables would have been established in the research subjects’ minds as part of their school education or recreational activities.

If social psychology is simply formalized folk knowledge, what happens when the conditions of human life change radically? In our current world, information technology promotes globalization, which erodes existing social and cultural structures even as it builds new ones, and it transforms conditions of work in profound ways. As the classical theory of William F. Ogburn predicts, adaptation will be delayed, causing *cultural lag*, during which people will suffer unusual strains [45]. Cultural adaptation will be erratic, as people experiment incoherently, even in areas of culture that seem remote from technology, notably religion. Thus, like a plague of locusts, new cults will arise, some calling themselves religions and others avoiding that label, adding to the cultural confusion but perhaps leading to the invention of new religions better adapted to the revolutionary conditions caused by science and technology.

2.2 Religious Innovation

At a first approximation, it can be said there are three social-psychological theories of the emergence of radically new religious movements [46]:

1. *Psychopathology*: Religious innovation is a rare but direct result of temporary psychotic episodes an otherwise competent person experiences, interprets in religious terms, then convinces other people to believe.
2. *Entrepreneurship*: Personal ambition drives some individuals to develop new packages of supernaturally defined psychological compensators, in order to exchange them for rewards from followers.
3. *Subculture evolution*: A cohesive network of individuals encourage each other to adopt an emerging religious perspective, by expressing hopes that spread like rumors through the group, each one of minor significance, but together constituting a new faith.

The literature citations for the psychopathology model are primarily to the Psychoanalysis tradition, rather than to modern cognitive science, which may be taken as ironic evidence that Psychoanalysis is in direct competition with new religions for its clients, and thus is itself covertly a new religion [47–50]. At least that is how the entrepreneurship model might be applied to the chief proponents of the competing psychopathology model. Both of the first two models could become components of the third, as the self-interested claims of some members of the group reinforce the personal psychiatric symptoms of other members. While the first two models emphasize the role of a single leader, all three models require group dynamics that convert additional recruits to the new faith.

The most comprehensive and clear social-psychological model of cult recruitment was published way back in 1965 by John Lofland and Rodney Stark, two graduate students at the University of California, Berkeley, who drew upon the more general theories of their professors Neil Smelser and Charles Y. Glock, in interaction with fellow graduate students like Travis Hirschi. Lofland had been using ethnographic methods to study an early branch of the Korean new religious movement in California, the Unification Church, and Stark provided some of the formal logic required, on his way to becoming one of the leading sociologists of religion of his generation [51–55].

The seven-step Lofland-Stark model of “conversion to a deviant perspective” followed Smelser’s *value-added* conception, in which each step must be taken in the given order for someone to become a “deployable agent” for the cult, strongly committed and working to recruit additional members [56]. But the steps were assembled from somewhat different existing theories of deviance and conformity, and thus could be considered contributory variables that would increase the probability of joining in whatever order they occurred. The first three steps may be seen as predisposing factors, the fourth as situational, and the final three as dynamic interaction between the person and the cult:

1. Experience enduring, acutely felt tensions
2. Within a religious problem-solving perspective,
3. Which leads him to define himself as a religious seeker;
4. Encountering the group at a turning point in his life
5. Wherein an affective bond is formed (or pre-exists) with one or more converts;
6. Where extra-cult attachments are absent or neutralized;
7. And where, if he is to become a deployable agent, he is exposed to intensive interaction.

From the standpoint of the individual person, “enduring, acutely felt tensions” are frustrating life problems that have resisted solution by conventional means, driving the person closer and closer to a breaking point. Within sociological theory, it was often seen on the collective rather than individual level, as what Smelser called *structural strain*, for example a contradiction between values promulgated by the culture and the institutional realities that are supposed to serve those values. Today, we might suggest the example of modern societies that tell young people to get a good education so they can earn respectable incomes, but who find no jobs available

when they graduate from college. The more structural strain in a society, the higher the rate of deviant behavior.

Smelser was a student and collaborator of Robert K. Merton, and structural strain is an adaptation of Merton's *anomie theory* [57]. They believed that any coherent society possessed a set of *values* and *norms*, the goals people were expected to seek and the legitimate means for seeking them. Merton's anomie concerned those cases in which following the norms would fail to achieve the values for a significant number of members of the society. In the absence of anomie, people would tend to conform, and even with anomie a significant fraction of people suffering enduring, acutely felt tensions would ritualistically follow the norms. Thus *strain theory* may explain the circumstances that predispose people to join a deviant religious movement, but is not sufficient in itself.

A “religious problem-solving perspective” is a general assumption that life’s troubles require help from God, or is based on comparable faith that persistent difficulties can be resolved by some form of supernatural intervention. In Smelser’s terms, this is a *generalized belief*. The default solutions for human problems are given by the norms governing ordinary daily life, but in cases of strain, they are not working. Then, Lofland and Stark explain, individuals may consider alternatives that also exist in the common culture:

An alternative solution is a perspective or rhetoric defining the nature and sources of problems in living and offering some program for their resolution. Many such alternative solutions exist in modern society. Briefly, three particular genres of solution are relevant here: the psychiatric, the political and the religious. In the first, the origin of problems is typically traced to the psyche, and manipulation of the self is advocated as a solution. Political solutions, mainly radical, locate the sources of problems in the social structure and advocate reorganization of the system as a solution. The religious perspective tends to see both sources and solutions as emanating from an unseen and, in principle, unseeable realm [58].

Lofland and Stark call psychiatric and political problem-solving perspectives “secular rhetorics,” which immediately suggests that we should wonder how secularization might affect the dynamics of their theoretical model. If secularization means loss of influence by traditional religions, then untraditional religions would become less deviant as existing assumptions erode. That implies that less severe enduring, acutely felt tensions would be required to motivate joining a new religion. However, if secularization means the loss of faith in religion in general, then joining a new religion would become more deviant, and require greater tension. Or, does secularization reduce any advantage in calling one’s innovation a religion, thus increasing the fraction of new movements that are at most quasi-religious? In court testimony concerning a movement called the Local Church, some years after publishing with Lofland, Stark emphasized that the heart of the model was the process of social influence, recruiting potential converts if they had stronger social ties with members than with non-members: “The marvelous thing is how unimportant frequently religion was in this whole process.”¹ How do we resolve those competing predictions?

¹ www.contendingforthefaith.com/libel-litigations/god-men/experts/stark.html; [en.wikipedia.org/wiki/Local_churches_\(affiliation\)](https://en.wikipedia.org/wiki/Local_churches_(affiliation)), accessed November 6, 2016.

Stark, beginning in collaboration with Travis Hirschi, provided an interesting resolution. Using data that Hirschi had collected, he and Stark published an influential article reporting that religiosity did not deter juvenile delinquency [59]. That finding immediately raises doubts about the widespread assumption that religion establishes and enforces the norms of a society, thus undercutting the Lofland-Stark model to some degree [60]. But years later Stark did a study showing that the situation was more complex [61]. Hirschi's data were collected in a part of California where the rate of church membership was low, and thus conventional religion was weak, whether because of increased secularization or simply because high rates of geographic migration eroded society more generally. Using a national dataset, Stark showed that religion deterred delinquency in areas of the country where it was strong, but lacked that influence where it was weak. Simultaneously, Stark and I were publishing many studies that indicated that radical cults flourished in areas where church membership was weak [62, 63].

This book raises further doubts about the clarity of the Lofland-Stark model, specifically suggesting that many of the most influential psychiatric perspectives of their period were in fact pseudoscientific religions, that is, functionally equivalent to religions but couching mystical concepts in popular terms that did not evoke images of angels and deities. More generally, there may be in modern society an incoherent host of problem-solving perspectives, some of which are hardly distinguishable from religions. In his much more recent statements about new religious movements, Stark has argued that successful ones more closely resemble traditional religions than do unsuccessful ones, which if true might result from the ease with which the label "religion" can be applied to them [64]. Evaluating Stark's hypothesis is difficult if some of the more successful movements resemble religion but do not themselves adopt that label, and thus are excluded from the analysis.

The third step in the Lofland-Stark model is probably the least clear in the subsequent literature, the extent to which people define themselves as religious seekers prior to joining new religious movements. There are serious issues within social psychology about definition of the self, especially for theories that assume many mental processes are subconscious.

The fourth step, turning point, may reflect a change in self-definition, or a change in external circumstances, such as graduating from school or moving to a new town, both of which feed into the final three steps by disrupting existing social relationships and opening doors for new relationships to be formed. Steps 5 through 7 are an application of Edwin Sutherland's *differential association theory*, a multi-step formalization of the common notion that people are influenced by the people they interact with most frequently [65].

When I did ethnographic field research inside the Process Church of the Final Judgement, 1970–1976, the subject of Chap. 3, I was very much influenced by the Lofland-Stark model, and I still think it has much value. But it also has three related failings, that plague social psychology more generally.

First, as we have already noted, key terms like *religion* are difficult to define, and society's conventional definitions may change during the very processes we seek to study, in this case secularization. The Process began as a psychotherapy called

Compulsions Analysis, then evolved into a religion, then evolved surprisingly into an animal rescue charity.

Second, collecting rigorous data ample enough to test an hypothesis is very difficult. The Lofland and Stark publication offers biographical vignettes describing the life problems a few of the recruits to the Unification Church were suffering, and I published some about Processians as well [66]. By my observation, some of the most valuable recruits to the Process did not seem to be suffering “enduring, acutely felt tensions,” but in the context of the glorious 1960s to be reasonably successful young people who believed it was possible to achieve lives far above the ordinary, rather than merely satisfactory. Potential recruits who were suffering great tension, tended not to be as valuable to the group, and even burdened it when they did join. One reason Stark and I published so many quantitative studies using data about cult and church rates for geographic areas, was that reliable data about individual people was not available. That meant that hypotheses often could be tested only very indirectly, connected to real data only through long chains of debatable logic.

Third, the steps in the Lofland-Stark model, and really all social psychology, are framed in ordinary language rather than scientific technical terms or complex mathematical expressions as in physics. Every idea in the model can be understood by any reasonably intelligent person, without the necessity for extensive education in social psychology. Yes, a term like *differential association* may seem technical, but I had no trouble stating it in ordinary language above. Now I must admit that while I gave the term the ordinary meaning sociologists attach to it, Sutherland’s meaning was more sophisticated, because originally he was thinking not so much about associations between people, but associations between pieces of information in the individual’s mind. Indeed, Sutherland’s classic work can be reframed in terms of modern *cognitive science* rather than social psychology.

2.3 A Nineteenth-Century Science of the Mind

Dynamic secularization is currently reaching a watershed, yet has been operating for centuries and history offers earlier examples of pseudosciences that temporarily filled the space currently occupied by social psychology. Wikipedia offers the perfect example: “Phrenology (from Greek φρήν (phrēn), meaning ‘mind’, and λόγος (logos), meaning ‘knowledge’) is a pseudoscience primarily focused on measurements of the human skull, based on the concept that the brain is the organ of the mind, and that certain brain areas have localized, specific functions or modules.”² The sentence connects phrenology to ancient Greek concepts, rejects it as pseudoscientific, yet describes it as a premature attempt to do what modern psychiatrists and neuroscientists are still struggling to accomplish: understand how brain structure may shape personality and thus interaction with other people.

² en.wikipedia.org/wiki/Phrenology, accessed August 17, 2015.

The continuing construction of historical archives and their constantly improving access online have provided a basis for studying religions of old in new ways, for example a recent study by Adam Goldstein and Heather Haveman of denominational dynamics reflected in the evolving publication of American religious magazines [67]. The Library of Congress offers an online archive of historical American newspapers 1836–1922 called Chronicling America, with a somewhat versatile search system that permits searching not merely for single words, but also for some combinations of words.³ It facilitates searching in a selected newspaper, within a particular range of years, and by separate states of the nation. When the work described here was done, in August 2015, the archive contained 9,741,765 newspaper pages, reported the number of pages containing the search term, and let the user read or download a good image of any interesting page. For example, searching the famous *New-York Tribune* edited by Horace Greeley quickly discovered an intelligent 1841 overview titled “Phrenology” and written by someone using the pseudonym “A Calm Observer,” which began:

That the mind depends upon the brain for communication with the objects in creation, is a general truth undeniable by men of candor and common sense, who have examined the subject. For an injury to the brain causes delirium and insanity or idiocy, if sufficiently extensive. So also natural defects from birth, show corresponding imbecility or discordant results in the manifestations of mind. Observation and induction have proved also, that the reflective faculties lie in one part of the brain, the moral sentiments in another, and the animal propensities in another. It is contended that these are opposing or antagonistic faculties, and character depends upon the resultant force.⁴

A remarkable amount of reasonable speculation about the human personality is crammed into this paragraph. It is worth noting that the perspective is *dualist*, considering the mind to be somewhat separate from the brain, manifesting itself through a physical organ of the body but possibly transcendent in the form of a *soul*, although that contentious four-letter word is not used. Dualism is often traced back to the philosopher René Descartes, who contributed much to the birth of modern science and employed an introspective method to seek the truth about the relationship between the subjective self and the objective world [68]. It would be a mistake to believe simply that Descartes was wrong to separate mind from body, although finding the ultimate truth may be beyond our current abilities. Something like dualism is found in modern computer science, but perhaps a form of *trialism*, having three components rather than two: data, software, and hardware. It seems appealing to say that the mind is the data, the brain is the hardware, and the personality is the software that gives form to the data. Yet anyone who has programmed a variety of computers using different languages and operating systems will know that software can be considered data, and both may at times be built into the hardware.

The middle of the newspaper paragraph offers empirical evidence that human behavior depends to a great extent upon the condition and structure of the brain, an awareness that had arisen over previous decades within medical practice, especially

³ chroniclingamerica.loc.gov/, accessed November 6, 2016.

⁴ A Calm Observer, “Phrenology,” *New-York Tribune*, October 16, 1841, page 1.

Table 2.1 US newspaper pages using these words: phrenology, psychology, theology

Years	Phrenology	Psychology	Theology	Phrenology/ psychology (%)	Phrenology/ theology (%)	Psychology/ theology (%)
1840–1849	1633	188	1359	868.6	120.2	13.8
1850–1859	2882	617	3943	467.1	73.1	15.6
1860–1869	2034	745	2687	273.0	75.7	27.7
1870–1879	4389	2150	6416	204.1	68.4	33.5
1880–1889	2534	3220	10,702	78.7	23.7	30.1
1890–1899	2686	9766	17,341	27.5	15.5	56.3
1900–1909	2176	22,365	16,615	9.7	13.1	134.6
1910–1919	1106	38,646	10,472	2.9	10.6	369.0

as the effects of head injuries had been observed. The concluding sentences suggest that three aspects of personality depend upon three distinct parts of the brain that might determine the shape of the skull: reflective (intellectual), moral, and animal. Historians report that phrenology was originally developed in Europe and became rather popular among educated Americans in the 1840s [69]. We can begin to explore its cultural influence through a simple count of the number of newspaper pages mentioning the word, per decade, over the period 1840–1919, shown with comparative data in Table 2.1.

As Table 2.1 reports, 1633 of the newspaper pages dating from 1840–1849 contained the word “phrenology,” and the peak decade was the 1870s with 4389. The last decade has the smallest number of pages containing “phrenology,” but the counts vary only moderately, with five of the eight decades in the 2000s range. This suggests that phrenology continued to be a topic of some interest after the 1840s, but it does not take account of the great increase in newspaper publication, nor changing patterns of how many pages were published in a typical issue, or issues in a week, nor what fraction of the pages was taken by increasing use of photographs and perhaps advertisements. The drop in the number of pages in the 1860s may reflect the US Civil War, which disrupted newspaper publishing in many communities, but presumably more in the Confederacy than in the Union. If we were doing an intensive study of this topic, we would need to employ more sophisticated methods than mere word counts, but even a very slight increase in effort can reveal insights.

A similar count was done for the word “psychology,” which showed a massive growth in frequency, from just 188 pages in the 1840s up to 38,646 pages in the 1910s. This explosion is a result of two factors: (1) the growth of newspaper publishing, indeed of towns across the nation that needed new outlets, and (2) increase

in the popularity of “psychology.” The table then shows the size of the “phrenology” count as a percentage of the “psychology” count, revealing an almost linear crash in the use of the term “phrenology.” Even in the last decade, some of the articles present phrenology in a favorable light, but many mention it only in passing and in derogatory terms. Historians have noted that the phrenology movement played a role in secularization and perhaps also in left-wing political movements for which traditional religious institutions seemed to be instruments of the ruling class [70, 71]. Thus, it is worthwhile comparing the trend in newspaper usage for a religion-related word, and “theology” seemed a good counterpart to “psychology.”

Here is an anecdote about phrenology and religion that raises more questions than it answers, which is not a bad thing early in a study of something as ambiguous as human nature. In March 1842, the religious leader William Miller was taken by a friend to a phrenologist in Boston, without introducing Miller by name. He was actually quite famous at the time, as the prophet who predicted that Christ would return to Earth sometime in the year March 21, 1843 to March 21, 1844, and today’s Adventist movements are the enduring result of the Great Disappointment that was experienced when his prophecy was disconfirmed by the failure of the world to end. As reported in an often-quoted 1853 biography of Miller by Sylvester Bliss, the phrenologist began feeling the shape of Miller’s skull and remarking that its good form indicated a man of good sense, unlike that crazy man, William Miller. Note, the story says that the phrenologist did not recognize he was feeling the skull of William Miller, and made the dubious diagnosis that such a well-formed skull could not possibly belong to such a lunatic as the infamous William Miller.

Bliss quotes the phrenologist verbatim: “Mr. Miller could not easily make a convert of this man to his hair-brained theory. He has too much good sense... O, how I should like to examine Mr. Miller’s head! I would give it one squeezing... There! I’ll bet you anything that old Miller has got a bump on his head there as big as my fist.” [72] This anecdote makes two points: (1) Phenologists are stupid quacks, because they are arrogant secularists. (2) William Miller was a reasonable man, despite being responsible for a major religious upheaval that disrupted the lives of hundreds if not thousands of followers. The second point is probably true, and he seems to have been a totally respectable man who had seen much tragedy in his life and read new meaning into the Bible in an honest attempt to understand the human condition. Today, we naturally assume the first point was also true, because the discoveries made two centuries ago by the first phenologists have been disproven, and after its early popularity among intellectuals had indeed become a crank pseudoscience.

However, if today one googles “phrenology” and “William Miller,” one gets among the four first hits two that are about this incident but two that link to a phrenology publication dating from 1839 in which an extensive examination of the head of a different William Miller was reported, indeed a murderer for whom the phrenological exam was part of his trial [73–75]. Thus, the anecdote misinterpreted what the phrenologist said, and was not proof that his pre-psychological form of secularization was foolish in comparison with Adventism.

2.4 The Current Crisis

In August 2015, the respected journal *Science* published a study purporting to demonstrate that a very large fraction of psychological experimental studies could not be replicated, implying that the journals contained many articles that were based on methodological errors or even fraud [76, 77]. Remarkably, only about a quarter of studies published in the *Journal of Personality and Social Psychology* could be replicated. Of course, if many of the original studies were deeply flawed, the same could be true for the replication attempts. On the other hand, some of the studies that could be replicated may have themselves been replications of classic studies, perhaps deceptively appearing to be innovative by giving new names to the experimental variables. Reviewers for the social-psych journal may have evaluated the article submissions the way a church-goer evaluates a Sunday morning sermon: It is literally wonderful if it inspires us in our faith, by repeating sacred scriptures in fresh language.

In this case, the journal *Science* may represent the secularizing force of science, eroding religious faith without respecting its social-emotional values. It is worth noting that *Science* essentially never publishes social psychology, implicitly excluding it from the roster of true sciences. The author of the critical replication paper was a collective, called the Open Science Collaboration, while the introduction was written by John Bohannon, famous for his critical journalism, for example a study in which he submitted a fake article to online journals and had it accepted by many of them [78]. More recently, he reported on the *Science* website about research that suggested many international questionnaire studies included fraudulent data [79]. We cannot be confident that the *Science*-based critiques of social science are themselves fully scientific. Indeed, the journal was instantly the recipient of angry letters arguing that the replication article was methodologically flawed.

In 2011, *Journal of Personality and Social Psychology* published an article by Daryl Bem of Cornell University, reporting that nine experimental studies with more than a thousand human subjects had demonstrated that human beings actually do possess psychic powers allowing them to foresee the future [80]. A news article on the Cornell website proclaimed that this marvelous study capped Bem's career, as he prepared for retirement. It also offered a succinct description of his methodology:

Bem's nine experiments demonstrated similar unconscious influences from future events. For example, in one experiment, participants saw a list of words and were then given a test in which they tried to retype as many of the words as they could remember. Next, a computer randomly selected some of the words from the list and gave the participants practice exercises on them. When their earlier memory test results were checked, it was found that they had remembered more of the words they were to practice later than words they were not going to practice. In other words, the practice exercises had reached back in time to help them on the earlier test [81].

Later we will note the mystical connotations of the word “unconscious,” but logically this methodology seems quite rigorous. The same was true of research done in

the 1930s by J. B. Rhine, whom Wikipedia describes as “an American botanist who founded scientific research in parapsychology as a branch of psychology, founding the parapsychology lab at Duke University, the *Journal of Parapsychology*, the *Foundation for Research on the Nature of Man*, and the *Parapsychological Association*.⁵ Rhine was no fool, and he is generally thought also not to have been a fraud. He was prepared to debunk fakery performed by psychic mediums, but possessed an intense desire to discover spiritual transcendence through the methods of science [82–86]. A series of experimental studies testing research subjects for their telepathic abilities was published and received considerable publicity. Before long, psychologists came to the view that Rhine had been deceived by some of his research subjects, or had committed clumsy errors in research design, or had “subconsciously” introduced bias in his selection and analysis of data [87].

Writing in the journal *Nature*, which like *Science* does not often publish social psychology, Ed Young noted that other researchers failed to replicate Bem’s results in their own studies [88]. But they had trouble publishing their negative findings. Young observed:

Positive results in psychology can behave like rumours: easy to release but hard to dispel. They dominate most journals, which strive to present new, exciting research. Meanwhile, attempts to replicate those studies, especially when the findings are negative, go unpublished, languishing in personal file drawers or circulating in conversations around the water cooler...

These problems occur throughout the sciences, but psychology has a number of deeply entrenched cultural norms that exacerbate them. It has become common practice, for example, to tweak experimental designs in ways that practically guarantee positive results. And once positive results are published, few researchers replicate the experiment exactly, instead carrying out “conceptual replications” that test similar hypotheses using different methods. This practice, say critics, builds a house of cards on potentially shaky foundations [89].

According to a report by *New Scientist*, the *Journal of Personality and Social Psychology* indeed rejected a study that failed to replicate Bem’s results, quoting the editor as writing, “This journal does not publish replication studies, whether successful or unsuccessful.” [90] However, the journal did publish a critique of Bem’s methodology that reanalyzed his data, for example calling the studies exploratory rather than confirmatory, and saying that Bem’s publication favored apparently positive results, from a large dataset, thus invalidating tests of statistical significance. More generally it commented: “The field of psychology currently uses methodological and statistical strategies that are too weak, too malleable, and offer far too many opportunities for researchers to befuddle themselves and their peers.” [91].

An example of a specific methodological problem related to demand characteristics, often cited in comparison with the Bem debate and prominent at about the same time, concerned *priming effects*, the psychological term we already mentioned for the tendency people have to interpret one stimulus in terms temporarily preconditioned by some earlier influential stimulus. Any thoughtful person in any recent century already possessed some version of the *priming effect* concept, so this is not

⁵ en.wikipedia.org/wiki/Joseph_Banks_Rhine, accessed July 29, 2016.

some astonishing modern discovery of psychological science. We interpret every new stimulus in terms of the context in which it occurs, and in the form that recent events have prepared our minds to expect. Suppose stimulus number 1 is a piece of cheese, and stimulus number 2 is the word “mouse,” we naturally look around for a rodent who may want to eat the cheese. But if we are sitting at our computer, and read the word “mouse,” we naturally think of a manual input device, with a wire for a tail. So cheese or a computer prime us with different expectations, and on some level everybody already knows this.

This is reminiscent of the Hawthorne effect, “a type of reactivity in which individuals modify or improve an aspect of their behavior in response to their awareness of being observed.”⁶ Named after the Hawthorne factory of the Western Electric Company, where research on factors that encourage worker productivity was carried out in 1924–1932, in later re-analyses of the data this research error concept suggested workers would react favorably to almost any attention that was lavished upon them, thus obscuring which changes were real improvements [92]. Despite the long history of work in this area, psychologists continually publish studies either falsely claiming to have discovered priming for the first time, or adding some unexpected feature we were not already primed to expect. For example, in 1996, John A. Bargh, Mark Chen, and Lara Burrows published an article about priming, titled “Automaticity of Social Behavior,” in the *Journal of Personality and Social Psychology*. The journal generally requires articles to report the results of at least two different experimental studies on the same general topic, and as its abstract explained, this one reported on three:

Experiment 1 showed that participants whose concept of rudeness was primed interrupted the experimenter more quickly and frequently than did participants primed with polite-related stimuli. In Experiment 2, participants for whom an elderly stereotype was primed walked more slowly down the hallway when leaving the experiment than did control participants, consistent with the content of that stereotype. In Experiment 3, participants for whom the African American stereotype was primed subliminally reacted with more hostility to a vexatious request of the experimenter [93].

After philosophizing about a mouse, we should let the cat out of the bag. Priming effects are one of the potentially powerful causes of false results in social-psychological experiments, but the studies of priming effects are themselves of controversial quality. In 2012, Stéphane Doyen, Olivier Klein, Cora-Lise Pichon, and Axel Cleeremans published results of an attempt to replicate the second experiment in this set, initially failing to find any difference in how quickly research subjects walked down a hallway, after they had been primed to think about old people [94]. They then ran the experiment again, but explicitly told the research subjects the theory that was being tested, and this time their behavior did support the theory.

In an angry rejoinder, Bargh both defended his team’s research, and commented on the debate then raging about replicability of results in social psychology, even citing Ed Young’s article from *Nature*. He proudly cited two studies published in *Journal of Personality and Social Psychology* that had replicated his results [95, 96].

⁶en.wikipedia.org/wiki/Hawthorne_effect, accessed November 6, 2016.

But he admitted the later research had made further discoveries: “Both articles found the effect but with moderation by a second factor: Hull et al. 2002 showed the effect mainly for individuals high in self consciousness, and Cesario et al. 2006 showed the effect mainly for individuals who like (versus dislike) the elderly.” [97] Thus, we may worry that priming effects within an experiment are contingent upon priming effects that take place before the experiment, and if we ran thousands of studies like this, with research subjects drawn from different populations, the findings would blur to the point of invisibility.

Reading Bargh’s rejoinder requires managing a rather strong priming effect caused by the fact that it is in his blog, with the standing title “The Natural Unconscious” on the excruciatingly unscientific *Psychology Today* website. Indeed, immediately above it on the page is the advertisement “Find a Therapist,” and when I enter my postal zip code into it, I get a list of local psychotherapists, accompanied by glowing portraits of their faces. By pure chance, the first primes me for my first visit with her by counteracting the priming she assumes I already feel: “I understand many clients come to therapy for the first time full of anxiety as they are wary of talking to a stranger about personal issues. I am often told by clients that I make them feel comfortable and relaxed, and by the end of the first visit they often feel a sense of relief and hope.”

Being wary of talking to strangers may be the result of many bad experiences over the years, rather than of a very recent event that primed one temporarily with anxiety. Long-lasting priming may be called *prejudice*, and some of the early social psychology studies that experienced replication difficulties were focused on racial prejudice. In the 1960s, Milton Rokeach and collaborators argued that racial prejudice was a less significant factor than ideological differences in shaping human relations [98, 99]. An experimental test of this theory could assemble several discussion groups of research subjects, have them debate a topic, then say which of the other group members they would be happy to work with again. A confederate of the researcher could pretend to be a member of the group, either of the same race as the research subjects or a different one, and either agreeing with them or disagreeing.

Of course that was a decade of great concern over race relations in America, and research subjects tend to be convenience samples of students or others close to the university, so the results could have been a reflection of the momentary ideology on campus or in the mass media, more than a fundamental discovery about human nature. Many research subjects were effectively primed to minimize race in their responses [100]. One of the methodological debates concerned whether it would be better to do the studies out in the real world, without telling people they were subjects to an experiment, thus reducing the academic priming effects. But this then came to be seen as unethical, because research subjects had the right to give or withhold informed consent before being experimented upon [101]. Looking backward from today, it seems unreasonable to assume that race and belief differences have fixed propensities to produce hostility, but exist in a complex dynamic, influencing each other and responding to changing historical conditions [102]. Not only does that raise doubts about the value of purist laboratory experiments in social psychol-

ogy, but it also suggests that social psychology itself is influenced by changing cultural conditions.

2.5 Subconscious Pathologies

Among the most impressive computer-based social psychology studies of recent years, is a series centered on the Implicit Association Test, available online for anyone who wants to experience it. The use of the term *implicit* is ambiguous, defined by one online dictionary as “implied though not plainly expressed,” and another as “ implied, rather than explicitly stated.”⁷ These definitions imply that the person who implies an idea is personally aware of it, but for some reason not willing to acknowledge that awareness fully. Yet the IAT website defines *implicit associations* as “hidden thoughts” and defines *implicit social cognition* as “thoughts and feelings outside of conscious awareness and control.” The implies that the thoughts are hidden from the thinker, as well as from other people.

With a prestigious Internet address at Harvard University, the IAT proclaims: “Conscious experience provides only a small window into how the mind works. What are your unconscious or uncontrolled reactions when you think about anxiety, depression, alcohol, eating disorders, or persons with mental illness? Find out by experiencing the Implicit Association Test (IAT).”⁸ A visitor to the website is then invited to try one of the follow demonstration tests:

Depression IAT: Do you implicitly associate yourself with being happy or sad?

Alcohol IAT: Do you implicitly think alcohol is irresistible?

Treatment IAT: Do you implicitly favor medication or talk therapy?

Self-esteem IAT: Do you implicitly associate yourself as good or bad?

Eating IAT: Do you implicitly feel eating high-fat food is shameful?

Anxiety IAT: Do you implicitly associate yourself with being anxious or calm?

Mental Illness IAT: Do you implicitly think people with mental illnesses are dangerous?

What is not obvious to the uninitiated respondent is that the online system is only superficially worried about the correctness of the answers, but primarily measuring *latency of response*, how long it takes the respondent to press the correct key. Several versions now exist of the Implicit Association Test, originally developed by psychologists Tony Greenwald, Mahzarin Banaji, and Brian Nosek [103, 104]. Latency of response was one of many contributions to psychology a century ago by Carl Gustav Jung, a disciple of Sigmund Freud and arguably the most mystical of the early psychoanalysts [105]. For example, he advocated belief in *synchronicity*, a connection between events that is unrelated to cause and effect in ordinary time order, not merely subjectively meaningful but somehow objectively real [106]. Unique among Freud’s disciples, Jung was a minister’s son and heavily influenced

⁷ www.encyclopedia.com/doc/1O999-implicit.html; www.dictionary.com/browse/implicit, accessed August 18, 2016.

⁸ implicit.harvard.edu/implicit/user/pimh/index.jsp, accessed August 18, 2016.

by Christianity. He may have been influenced also by the philosophy of Henri Bergson, who attempted to find a middle ground between esoteric mysticism and modern science [107]. Jung's psychology has influenced some modern religious movements, often in occult domains [108, 109].

To be sure, latency of response is an objective measurement of human behavior. However, there are different opinions about what it means. In very influential cognitive science research, Sol Sternberg used latency measures to learn how some aspects of human memory were accessed. I have used his method myself, in a pilot study comparing an individual with something approaching photographic memory versus an ordinary research subject [110]. Repeatedly, the person is shown a series of one-digit numbers in sequence on a computer screen, followed by a pause, then one target digit that at random either was or was not in the particular series. The respondent then presses a key to indicate whether the digit was in the series or not. Indeed, the person with remarkable memory simply did not make mistakes.

But following Sternberg's method, I was primarily interested in how long it took the respondent to respond. Does the person remember the sequence of digits as a series, and thus must take time to scan through them in memory? If so, answers involving long sequences will produce greater latency as each digit is recalled in turn. Also, if the digits are recalled as a sequence, can the person halt the scan if the target digit is found? If so, "no" answers will on average take longer than "yes" answers. This methodology uses latency as a measure of the amount of cognitive work that must be done to produce a response. Jung and his Implicit Association disciples take it as a measure of psychological repression, in which inhibitions retard expressions of subconscious feelings.

Many of the early online applications of the Implicit Association Test used it to ferret out racial prejudice, thus tainting the result with political bias. The approach was certainly reasonable, from the perspective of Jung's school of thought. White people know they are not suppose to have prejudice against Black people, so they hide it. But in psychoanalytic theory people also repress their prejudice, becoming unaware of it. Notice a problem already at this point. Maybe the respondents who scored as racially prejudiced are conscious that they have negative judgments of people who belong to other races. Their increased latency of response reflects a series of cognitive steps that unprejudiced people do not need to take: "I dislike and disrespect members of that race. The psychologist will think poorly of me if I admit that. Therefore I must conceal the fact and pretend not to feel this way." Distinguishing conscious deception from unconscious repression is difficult, if the only information we have is a delay in the response.

A standard cognitive theory of prejudice was offered by Harvard psychologist Gordon Allport. He suggested that much prejudice results from a principle of least effort that affects the way humans categorize, and he said that "monopolistic categories are easier to form and to hold than are differentiated categories." [111] In a computer simulation study, I found it was rather easy to model this effect using neural networks that were intentionally designed to be just smart enough to solve problems that represented interactions with people having different characteristics,

but would often make simplifying errors that were equivalent to human prejudice [112].

There seem to be three related reasons why the creators of the Implicit Association Test conceptualize latency of response in terms of repression of unconscious feelings, rather than considering a range of alternative cognitive science explanations.

First, they are operating in the intellectual heritage of Jung, Freud and Psychoanalysis more generally. For all its scientific pretensions, this heritage has mystical roots. Both David Bakan and Larry Berkower have reported that Psychoanalysis was a direct outgrowth of the medieval Jewish mystical tradition, and Nandor Fodor connected it to a diversity of unconventional religious and occult traditions [113–115]. In his early work with Joseph Breuer, Freud used hypnosis on his patients, which has been compared with the casting of a magical spell or spirit possession [116]. Technically called *mesmerism*, hypnosis came directly from the quasi-religious cult of Franz Anton Mesmer, who claimed to be doing science based on a magical theory of animal magnetism [117]. The patients treated by Breuer and Freud were generally diagnosed hysteric – histrionic personalities who sometimes pretended to have multiple personalities – thus reinforcing the popular notion that multiple minds can exist inside the same skull [118].

Second, their interpretation is a tactic to gain influence over other people. This hearkens back to the entrepreneur theory of religious innovation, the claim that messiahs consciously deceive other people to gain advantage over them.

Third, ordinary folk culture has a concept of *self*, or *soul*, or *consciousness* that is at best subjective and probably erroneous. To believe in an unconscious mind or subconscious thoughts, one must first believe in a conscious mind that is somehow separate from other brain functions. There does, indeed, exist a considerable corpus of psychology and philosophy literature that accepts the distinction between conscious and unconscious mental processes [119–122]. Yet it seems built upon a phenomenological assumption, subjective or reflecting quasi-religious conceptions built into our language. It is one thing to recognize that different parts of the brain may serve different functions, but quite another to attribute personhood to a hidden self.

Several intellectual schools of thought have criticized naive use of language. A common view among scholars of literature, especially Existentialists or poets, is that much of human experience cannot be framed exactly in worlds but only suggested through metaphors [123]. An especially interesting if small and antique language-related social movement was General Semantics, created by Alfred Korzybski (1879–1950) who proclaimed aphorisms like: “The word is not the thing.” “The map is not the territory.” His disciple, S. I. Hayakawa (1906–1992) wrote a frequently re-printed textbook with a chapter titled “The Little Man Who Wasn’t There,” about the human tendency to ascribe personhood to abstractions, which may be as much true for the self as for the god [124].

2.6 Countercultures

If various schools of thought within social science are comparable to religions, are some allegedly religious groups comparable to social sciences? Of course, we would not expect religious cults to have academic journals and teach their doctrines in colleges, yet some of their concepts might be comparable to those of social psychology theories. For example, dualist perspectives that contrast God and Satan are simultaneously defining two alternate personality types. Thinking more religiously, must Christians believe in the existence not only of God and their own immortal souls, but also of Satan? If both God and Satan exist, are both deities, and are we free to worship the one we choose?

Such questions are central to a computer game and movie named *Constantine*, which is based on a movie of the same name which is based on the *Hellblazer* series of graphic novels. A Christian movie review website complains: “At face value, *Constantine*’s supernatural worldview seems to be similar to the truth set out in the Bible. (There is a heavy emphasis on Catholic icons and symbolism.) But heavy distortions quickly knock it off-kilter. God is said to be powerful, but self-limited by a wager with Satan. He and His angels are restricted to heaven. Satan and his demons are restricted to hell. At one point, when John is being taken to glory, Satan drags him back. This moment and others leave the audience wondering who is in charge. So what of Christ? He’s mostly a non-issue, and His divinity is swept under the rug.”⁹ In my earlier book on religion in computer games, I summarized the story [125]:

In the solo-player game called *Constantine*, the very first thing a player must do is go to Hell. Based on a movie and graphic novel, the story concerns John Constantine, a faithless soldier in the war between Heaven and Hell, at a time when infernal demons have broken a truce and begun invading Earth. Many of his weapons have biblical origins: a pistol that fires stones from the road to Damascus, a machine gun shooting nails used to crucify martyrs, holy water grenades, a bomb called the Shroud of Moses, and, finally, the spearhead that slew Jesus. Constantine’s mission requires him to shuttle back and forth between terrestrial Los Angeles and Hell’s devastated version of the city, where infernal fires hurl melting cars and buses through the sulfuric air. At the end, Constantine must fight against both the angel Gabriel and Mammon, the son of Satan. Then he discovers that God had engineered the demonic invasion to strengthen religious belief, which only reinforces his view that God is really no better than Satan.

We can study games and movies by personally exploring them, perhaps performing virtual ethnography or consciously seeking theoretical insights in any of the social sciences. But it is also possible to perform quantitative social science, for example through intensive analysis of data derived from online recommender systems. Chiefly developed in the 1990s, recommender systems employ *collaborative filtering*, statistical techniques based on many respondent’s ratings of movies or other cultural products, to advise a customer about which movie to see next, or other medium to experience [126–128]. They are similar to questionnaires, and may be used to map changing patterns in modern culture, although their use so far by social

⁹<http://www.pluggedin.com/movie-reviews/constantine/>, accessed September 24, 2016.

Table 2.2 Connections among selected movies rated by Netflix customers

Movie (Year released)	Cases	Mean	Correlation (r) with:		Passion cases
			<i>Constantine</i>	<i>Passion of Christ</i>	
<i>Constantine</i> (2005)	40,000	3.41	1.00	0.18	16,264
<i>The Passion of Christ</i> (2004)	16,264	3.79	0.18	1.00	16,264
<i>The Exorcist</i> (1973)	12,746	3.93	0.13	0.10	7077
<i>The Ten Commandments</i> (1956)	4057	4.03	0.13	0.31	2632
<i>Super Mario Bros.</i> (1993)	1285	2.40	0.36	0.15	724
<i>Jesus Christ Superstar</i> (1973)	815	3.58	0.13	0.15	484
<i>Elmer Gantry</i> (1960)	666	3.43	-0.01	0.09	392
<i>The Chronicles of Narnia: The Lion, the Witch and the Wardrobe</i> (1988)	594	3.19	0.19	0.16	340

scientists has been unexpectedly modest. A decade ago I suggested in *Review of Religious Research* that recommender systems could be a useful tool for the social science of religion, and offered *Constantine* as an example [129].

I had gained access to a remarkable dataset provided by the Netflix online movie rental company. It consists of 17,770 text files, each one for a different movie. Each line of a text file reflects the rating of that movie by one respondent who is identified by an ID number. The data reflect responses from fully 400,000 people who rated movies shortly after having seen them, on a scale from 1 to 5 in terms of how much the respondent liked the movie. To explore the utility of working with these recommender system preference data, I randomly selected 40,000 respondents who had rated *Constantine*. I then added ratings these respondents had given for six highly varied movies about religion and one based on the *Mario* videogames.

Of the 40,000 Netflix customers who had rated *Constantine*, fully 16,264 had also rated *The Passion of the Christ*, directed by Mel Gibson, which has some aesthetic similarities while being theologically more orthodox. The ratings of these two religion-oriented films correlate 0.18, which with 16,264 cases is certainly statistically significant. But what the correlation means is unclear. Is it generated by the fact that raters differ in how much they like religion, how much they like movies, or how much they fall prey to one or another psychological response bias? It could even reflect merely how close in time the releases of the two movies occurred, just short of a year apart. More meaningful might be differences and similarities in the correlations linking this pair of movies with others, as reported in Table 2.2.

Both correlations with *The Exorcist* are slightly lower but nearly the same, conceivably reflecting the fact that it was made over three decades earlier. But *Passion of the Christ* has a much higher 0.31 correlation with the even older religiously orthodox film, *The Ten Commandments*, and *Constantine* has an even higher 0.36 correlation with the decade older movie about the *Super Mario Bros* videogame. *Jesus Christ Superstar* and *The Chronicles of Narnia* offer essentially Christian ideology through different cultural styles, while *Elmer Gantry* with near-zero cor-

relations is about an errant preacher and does not take a positive stance toward religion.

To see the potential future value of recommender system data for religious research, I suggest we need to expand somewhat our ideas of the scope of quantitative social science to include what might be called quantitative ethnology. We could take inspiration from the anthropology journal *World Cultures*, which is the current manifestation of a research program dating back to George Murdock's work developing the *Ethnographic Atlas* in the late 1940s and the *Human Relations Area Files* at Yale [130, 131]. Recommender systems are a tool for mapping the current and changing conceptual structure of modern culture, as reflected in the choices and judgments of potentially vast numbers of members of the culture. Another source of both quantitative and qualitative data is Facebook, a home to a vast number of groups that represent countercultures.

On September 23, 2016, The Satanic Temple inaugurated its new world headquarters in Salem, Massachusetts. The date was symbolic because September 23 is the autumnal equinox, the day in the year after which the night is longer than the day. The former funeral home was labelled an art gallery, and the premier work of art on display was a famous life-size bronze statue of goat-god Baphomet as conceptualized by nineteenth-century occultist Éliphas Lévi, commonly used today as the icon of Satan. The sculptor, Mark Porter, had depicted this bi-sexual, capric humanoid with two sweet children, who gaze upward in adoration just as Christian kids might if they met Jesus. The Satanic Temple's website said the statue would be on display "until an offer to donate the statue to Arkansas for display on State Capitol grounds alongside the Ten Commandments is accepted."¹⁰ In 2014, the Satanic Temple had collected \$28,180 of contributions on the Indiegogo crowdfunding website to create the statue, proclaiming:

The existing Ten Commandments monument, donated to the Capitol Preservation Commission in 2009 by Mike Ritze, a representative of the Oklahoma State Legislature and ordained Southern Baptist Deacon, has raised the ire of the American Civil Liberties Union (ACLU) who filed suit in August of 2013, noting that, "the monument stands alone, with no other monuments or memorials in the immediate vicinity." Also of concern to the ACLU is the "self-evidently exclusive" religious message "that supports and endorses the faiths and creeds of some churches and sects." We believe that in being allowed to place our monument within the proximity of the Ten Commandments monument, we can appease the ACLU's concerns.¹¹

Journalistic interviews with the leaders of the temple suggested they actually were atheists, using pseudonyms for self-protection from violent Christians, who adopted Satanic symbolism as a weapon in their war against religion [132, 133]. The opening of the Salem headquarters received a fair amount of publicity, a good deal of it rather tolerant. For example, the *Boston Globe* reported the event, commenting "But pitchfork-wielding mobs protesting the move seem unlikely, as the

¹⁰ thesatanictemple.com, accessed September 27, 2016.

¹¹ www.indiegogo.com/projects/put-a-satanic-monument-at-ok-capitol#/, accessed September 27, 2016.

fire-and-brimstone theology of the Puritans who once populated the city has given way to a ‘live and let live’ attitude in present day Salem.”¹²

But the apparently Evangelical Christian website *Freedom Fighter Times* accused the Satanic Temple of launching an attack on America, saying “this is the same organization which attempted to indoctrinate children with satanism in Florida by distributing satanic materials to children in 2014. The evil temple is also the same group behind the takeover of city council meetings across America... Given the history, and the strategic movement by the satanic temple it is evident that there is another agenda at play. That agenda is not physical but spiritual; the Christian America that was is dying... This is a call to action, today – September 23rd, 2016 – it’s time to pray for Salem; that the city would turn from its wickedness and repent.”¹³

In anticipation of the Salem event, I joined the group’s pair of closed Facebook groups, and gained both an understanding and links to many other information sources from the messages members were posting. I also joined eight other more-or-less Satanic groups, which seemed more sincere in their advocacy for emotional rejection of Christian values, two of which were public. The distinction between closed and public groups in Facebook is a little complex, because the owner can set various rules that are more specific than this gross dichotomy. In the case of all ten I needed to apply for membership and be accepted, and the administrators of a group could check my own Facebook page if they had doubts. Table 2.3 lists the membership population and part of the self-description of each group, as of September 25, 2016.

The Satanic Temple official forum’s membership was 2275 at 9 PM, September 20, 2016, 5 days before the 2316 in the table, and it proved possible to extract the names of 2114 of them and determine that they had joined at a rather constant rate over the previous year. The three current administrators of the group were Ash Astaroth, Konrad Josefsson, and Brian Conklin Jr. While I communicated most directly with Ash Astaroth, it was Konrad Josefsson who accepted my application to join. The data included the name of the administrator accepting a membership request in 1784 cases, for 1578 of whom Brian Conklin performed this function. As the name Astaroth suggests, a number of the members of the groups in Table 2.3 do not use their mundane identities, and I know of several cases in which people have two or more Facebook avatars. The website of Ash Astaroth provided this tantalizing self-description: “a skeptic, a transhumanist, a feminist, and a Satanist atheist living in NYC and working for The Satanic Temple of NYC.”¹⁴

Many Facebook groups have but one administrator, which tends to indicate either that it is a mode of self-expression by that individual, or a communication hub the person set up just for Facebook, rather than being the page belonging to a real-world

¹² www.bostonglobe.com/metro/regional/north/2016/09/20/satanic-headquarters-hopes-for-quiet-opening-salem/GcS4kooiHUCdDGdRHVq9xK/story.html, accessed September 20, 2016.

¹³ freedomfightertimes.com/end-times/spirit-war/satanic-temple-international-headquarters-salem-massachusetts/, www.youtube.com/watch?v=CE_u4IFiG2U, accessed September 27, 2016.

¹⁴ ashastaroth.thesatanictemplenyc.com/?p=438, accessed September 27, 2016.

Table 2.3 Ten self-consciously satanic facebook groups

Name	Self-description	Members	Admins	Friends
Public groups:				
The Temple Of Satan	The Temple of Satan was founded in 2009 by Jacob Bannon, Lanny Summers, and Levi Goodpaster in Bloomington Indiana. We are an Organization based off of the philosophies of the Satanic Bible and other relevant works of the late great Dr. Anton Szandor LaVey. Although we follow the LaVeyan Path, and even emulate certain policies of the Church of Satan, we are in no way affiliated with the C.o.S.	8842	3	100
Closed Groups:				
The Spiritual Luciferian – The Prophetic Light	This group is designed to expose the truth about reality and spirituality... For mankind – this is your call to arms – this is your wake up call – The only weapon we have to combat the parasitic possessions within the human consciousness is Love. Love is Law. The only thing more powerful than Love is Human Will. May spiritual ignorance, pollution and the over population therein be their atonement for a new era in which such injustices do not exist. To help you see what great and failing religious institutions cannot explain.	2044	7	59
The Satanic Temple official forum	This is the OFFICIAL Facebook forum of The Satanic Temple... This is a group for discussion of The Satanic Temple and its campaigns, mission, and activities.	2316	3	126
The Satanic Temple Unofficial Discussion	Replacement for the old unofficial TST discussion group. Please keep your posts on topic and civil.	1845	6	85
The Church of Satan	This is an unofficial Facebook group for the Church of Satan, an international organization established in 1966 and still in worldwide operation today. The content in this group does not officially represent the Church of Satan, however its purpose is to facilitate discussion and share ideas related to Satanism and the Church of Satan, the organization who supports the principles found in “The Satanic Bible” by Anton Szandor LaVey. The administrators of this Facebook group are all Church of Satan members.	12,568	11	90

(continued)

Table 2.3 (continued)

Name	Self-description	Members	Admins	Friends
Satanic Philosophy And Education	This is an educational group dedicated to the study of Satanism and it's many paths. But we do not limit our selves to just that. We also journey forth through the Left Hand Path as a whole. This includes Luciferianism, Paganism, Wicca and everything in between.	9471	20	123
Atheistic Satanism – Official	The official group of atheisticsatanism.com and its corresponding facebook page. Other than being atheistic and egalitarian-leaning in some way, it is general Satanism.	869	9	73
Your Friendly Neighborhood Satanists	Well hello! This is a group dedicated to Satanists, the things we believe in (responsibility to the responsible, an insatiable love for life and the pursuit of our goals and delights) and the things we DON'T believe in (animal sacrifice, eating babies, dressing like a cartoon of a goth)... You just may find the worlds most whispered about "non religion" is exactly what you were looking for.	1363	11	39
LaVeyan Satanism	LaVeyan Satanism was founded in 1966 by Anton Szandor LaVey. Its teachings are based on individualism, self-indulgence, and "eye for an eye" morality, drawing influences from the rituals and ceremonies of occultist Aleister Crowley, and the philosophies of Friedrich Nietzsche and Ayn Rand. Employing Crowley's terminology, its adherents define Satanism as a "Left-Hand Path" religion and philosophy, rejecting traditional "Right-Hand Path" religions such as Christianity for their perceived denial of life and emphasis on guilt and abstinence.	6222	14	65
Satanic International Network	Satanic International Network was created to be an alternative to other typical Satanic "churches" and organizations. There are no membership fees. No hierarchy of occult grand poo-baas. No high priest, magus, reverends or any other silly self ordained title and rank. S.I.N. is simply a networking hub, a loosely structured cabal of Satanists around the world. We believe the future of Satanism is here online.	6670	10	107

group. All ten of these virtual groups have multiple administrators, suggesting they are groups in the real world.

The column headed Friends gives the number of members with whom I then had a “friend” connection in Facebook. I had a total of 2002 friends when the data were recorded, and few are people I have met in the real world. In order to gain the maximum information about these and other groups I was studying, I had just aggressively increased over 3 weeks from about 100 friends, by sending invitations to any member of a group with whom I already had at least ten mutual friends, perhaps not an ideal sampling technique, but one that increases one’s network by a kind of chain reaction.

I quickly noticed that many people belonged to several of the groups in the table, thus suggesting it was indeed a somewhat coherent subculture, even as the groups differed somewhat. Even without completing a systematic study, the pictures representing my new friends, and the materials presented on their personal pages, suggested a distinctive range of personalities. Many of the men looked like members of the famous motorcycle group, Hell’s Angels, complete with tattoos on muscular bodies, suggesting physical strength and emotional aggression. Others presented themselves in occult symbolism and art. In terms of culture, they were literally iconoclasts, figuratively smashing the icons of conventional religion. This raises a question that will be examined very closely in the following chapter: To what extent could Satanism, a child of secularization, become a real religion of the future?

References

1. Williford, C., Henry, C., Friedlander, A.: One Culture: Computational Intensive Research in the Humanities and Social Sciences. Council on Library and Information Resources, Washington DC (2012)
2. Schein, E.F., Schneier, I., Barker, C.H.: Coercive Persuasion. Norton, New York (1961)
3. Barker, E.: The Making of a Moonie: Choice or Brainwashing? Blackwell, Oxford (1984)
4. Frazer, J.G.: The Golden Bough: A Study in Comparative Religion. Macmillan, New York (1894)
5. Malinowski, B.: Magic, Science and Religion. Doubleday, Garden City (1954)
6. Evans-Pritchard, E.E.: Nuer Religion. Clarendon Press, Oxford (1956)
7. Comte, A.: The Catechism of Positive Religion. Trübner, London (1883)
8. Stephan, C.W., Stephan, W.G.: Two Social Psychologies. Wadsworth, Belmont (1990)
9. Blumer, H.: Symbolic Interactionism. Prentice-Hall, Englewood Cliffs (1969)
10. Schutz, A.: The Phenomenology of the Social World. Northwestern University Press, Evanston (1967)
11. Garfinkel, H.: Studies in Ethnomethodology. Prentice-Hall, Englewood Cliffs (1967)
12. Berger, P.L., Luckmann, T.: The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Doubleday, Garden City (1966)
13. Homans, G.C.: The Witch Hazel: Poems of a Lifetime. Transaction Books, New Brunswick (1988)
14. Homans, G.C.: The Human Group. Harcourt, Brace and World, New York (1950)
15. Homans, G.C.: Social Behavior: Its Elementary Forms. Harcourt, Brace Jovanovich, New York (1974)

16. Homans, G.C.: *The Nature of Social Science*. Harcourt, Brace and World, New York (1967)
17. Homans, G.C.: *Coming to My Senses: The Autobiography of a Sociologist*. Transaction Books, New Brunswick (1984)
18. Bainbridge, W.S.: George Caspar Homans. In: Asher, R.E., Simpson, J.M.Y. (eds.) *The Encyclopedia of Language and Linguistics*, pp. 1592–1593. Pergamon, Oxford (1994)
19. Bainbridge, W.S.: Values. In: Asher, R.E., Simpson, J.M.Y. (eds.) *The Encyclopedia of Language and Linguistics*, pp. 4888–4892. Pergamon, Oxford (1994)
20. Bainbridge, W.S.: The harvard department of social relations. In: Bainbridge, W.S. (ed.) *Leadership in Science and Technology*, pp. 496–503. Sage, Thousand Oaks (2010)
21. Spengler, J.J.: Have values a place in economics? *Int. J. Ethics.* **44**(3), 313–331
22. Moreno, J.L.: *Who Shall Survive?* Nervous and Mental Disease Publishing Company, Washington DC (1934)
23. Borgatta, E.F., Boguslaw, R., Haskell, M.R.: On the work of Jacob L. Moreno. *Sociometry*. **38**(1), 148–161 (1975)
24. Borgatta, E.F.: Jacob L. Moreno and ‘Sociometry’: A mid-century reminiscence. *Soc. Psychol. Q.* **70**(4), 330–332 (2007)
25. Marineau, R.F.: The birth and development of sociometry: The work and legacy of Jacob Moreno (1889–1974). *Soc. Psychol. Q.* **70**(4), 322–325 (2007)
26. Howie, P.: Philosophy of life: J. L. Moreno’s revolutionary philosophical underpinnings of psychodrama, and group psychotherapy. *Group: J. Eastern Group Psychother. Soc.* **36**(2), 135–146 (2012)
27. Hare, P., Hare, J.R.: *J. L. Moreno*. Sage, London (1996)
28. Meiers, J.I.: Origins and development of group therapy. *Sociometry*. **8**(3/4), 261–296 (1945)
29. Kanazawa, S.: The Savanna principle. *Manag. Decis. Econ.* **25**(1), 41–54 (2004)
30. Kanazawa, S.: Evolutionary psychological foundations of civil wars. *J. Polit.* **71**(1), 25–34 (2009)
31. Gordon Childe, V.: *Man Makes Himself*. New American Library, New York (1951)
32. Kanazawa, S.: Why liberals and atheists are more intelligent. *Soc. Psychol. Q.* **73**(1), 33–57 (2010)
33. Cautin, R.L.: The founding of the association for psychological science: Part 1. dialectical tensions within organized psychology. *Perspect. Psychol. Sci.* **4**(3), 211–223 (2009)
34. Oishi, S., Graham, J.: Social ecology: Lost and found in psychological science. *Perspect. Psychol. Sci.* **5**(4), 356–377 (2010)
35. Miller, G.A.: Mistreating psychology in the decades of the brain. *Perspect. Psychol. Sci.* **5**(6), 716–743 (2010)
36. Miller, G.A.: The cognitive revolution: A historical perspective. *Trends Cogn. Sci.* **7**(3), 141–144 (2003)
37. Thagard, P.: Cognitive science. In: Zalta, E. N., (ed.) *The Stanford Encyclopedia of Philosophy*, (Fall 2014 Edition), plato.stanford.edu/archives/fall2014/entries/cognitive-science, Accessed 2 Sept 2016
38. Bainbridge, W.S.: Ethical challenges of ubiquitous health care. In: Eshaghian-Wilner, M.M. (ed.) *Wireless Computing in Medicine*, pp. 475–506. Wiley, New York (2016)
39. Pinker, S.: *How the mind works*. Norton, New York (1997)
40. Bloom, P.: *Descartes’ Baby: How the Science of Child Development Explains What Makes Us Human*. Basic Books, New York (2004)
41. Bainbridge, W.S.: Cognitive science and the new atheism. In: Amarasingam, A. (ed.) *Religion and the New Atheism*, pp. 79–96. Brill, Leiden (2010)
42. House, J.S.: Social psychology, social science, and economics: Twentieth century progress and problems, twenty-first century prospects. *Soc. Psychol. Q.* **71**, 232–256 (2008)
43. Sewell, W.H.: Some reflections on the golden age of interdisciplinary social psychology. *Annu. Rev. Sociol.* **15**, 1–16 (1989)
44. J. Henrich, S. J. Heine, and A. Norenzayan: The Weirdest People in the World. *Behav Brain Sci.* **33**, 61–83 (2010). with many commentaries as www2.psych.ubc.ca/~henrich/pdfs/WeirdPeople.pdf. Accessed 7 Oct 2016.

45. Ogburn, W.F.: Social Change with Respect to Culture and Original Nature. Huebsch, New York (1922)
46. Bainbridge, W.S., Stark, R.: Cult formation: Three compatible models. *Sociol. Anal.* **40**, 285–295 (1979)
47. Freud, S.: The Future of an Illusion. Doubleday, Garden City (1964 [1927])
48. Roheim, G.: Magic and Schizophrenia. Indiana University Press, Bloomington (1955)
49. Silverman, J.: Shamans and acute schizophrenia. *Am. Anthropol.* **69**, 21–32 (1967)
50. LaBarre, W.: The Ghost Dance. Dell, New York (1972)
51. Lofland, J., Stark, R.: Becoming a world-saver; a theory of conversion to a deviant perspective. *Am. Sociol. Rev.* **30**, 862–875 (1965)
52. Lofland, J.: Doomsday Cult. Prentice-Hall, Englewood Cliffs (1966)
53. Bainbridge, W.S.: Satan's Power: Ethnography of a Deviant Psychotherapy Cult. University of California Press, Berkeley (1978)
54. Richardson, J.T., Stewart, M.W., Simmonds, R.B.: Organized Miracles. Transaction, New Brunswick (1979)
55. Snow, D.A., Machalek, R.: The sociology of conversion. *Annu. Rev. Sociol.* **10**, 167–190 (1984)
56. Smelser, N.J.: Theory of Collective Behavior. Free Press, New York (1962)
57. Merton, R.K.: Social structure and anomie. In: *Social Theory and Social Structure*, pp. 185–214. Free Press, New York (1968)
58. Lofland, J., Stark, R.: Becoming a world-saver; a theory of conversion to a deviant perspective. *Am. Sociol. Rev.* **30**, 867 (1965)
59. Hirschi, T., Stark, R.: Hellfire and delinquency. *Soc. Probl.* **17**, 202–213 (1969)
60. Parsons, T.: Evolutionary universals in society. *Am. Sociol. Rev.* **29**, 339–357 (1964)
61. Stark, R., Bainbridge, W.S.: Religion, Deviance and Social Control. Routledge, New York (1996)
62. Stark, R., Bainbridge, W.S.: The Future of Religion. University of California Press, Berkeley (1985)
63. Bainbridge, W.S.: The religious ecology of deviance. *Am. Sociol. Rev.* **54**, 288–295 (1989)
64. Stark, R.: Why religious movements succeed or fail: A revised general model. *J. Contemp. Relig.* **11**, 133–146 (1996)
65. Sutherland, E.H.: Principles of Criminology. Lippincott, Philadelphia (1947)
66. Bainbridge, W.S.: The sociology of conversion. In: Newton Malony, H., Southard, S. (eds.) *Handbook of Religious Conversion*, pp. 178–191. Religious Education Press, Birmingham (1992)
67. Goldstein, A., Haveman, H.A.: Pulpit and press: Denominational dynamics and the growth of religious magazines in Antebellum America. *Am. Sociol. Rev.* **78**(5), 797–827 (2013)
68. Bloom, P.: Descartes' Baby: How the Science of Child Development Explains What Makes Us Human. Basic Books, New York (2004)
69. Riegel, R.E.: The introduction of phrenology to the United States. *Am. Hist. Rev.* **39**(1), 73–78 (1933)
70. Grant, C.: Combe on phrenology and free will: A note on sixteenth-century secularism. *J. Hist. Ideas.* **26**(1), 141–147 (1965)
71. McLaren, A.: Phrenology: Medium and message. *J. Mod. Hist.* **46**(1), 86–97 (1974)
72. Bliss, S.: Memoirs of William Miller, p. 160. Joshua V. Himes, Boston (1853)
73. Fowler, O.S., Lewis, E., Miller, W.: Phrenological developments and character of William Miller, who was executed at Williamsport, Pa., July 27th, 1838, for the murder of Solomon Hoffman. *American Phrenological J. Miscellany.* 272–286 (1839)
74. Riegel, R.E.: The introduction of phrenology to the United States. *Am. Hist. Rev.* **39**(1), 73–78 (1933)
75. Bainbridge, W.S.: The Sociology of Religious Movements, p. 102. Routledge, New York (1997)
76. Bohannon, J.: Many psychology papers fail replication test. *Science.* **349**, 910–911 (2015)

77. Open Science Collaboration: Estimating the reproducibility of psychological science. *Science*. **349**, 943-. (2015)
78. Bohannon, J.: Who's afraid of peer review? *Science*. **342**(6154), 60–65 (2013)
79. Bohannon, J.: Many surveys, about one in five, may contain fraudulent data. www.sciencemag.org/news/2016/02/survey-says-many-surveys-about-one-five-may-contain-fraudulent-data, Accessed 6 Nov 2016.
80. Bem, D.J.: Feeling the future: Experimental evidence for anomalous retroactive influences on cognition and affect. *J. Pers. Soc. Psychol.* **100**(3), 407–425 (2011)
81. Lowery, G.: Study showing that humans have some psychic powers caps Daryl Bem's career. Cornell Chronicle, December 6, 2010., www.news.cornell.edu/stories/2010/12/study-looks-brains-ability-see-future, Accessed 27 July 2016.
82. Rhine, J.B.: Extra-Sensory Perception. Bruce Humphries, Boston (1964 [1934])
83. Rhine, J.B.: New Frontiers of the Mind. Farrar and Rinehart, New York (1937)
84. Rhine, J.B. (ed.): Progress in Parapsychology. Durham, Parapsychology Press (1971)
85. Beloff, J. (ed.): New Directions in Parapsychology. Scarecrow Press, Metuchen (1974)
86. Edge, H.L., Morris, R.L., Rush, J.H., Palmer, J.: Foundations of Parapsychology. Routledge and Kegan Paul, Boston (1986)
87. Hansel, C.E.M.: ESP – A Scientific Evaluation. Scribner's, New York (1966)
88. Ritchie, S.J., Wiseman, R., French, C.C.: Failing the future: Three unsuccessful attempts to replicate Bem's 'retroactive facilitation of recall' effect. *PLoS One*. **7**(3), e33423 (2012)
89. Yong, E.: Replication studies: bad copy. *Nature*. **485**, 298–300 (2012)
90. Aldhous, P.: Journal rejects studies contradicting precognition. *New Scientist*. May 5, 2011. www.newscientist.com/article/dn20447-journal-rejects-studies-contradicting-precognition. Accessed 29 July 2016
91. Wagenmakers, E.-J., Wetzels, R., Borsboom, D., van der Maas, H.L.J.: Why psychologists must change the way they analyze their data: The case of psi: Comment on Bem. *J. Pers. Soc. Psychol.* **100**(3), 426–432 (2011)
92. Olson, R., Verley, J., Santos, L., Salas, C.: What we teach students about the Hawthorne studies: A review of content within a sample of introductory I-O and OB textbooks. *Ind.-Organ. Psychol.* **41**(3), 23–39 (2004)
93. Bargh, J.A., Chen, M., Burrows, L.: Automaticity of social behavior: Direct effect of trait construct and stereotype activation on action. *J. Pers. Soc. Psychol.* **71**, 230–244 (1996)
94. Doyen, S., Klein, O., Pichon, C.-L., Cleeremans, A.: Behavioral priming: It's all in the mind, but whose mind? *PLoS One*. **7**(1), e29081 (2012)
95. Hull, J.G., Slone, L.B., Meteyer, K.B., Matthews, A.R.: The nonconsciousness of self-consciousness. *J. Pers. Soc. Psychol.* **83**(2), 406–424 (2002)
96. Cesario, J., Plaks, J.E., Tory Higgins, E.: Automatic social behavior as motivated preparation to interact. *J. Pers. Soc. Psychol.* **90**, 893–910 (2006)
97. Bargh, J.A.: Priming effects replicate just fine, thanks. *Psychol. Today*, May 11, 2012, www.psychologytoday.com/blog/the-natural-unconscious/201205/priming-effects-replicate-just-fine-thanks, Accessed 29 July 2016
98. Rokeach, M.: The Open and Closed Mind. Basic Books, New York (1960)
99. Rokeach, M., Mezei, L.: Race and shared belief as factors in social choice. *Science*. **151**(3707), 167–172 (1966)
100. Canon, L.K., Mathews Jr., K.: Belief, social distance and interpersonal evaluation: A methodological critique. *Sociometry*. **34**(4), 515–523 (1971)
101. Miller, S.E., Rokeach, M.: Psychology experiments without subjects' consent. *Science*. **152**(3718), 15 (1966)
102. Stark, T.H., Flache, A.: Double edge of common interest: Ethnic segregation as an unintended byproduct of opinion homophily. *Sociol. Educ.* **85**(2), 179–199 (2012)
103. Banaji, M.R., Nosek, B.A., Greenwald, A.G.: No place for nostalgia in science: A response to Arkes and Tetlock. *Psychol. Inq.* **15**(4), 279–289 (2004)
104. Banaji, M., Greenwald, A.: Blind Spot: Hidden Biases of Good People. Delacorte, New York (2013)

105. Jung, C.G.: *Studies in Word-Association*. Moffat, Yard, New York (1919)
106. Jung, C.G.: *Synchronicity: An Acausal Connecting Principle*. Routledge and Kegan Paul, London (1972)
107. Gunter, P.A.Y.: Bergson and Jung. *Journal of the History of Ideas*. **43**(4), 635–652 (1982)
108. Dawson, E.E.: The religious implications of Jung's psychology. *Trans. Kans. Acad. Sci.* **52**(1), 89–91 (1949)
109. Tirayakian, E.A.: Toward the sociology of esoteric culture. *Am. J. Sociol.* **78**(3), 491–512 (1972)
110. Bainbridge, W.S.: *Personality Capture and Emulation*, pp. 102–107. Springer, London (2014)
111. Allport, G.: *The Nature of Prejudice*, p. 173. Beacon, Boston (1954)
112. Bainbridge, W.S.: Minimum intelligent neural device: A tool for social simulation. *Math. Sociol.* **20**, 179–192 (1995)
113. Bakan, D.: *Sigmund Freud and the Jewish Mystical Tradition*. Van Nostrand, Princeton (1958)
114. Berkower, L.: The enduring effect of the Jewish tradition upon Freud. *Am. J. Psychiatr.* **125**(8), 1067–1073 (1969)
115. Fodor, N.: *Freud, Jung, and Occultism*. University Books, New Hyde Park (1971)
116. Snell, J.E.: Hypnosis in the treatment of the 'Hexed' patient. *Am. J. Psychiatr.* **124**(3), 311–316 (1967)
117. Darnton, R.: *Mesmerism and the End of the Enlightenment in France*. Schocken, New York (1970)
118. Breuer, J., Freud, S.: *Studies in Hysteria*. Nervous and Mental Disease Publishing Company, New York (1936)
119. Kihlstrom, J.F.: The cognitive unconscious. *Science*. **237**(4821), 1445–1452 (1987)
120. Massey, D.S.: A brief history of human society: the origin and role of emotion in social life: 2001 presidential address. *Am. Sociol. Rev.* (67), 1–29 (2002)
121. Roser, M., Gazaniga, M.S.: Automatic brains: Interpretive minds. *Curr. Dir. Psychol. Sci.* **13**(2), 56–59 (2004)
122. Robinson, W.S.: Thoughts without distinctive non-imagistic phenomenology. *Philos. Phenomenol. Res.* **70**(3), 534–561 (2005)
123. Porter Abbott, H.: *Real Mysteries: Narrative and the Unknowable*. Ohio States University Press, Columbus (2013)
124. Hayakawa, S.I.: *Language in Thought and Action*, pp. 186–195. Harcourt, Brace, New York (1949)
125. Bainbridge, W.S.: *eGods: Faith Versus Fantasy in Computer Gaming*, p. 199. Oxford University Press, New York (2013)
126. Goldberg, D., Nichols, D., Oki, B.M., Terry, D.: Using collaborative filtering to weave an information tapestry. *Commun. ACM*. **35**, 61–70 (1992)
127. Resnick, P., Varian, H.R.: Recommender systems. *Commun. ACM*. **40**, 56–58 (1997)
128. Basu, C., Hirsh, H., Cohen, W.: Recommendation as classification: using social and content-based information in recommendation. Proceedings of the Fifteenth National Conference on Artificial Intelligence, Madison (1998).
129. Bainbridge, W.S.: Expanding the use of the internet in religious research. *Rev. Relig. Res.* **49**(1), 7–20 (2007)
130. Murdock, G.P.: *Social Structure*. MacMillan, New York (1949)
131. Murdock, G.P.: *Ethnographic Atlas: A Summary*. University of Pittsburgh Press, Pittsburgh (1967)
132. Oppenheimer, M.: A mischievous thorn in the side of conservative christianity. *New York Times*. July 10, 2015, www.nytimes.com/2015/07/11/us/a-mischievious-thorn-in-the-side-of-conservative-christianity.html
133. Lebovic, M.: In haunted Salem, a Jewish church founder preaches the art of 'Satanic' social change. *The Times of Israel*, October 26, 2016, www.timesofisrael.com/in-haunted-salem-a-jewish-church-founder-preaches-the-art-of-satanic-social-change/. Accessed 11 Nov 2016

Chapter 3

Paganization: The Virtual Revival of a Cult Online

Abstract This chapter explores some of the alternative online pathways for religious innovation in a time of sacred disintegration, using the example of the Process Church of the Final Judgement, which the author studied ethnographically during its period of popular visibility, 1970–1976. Originally a British deviant psychotherapy growing out of Scientology and Psychoanalysis, the Process became a communal, polytheistic religion in the US and Canada. Its theology was a social psychology theory, postulating four gods that defined the variety of human personalities and interaction issues: Lucifer, Jehovah, Christ and Satan. The result was fragmentation. One faction became monotheistic, and then withdrew from public activity for two decades, before morphing into a very successful animal rescue non-profit corporation, collecting tens of millions of dollars per year through online blogs and videos, thereby illustrating extreme specialization in which a small sector of a radical culture survived. The other faction retained its radical polytheism but could not hold members, and apparently vanished. A few members kept in touch over the years, and when Internet blossomed into the World Wide Web, the original Processean culture revived but in the absence of formal organization. Most strikingly, a number of musical bands either revived the music of the original Process, or more often were inspired by its intellectually rich counterculture in creating their own music. Several of the original Processeans began copying and sharing their scriptures online, and a few commercial publishers began promoting them. After two decades of communication via email, Processean Facebook groups were formed, with the apparent potential to expand and diversify even further. Interacting with larger quasi-Satanic and Ritual Magick groups in Facebook, the Process contributed to a growing radical religious subculture. Some members describe it as the *left-hand path*, implying not evil in comparison with the Judeo-Christian-Islamic *right-hand-path*, but individualism and dynamism, rejecting orthodoxy enshrined in formal organizations, and using Internet rather than local congregations to unite members.

Current debates about the extent and direction of secularization need to take into account the possibility of *paganization* – not the decline of religion but its disintegration. From a Christian perspective, the word *pagan* is often used to refer to any religion that does not accept the authority of the Bible, but this is very parochial. A definition more appropriate to a possible post-Christian era can be drawn from an

essay on the demise of classical Paganism by James O'Donnell [1]. *Paganism* in this view does not refer to a particular religion but to an attitude that holds religion to be a private matter in a society in which a host of creeds and cults coexist in a dynamic system that lacks any central control. *Paganization* is a process in which formal religious organizations disintegrate, leading not to the death of religion but to the birth of many fragmentary social and cultural phenomena that serve religious or quasi-religious functions.

One powerful factor that has been shaping all aspects of contemporary culture is revolutionary information technologies, notably the Internet. Information technology also provides a set of increasingly effective tools for conducting social research. This chapter explores these issues through examination of the partial electronic resurrection of the Process Church of the Final Judgement, a religious organization that was well documented during its remarkable rise to public prominence in the years 1963–1975 but has apparently been defunct since then. The goal is not to test any hypotheses rigorously, but to conduct an exploratory expedition into new realms of culture and to view conventional religion from new perspectives. This chapter also suggests additional methodologies for the growing body of research into religion's online expressions [2].

I studied the Process through ethnographic, participant observation field research in the period 1970–1976, then kept in touch with several members over the following four decades, with increased communication in recent years via Internet [3–5].¹ Therefore this chapter can be partially described as a *revisit* that compares a social reality at two widely separated points in time [6], but the primary theme is hypothesis generation rather than simple description. The virtual revival of the Process does not guarantee its ultimate success as a conventional religious movement in the form of a well-organized denomination with local churches, and several vulnerabilities can be detected in surveying its current manifestations.

The Process was founded in 1963 as a form of psychotherapy called Compulsions Analysis, by Robert de Grimston and Mary Ann MacLean, who had met in London while in training in Scientology and adapted many of its methods. Another influence was Psychoanalysis, especially the psychotherapy developed by Alfred Adler, which stressed the inferiority complex and thus set a high value on helping individual clients achieve personal goals [7]. Scientology was originally established in 1950 as a brand of psychotherapy called Dianetics and then was recast as a religion later that decade [8]. While critics may say that Scientology and the Process sought status as religions to gain legal protections that were not available for experimental psychotherapies outside the medical profession, this book postulates that psychotherapy in general is a parareligious phenomenon that gained prominence over the past century as the result of secularization trends that left many people without the traditional religious affiliation that might have offered consolation and guidance in facing the difficulties of life.

¹This chapter draws upon a short article published online, “The Paganization Process,” *Journal of Research on Religion*, 2015 11(14).



Fig. 3.1 The P-sign and sign of union of the polytheistic process

The Process emerged from Compulsions Analysis through what some of its leaders explicitly called *religious engineering*. Robert de Grimston began “channeling” scriptures, and other leaders began crafting dramatic rituals. Early in 1966, the leadership moved into a large stone house at 2 Balfour Place, in London’s fashionable Mayfair district, which became a hybrid between church and coffee house. The name *Process* was an extension of the habit derived from Scientology of calling ritualistic therapy procedures *processes*, pronounced with a long-o as PROH-sess. A swastika-like symbol was designed like square letters P superimposed from four directions, then over some months the straight lines evolved into flared shapes, giving the P-Sign the quality of a Maltese cross, seen in Fig. 3.1. Over time, a pantheon of four gods developed: Lucifer, Jehovah, Satan, and Christ, and some members saw the P-Sign as the trumpets of the Four Great Gods, heralding the End and a New Beginning. The meeting room where newcomers became acolytes was called the Alpha, and the leadership pair was called the Omega, establishing the quest for transcendence in a hierarchy. A second symbol, the Sign of Union, placed an alpha inside an omega, representing copulation of the male god Lucifer with the female god Jehovah.

Religious engineering involved not merely rational design of symbols and rituals, but also experimentation and eclectic borrowing from compatible traditions. One of the more technological components was an electronic device, the P-Scope, that was derived from the Scientology E-Meter, which itself seems to have been derived from experiments carried out early in the twentieth century within Carl Gustav Jung’s branch of Psychoanalysis, the part of the movement that was most explicitly compatible with radical religious or mystical concepts [9, 10].

The P-Scope was used in therapy sessions in which a practitioner directed the client to go through various episodic memory and self-reflection exercises while the P-Scope registered changes in the client’s galvanic skin response that reflected emotional arousal and thus guided the questions and instructions given by the practitioner. The religious potential of this technology was illustrated when clients recalled

earlier and earlier memories until they were recovering experiences that they believed had occurred during previous incarnations. Another example of the religious engineering of the Process was its remarkable skill in producing magazines, poetic scriptures, and radio programs, using these media for recruitment and fund-raising rather than becoming embedded in pre-existing local communities as ordinary religious congregations are.

Immediately prior to studying the Process, I had carried out participant observation in Scientology, which gave me experience operating an E-Meter and a sense of the close kinship between the two groups [11–13]. Scientology also drew upon both the Psychoanalysis and Rosicrucian or Ritual Magick traditions [14–16]. As Scientology grew, generally in the period when the founders of the Process were members, it developed a fine-grained hierarchical structure with graduation ceremonies, if not exactly initiation rituals. It is noteworthy that universities are among the other institutions of society having this feature, although the esoteric groups conceal the higher-level teachings and in varying degrees have the quality of secret societies rather than publishing everything, as secular scholars do.

For 4 years, Processeans traveled over wide geographic territories, in groups and pairs. evangelizing and exploring, beginning with several months meditating and beginning to sketch religious scriptures at Xtul, an abandoned saltworks on the northern coast of Mexico's Yucatan peninsula. Especially during this period of spiritual as well as physical wandering, additional influence came from the Rosicrucian or Ritual Magick esoteric tradition. For example, the Process leadership sojourned briefly in the ruins of Aleister Crowley's Abbey of Thelema at Cefalú on the north coast of Sicily [17]. A number of details of the Processean rituals and symbols seem to have derived from this diffuse set of esoteric traditions, but one prominent feature was a formal social structure that required members to go through extensive training exercises punctuated by initiations to higher levels of status.

In 1970, the Process established four main churchlike chapters in New Orleans, Boston, Chicago, and Toronto. In his book, *The Second Coming: Satanism in America*, Arthur Lyons pretended to know the horrid truth: “Savage and indiscriminate sex is forced on the entrant into the cult not as a means of religious communion but as a means of purging any residue of Grey Forces that might be latent in them” [18]. In the first edition of his book about the Charles Manson murder cult, Ed Sanders of the Fugs rock music band claimed, “The Process Church of the Final Judgement is an English occult society dedicated to observing and aiding the end of the world by stirring up murder, violence and chaos, and dedicated to the proposition that they, the Process, shall survive the gore as the chosen people” [19].

In many respects, at its peak around 1971–1973, the Process presented itself as a remarkable contradiction, publically radical to the point of appearing lurid, yet privately a compromise between esoteric Paganism and Christianity. Does one God exist? No, according to the Process, there are four equal gods, each of whom may have millions of followers. Originally, a single God existed, but to play a game, He separated Himself into the Four Great Gods of the Universe and into all the myriads of lesser beings, including humans. Now – so the Processean proclamations asserted – the Unity of Christ and Satan and the Union of Lucifer and Jehovah

Fig. 3.2 Two priests at the Boston chapter of the process



would bring the world to a climax in which Humanity became the Devil, the Human Game destroyed itself, and God would be one again.

Figure 3.2 is a photograph I took in 1972 in the Boston chapter, of two Processean priests dressed for the weekly Sabbath Assembly, to which all members and friends were invited. Behind them is the Mendes Goat picture of Satan, and the opposite wall of their Alpha meeting room carried a cross representing Christ. Father Christian, on the left, is wearing the blue tabard that indicates he has taken the role of Sacrifist for the Assembly, essentially representing Christ, and carefully directing the ceremony. The symbol on his chest is the Sign of Union. Father Dominic on the right is wearing the red tabard that indicates he is playing the role of Evangelist, representing Satan and delivering the weekly sermon with emotional drama. The symbol on his chest is the P-Sign. Each carries his personal copy of the Missal, a book of advanced scriptures restricted to high-status members.

When I first encountered the Process in 1970, Christ was not described as a god, but as the Emissary of the Three Great Gods of the Universe: Lucifer, Jehovah, and Satan. Some of the most educated inner members considered these three to be

Table 3.1 Attributes of the early Processean pantheon

Satan's Lower Aspect	Lucifer	Jehovah	Satan's Higher Aspect
Lust	Enjoyment	Duty	Detachment
Abandon	Permissiveness	Discipline	Mysticism
Violence	Harmony	Struggle	Otherworldliness
Excess	Success	Sacrifice	Magic
Indulgence	Satisfaction	Self-Denial	Asceticism

Table 3.2 Attributes of the later Processean pantheon

	Jehovah	Lucifer	Satan	Christ
Element	Earth	Air	Fire	Water
Color I	Black	Blue	Red	White
Color II	Gold	Sky Blue	Bright Scarlet	Silver Gray
Handicap	Blind	Deaf	Dumb	Lame
Season	Winter	Summer	Fall	Spring
Direction	North	South	West	East

abstract archetypes, rather than deities, while many ordinary members had adopted Processean symbolism as a polytheistic theology. Given the early influence of Psychoanalysis, each god was associated with a particular personality type, and humans were often described as fragments of gods. Satan represented Separation, as in schizophrenia or multiple personality neurosis. The Law of the Universe was: “As you give, so shall you receive.” Satan gives Separation, so Satan receives Separation, dividing into higher and lower aspects. At this point in the rapidly evolving history of the Process, the gods represented the sets of concepts outlined in Table 3.1.

By 1973, the liturgy of the Saturday evening Sabbath Assembly proclaimed: “JEHOVAH is Strength. LUCIFER is Light. SATAN is Separation. CHRIST is Unification. They are the Great Powers of the Universe, and all mankind is subject to Their Will.” Christ had been elevated to the status of a co-equal deity, and the four gods were assigned attributes in several four-category ontologies, often in pairs of dualities, as shown in Table 3.2.

The Processean personality theory no longer imagined that each person was a fragment of one god, but a combination of two deities, one from each of the two dualities: Jehovah-Satanic, Jehovah-Christian, Luciferian-Satanic, Luciferian-Christian. When I first encountered Processeans in 1970, they were wearing black uniforms. Then they switched to pale gray, which a year later was replaced by more attractive blue. It was almost as if the Process was a whole family of Pagan cults, spread out along the timeline of the years rather than across geography.

Features shared by psychotherapies and esoteric cults are that they are highly fragmented, are unstable, and lack the solidity of an established church. Psychoanalysis could be compared with Asian religious traditions in which individual gurus have small numbers of disciples, some of whom may become gurus in their own right, as every psychoanalyst had to undergo a didactic analysis with a senior psychoanalyst. The esoteric cults remind us perhaps of the religious system

of Paganism in the classical world before the consolidation of great empires, in which local shrines and small groups of priests and magicians shared some beliefs and practices with others in neighboring towns but did not belong to a large-scale formal organization. This brings us back to the suggestion that the current debates about secularization should include the possibility that we are witnessing not the decline of religion but its disintegration, which can be considered a form of paganism.

Herbert Spencer provided a conceptual basis for paganism when he argued that technological progress facilitated increased differentiation of culture and society [20]. As society becomes more complex, specific social functions spin off from traditional institutions, causing institutions to specialize and ultimately reducing their significance. Today, we do not send a modern Moses to a mountaintop to get new laws suitable for our changing conditions; we give the task to legislatures. Spinning off a function can sometimes be beneficial to an institution. One case often discussed by scholars was the historical differentiation between magic and religion as religion gained a degree of invulnerability by avoiding making empirical claims that could be disproven, as can magical cures of diseases. Psychoanalysis, Scientology, Thelemism, and the Process all made exaggerated claims about how their concepts and procedures could benefit followers, which may be one factor that is encouraging disintegration.

In 1974, a split between the two founders triggered the Separation, in which Mary Ann MacLean influenced the main faction to expel Lucifer, Christ, and Satan, rename itself the Foundation, and worship Jehovah alone. Meanwhile, Robert de Grimston attempted, to no avail, to revive the traditional polytheistic Process from small factions in New Orleans, Boston, Toronto, and London. Over the decades, the Foundation went through a remarkable evolution and is now a very successful animal welfare organization called Best Friends. With the development of Internet, many former Processeans and others who learned of the Process only after its demise began communicating, reviving aspects of its culture, and setting the stage for the research revisit reported here. The following sections survey the fragmented online presence of the Process around July 2015, followed by a re-revisit in October 2016.

3.1 Animal Welfare

The expulsion of three gods from the original Process in the Separation that produced the Foundation recapitulated the historical birth of monotheism and supported centralized control within the organization. The legal continuity of this part of the movement is documented in amendments to the original Louisiana articles of incorporation of The Process Church of the Final Judgement dating from 1967. The name was formally changed to The Foundation – Church of the Millennium in 1974, The Foundation Faith of the Millennium in 1976, The Foundation Faith of God in 1978, and Best Friends Animal Sanctuary in 1993. As of July 2015, at least

two online document providers offered copies of the official records updated to 2006.² The three variants of the Foundation name suggest evolution from a Christian-oriented “church” to a Jehovian group that briefly sought Jewish converts to its largest branch in New York City, and from a millenarian group to one seeking more stability.

Born in the turbulent 1960s, the Process faced a continuing challenge as the population pool from which converts were drawn changed significantly [21]. Early recruits were well educated, many of them artists or intellectuals, and around 1970, many of the recruits were middle-class young adults who had dropped out during the late 1960s. After that, recruitment became much more difficult, and many of the people who were attracted to the Process were troubled individuals from less educated social backgrounds. Core members of the Foundation were original Process recruits with both talent and idealism who struggled over two decades to reshape their movement into an organization that could survive while feeling that they were serving a higher purpose. Greatly reduced in numbers, they settled in Angel Canyon near Kanab, Utah, and narrowed their transcendental focus to the salvation of animal lives rather than human souls.

Especially inspired by MacLean’s personal sense of outrage over mistreatment of animals, the Process had published a booklet calling animal abuse “the ultimate sin.” A few German shepherd dogs were treated almost like members, frequently being present for rituals; and at Xtul, the group and its dogs lived together very close to nature. Thus the evolution from Process to Foundation to Best Friends was a logical progression rather than some kind of conversion – a concentration on one element of an originally complex system. Prominent other examples include yoga and meditation when practiced outside their native Hindu or Buddhist religious contexts.

A laudatory book by a nonmember did not stress this continuity between Best Friends and the Process, however: “In the summer of 1982, a group of young men and women pooled their resources and bought 3,000 acres of high desert in the wilds of southern Utah. Nineteen years later they had brought into being the most beloved animal sanctuary in the world” [22]. In 2004, *The Rocky Mountain News* published an article, based largely on an interview with a leader of the group, that made it very clear that Best Friends had its origins in the disreputable Process but had moved far beyond its past to serve high values [23]. That was in February, and in May of that year, William H. Kennedy published *Lucifer’s Lodge*, claiming that the Process had been the inspiration for sexual abuse of children by Catholic priests, an accusation that lacked evidence [24]. Two books that inaccurately linked the Process to the Manson Family murders had sullied the group’s reputation years before, so the connection to the Process was a public relations challenge for Best Friends [25, 26]. It posted some of its history on its website, and for a time an expanded version could be found, dating from 2013, which observed: “The group evolved through several different spiritually-oriented incarnations, and then moved

² docsslide.us/documents/best-friends-animal-society-articles-of-incorporation.html; www.scribd.com/doc/2682018/Best-Friends-Animal-Society-Articles-of-Incorporation, accessed July 3, 2015.

on from each of them. It was all part of a search to find our true calling in life, which was right under our collective nose in the form of the animals who had always had a special place in our lives and work.”³

The year 1993, when Best Friends first proclaimed this identity, was when the technology underlying the World Wide Web was made available to all. Soon talented members of Best Friends were making expert use of the Web to spread their message of love for animals and to seek donations. Today, both the group’s website and YouTube offer many adorable videos of dogs, cats, and human members of the group engaging in outreach activities. As a nonprofit organization, Best Friends must be transparent in its finances, so each year it posts the reports that it files with government. A 2014 report listed \$81,423,064 in total assets, financial contributions in the most recent 9 months of \$48,239,427, and payment of \$19,095,964 salaries and wages over that same period. That report described the organization as “a Utah nonprofit organization with the mission of developing no-kill programs and partnerships to bring about a day when there are no more homeless pets. Best Friends’ leading initiatives in animal care and community programs are coordinated from its Kanab, Utah headquarters, one of the country’s largest no-kill sanctuaries. Best Friends develops and refines model programs that are shared with other organizations and people, so that more animals can be saved. This work is made possible by the personal and financial support of a grassroots network of members and community partners across the nation.”⁴

Best Friends extols humane values but does not publically worship Jehovah or Christ, let alone Lucifer or Satan. It illustrates one of the fundamental mechanisms of paganism in the modern world: preservation of some cultural element of a religion but disconnection from supernatural beliefs. *Desacralization* is the loss of sacred significance for some elements of a religion. Since the Renaissance, ancient pagan religions have experienced a degree of popularity but in desacralized form. Spectacular examples can be found throughout classical music, such as *L’Orfeo* by Claudio Monteverdi (1607), *Orfeo ed Euridice* by Christoph Willibald Gluck (1762), *Das Rheingold* by Richard Wagner (1869), *The Rite of Spring* by Igor Stravinsky (1913), *Trionfo di Afrodite* by Carl Orff (1953), and *Pervigilium Veneris*, which was set as an oratorio by Timothy Mather Spelman in 1931 and by George Lloyd in 1980. The same has happened for the Process, which created many chants and songs for its rituals and included talented musicians among its members.

³ bestfriends.org/News-And-Features/News/Before-Best-Friends, accessed July 3, 2015, no longer available as of October 23, 2016.

⁴ bestfriends.org/Who-We-Are/Financial-Information/Financial-Reports, accessed July 3, 2015 no longer available as of October 23, 2016.

3.2 Musical Variations

In the early 1970s, three of the Process chapters had bands that played in public, touring coffee houses and even appearing on local television, as shown in Fig. 3.3. A large corpus of songs, hymns, and chants were composed or arranged by members, occasionally using traditional melodies but usually original.

The first impact on music outside the church involved Funkadelic, a psychedelic rock, soul, and funk band, which incorporated Processean material into its record liner notes for *Maggot Brain* (1971) and *America Eats Its Young* (1972), as described recently by its leader, George Clinton:

There was a group called the Process Church that had been founded by a British couple as an offshoot of Scientology, and in the late sixties they started hanging out with the band, mainly in Boston. They would feed the kids in Boston Common and they ran what was basically the first day-care center that I can remember, offering to watch children when mothers went to work. We ended up excerpting some of their thinking in the *Maggot Brain* liner notes, which seemed fine at the time – it was a form of self-actualization, not an uncommon or unpopular philosophy at the time. We did the same thing for *America Eats Its Young*, but with far different results. In the summer of 1969, a career criminal (and part-time songwriter) named Charles Manson led a band of followers on a killing spree in upscale residential neighborhoods in Los Angeles, murdering a number of people, including Roman Polanski's wife, Sharon Tate. The killers were under the influence of a crazy-quilt mythology that somehow tied together the Beatles' "Helter Skelter," race war, and Satan worship. There was some thought that Manson had drawn on some of the writings of the Process Church [27].

It is hard to discern any Processean influence on Funkadelic's music, although the title of one song was "A Joyful Process," and the title and lyrics of another song harmonized with Process teachings: "If You Don't Like the Effects, Don't Produce



Fig. 3.3 Processean "Rock of Ages" musicians on Boston television

the Cause.” Negative publicity from the Manson murders burdened Funkadelic, and may have discouraged other bands from association with the Process. It disintegrated soon afterward. However, one of the most remarkable popular culture radicals, Genesis P-Orridge, became the key figure in reviving musical interest in the Process, through a lengthy process he described to me:

I first came across “The Process” in London in the 60’s and was immediately fascinated and compelled (yes a compulsion!). I felt that a part of my “destiny” was linked with theirs. So much that my sense of cultural inevitability, and my awareness of not being clear enough to be ready slipped in. But I began saving everything I could find, and still have that archive to this day. I went through my own activities. Ending up doing Performance Art with COUM Transmissions. Causing a scandal celebre in 1976. I founded Throbbing Gristle, and the genre Industrial music through that band. I quit and began Psychic TV and founded Thee Temple Ov Psychick Youth, which I terminated in 1991, but chagrined TOPY’s have continued a “cowboy” version I am told since then. I tried to include many references to The Process in that 10 year project. Usually covertly. I saw that as an invocation [sic]. My aim, to meet in an unbiased, not loaded way some original Processeans. To try to set up a new climate that would enable a re-evaluation and rehabilitation of the IDEAS which I found constantly relevant and powerful.⁵

In 2009, Genesis P-Orridge collaborated with a former leader of the Process, Timothy Wyllie, and Adam Parfrey of Feral House, who was publishing Wyllie’s book about the Process, titled *Love Sex Fear Death* [28]. The event was a reenactment of a Processean Sabbath Assembly, the group’s most elaborate ritual, traditionally held every Saturday evening and filled with both music and poetry [29]. On April 19, 2013, P-Orridge introduced a musical group called Sabbath Assembly at the Roadburn Festival in Tilburg, Netherlands, at one point quoting this Processean invocation:⁶

Consciously or unconsciously, apathetically, half-heartedly, enthusiastically or fanatically, under countless other names than those by which we know Them, and under innumerable disguises and descriptions, men have followed the Great Gods of the Universe ever since the Creation. Each one according to his nature.

Jehovah is Strength. Lucifer is Light. Satan is Separation. Christ is Unification. These are the great powers of the universe, and all mankind is subject to their will.

One of the websites of this musical group says, “Sabbath Assembly is an occult rock band based in TX and NYC. At its inception the group formed to play the hymns of the Process Church of the Final Judgment, an Apocalyptic religious sect from the late 60’s. The band currently performs and records original songs that maintain its ties to mystical theology.”⁷ At Roadburn, it followed the invocation by Genesis by singing one of the original Process hymns, with a stanza for each of the Four Great Gods of the Universe, and this chorus:

We give our lives we give our love
And praise you to the stars above!
We feel your power your burning fire!
You raise our spirits ever higher!

⁵ Genesis P-Orridge, email message to William Sims Bainbridge, January 9, 1998.

⁶ www.youtube.com/watch?v=9NXDgha91oU, accessed October 23, 2016.

⁷ sabbathassembly.bandcamp.com, accessed July 4, 2015.

Table 3.3 Selected YouTube videos illustrating process-influenced music

Group	Title	YouTube ID	Length	2015 views	2016 views
Sabbath Assembly	We Give Our Lives	9NXDgha91oU	4:38	162	252
Sabbath Assembly	In the time of Abaddon II	jYZzstcJjnK	4:02	17,984	19,729
Sabbath Assembly	Hymn of Consecration	09DdYIEI1D4	6:34	23,526	30,414
Sabbath Assembly	We Come From the One	h_9NmQV_-tI	4:56	16,223	23,636
Sabbath Assembly	Exit	pqA2D5IjHQk	5:18	19,179	27,982
Sabbath Assembly	I, Satan	m9iGhXjhI5g	4:25	22,527	38,156
Sabbath Assembly	Lucifer	3d9eWUq08eA	3:21	8420	14,805
Funkadelic	A Joyful Process	NOGPWRK58ng	6:23	3353	Gone
Psychic TV	Terminus-Xtul	eedwjxSSAR8	13:19	15,080	24,553
Skinny Puppy	The Process	7yOr2l7aAm0	4:47	10,956	13,578
Integrity	Humanity is the Devil	ThWnkjhVqo	34:29	3476	11,911
Electric Wizard	The Processean	IfoTdULs0RA	11:13	5484	7354
Monastery	The Process	A13idpfX6kE	6:34	7565	8498
New Processean Order	Hymn to Lucifer	rcWnNUUQVjE	3:59	995	1725
Lay It On The Line	A Prelude To The Process	A3v5OY0xD7c	12:05	397	5226

This was one of nine original Processean songs offered on a CD titled *Restored to One*, advertised thus:

Restored to One is a modern response to the musical activities of a cult known as The Process Church of the Final Judgment, who used music to spread their visions of Gnostic reconciliation in a time of cataclysmic change. Sabbath Assembly has re-charged the original hymns of The Process Church and worked them into moving renditions that unite the trinity of rock, psychedelic and gospel into one triumphant re-awakening.⁸

While several Sabbath Assembly CDs are currently for sale in different formats, much of the group's Process music can be heard for free online, either from their own website or from a couple dozen YouTube videos, some of the best of which are listed in Table 3.3, along with Process-inspired music by other groups. The data on the numbers of times the video has been viewed date from July 1, 2015, and October 24, 2016. It must be admitted that the numbers of views, while significant, do not put Sabbath Assembly among the elite of very popular groups.

⁸ sabbathassembly.bandcamp.com/album/restored-to-one, accessed October 23, 2016.

The video for “In the time of Abaddon II” is a collage of images, including a mysterious photograph of Robert de Grimston, the iconic symbols of the cult, and a picture of an initiation ceremony from the early 1970s mixed with more recent scenes. The first half is a recitation of The Prophecy of the End from the original Sabbath Assembly ritual, with Genesis P-Orridge in the role of Sacrifist, beginning as follows:

Sacrifist:

This is the Prophecy of the End.
 The Gods are with us. Christ is among us.
 As herald of the Time, a wave of pain and suffering sweeps the earth from end to end.
 And fear is growing in the hearts of men.

Assembly:

And we shall conquer fear with love.

The “Hymn of Consecration,” also derived from the Sabbath Assembly ritual, was sung to introduce a ceremony for Acolytes of the Process who were ready to become Initiates and commit themselves to intensive study of the teachings. During an initiation, the Sacrifist would bless the Acolyte with water for Christ and fire for Satan, demanding dedication to their coming Unity. One verse of the hymn explains the role of fire:

Purify me with the Fire
 Satan, test me in your Pit of Fire, desire
 Purify me with the Fire
 Satan, I will meet your demands and defy Fear
 Purify me with the Fire

The images in this video are chiefly black and white scans of desiccated human skeletons in the Sedlec Ossuary in the Czech Republic. “We Come From the One” expresses the Processean theology that we are all fragments of God, who shattered to create the universe, and begins with Genesis P-Orridge reciting the Invitation: “May the life-giving water of the Lord Christ, and the purifying Fire of the Lord Satan, bring the presence of Love and Unity into this Assembly.” The images are a remarkable 1907 short film, *Le Spectre Rouge*, depicting a struggle between a demonic magician and a good spirit in a Satanic grotto. “Exit” recycles shots from the 1972 Christian end time movie “A Thief in the Night.” It takes its title from a collection of Robert de Grimston’s essays and includes this chorus:

There is an exit from confusion
 An exit from despair
 There is an exit for everyone
 An exit that we can share

“I, Satan” and “Lucifer” are more recent, dating from 2014 and lacking narration. Both are rather astonishing in their graphics – beautiful, exotic, and evocative. One way to understand Process theology is to postulate that the Bible is only half of the ancient revelation, an alliance between Jehovah and Christ that has distorted the past two millennia and can now be rebalanced through the unity of Christ and Satan and the Union of Jehovah and Lucifer. The notion that Lucifer was the same as

Satan was simply Jehovian propaganda to defy the Union and must now be swept away by the God of Light. The marvelous Lucifer song had been written by Brother Christopher of the Boston chapter of the Process, around 1971, who is the performer on the left in Fig. 3.3:

Deep in my darkest night, before the light of day
 You bring the morning near, to wash my fears away
 Show me the way to go home
 Show me that I'm not alone
 Show me the light I have known
 Show me Lucifer, Lucifer, Lucifer

Other bands on the list, beginning with Skinny Puppy, seem to have been influenced by Genesis P-Orridge, but the members of New Processean Order and Lay it On The Line are actual, self-professed Processeans, despite being too young to have belonged to the original group. The Funkadelic video had been removed by YouTube before the 2016 re-revisit, with this explanation: “The YouTube account associated with this video has been terminated due to multiple third-party notifications of copyright infringement.” However, it was easy to find several other postings of this music, most of which also seem to be in violation of copyright. As a sign of how Internet erodes traditional notions of intellectual property, the Funkadelic channel in YouTube does not belong to the band or to George Clinton, but “was generated automatically by YouTube’s video discovery system.”⁹

3.3 Virtual Scriptures

For the past 20 years, individuals interested in Processean culture and theology have exchanged e-mail messages, often with photographs or scriptures attached, and periodically some of them have developed blogs or even launched websites. Many early websites of all kinds were short-lived, and all five Process sites listed in 1999 in the University of Virginia’s online encyclopedia of new religions movements had vanished 15 years later.¹⁰ Table 3.4 lists a range of examples that were available as of early July 2015, beginning with one of scores of journalistic stories that vary greatly in their accuracy but almost universally exploit the lurid reputation of the Process to excite readers. The efforts by Michael Lee Röhm and Loki der Quaeler exactly fit the definition of paganization suggested by O’Donnell’s work, in that both were individual fans of the Process for whom the culture was significant but who do not belong to a formal group.

⁹ www.youtube.com/channel/UCKwWf4e842gO9cY0YJCfe2A/about, accessed October 28, 2016.

¹⁰ web.archive.org/web/20060828130118/religiousmovements.lib.virginia.edu/nrms/Process.html, accessed July 7, 2015.

Table 3.4 The range of Process-related websites

URL	Name	Nature
www.satanservice.org/propaganda/process.html	“Sympathy for the Devil” by Gary Lachman	An article originally published in <i>Fortean Times</i>
www.blackgnosis.com/2012_12_01_archive.html www.blackgnosis.com/2012/11/glory-to-gods-in-highest.html	“The Process Church of the Final Judgment” by Michael Lee Röhm	Two extensive blogs offering much historical information
www.weltschmerz.org/process.org	“As it is... as it was” by Loki der Quaeler	An archived Process site dating from 1994–2001
www.process.org/discept	“The Process Is ...” by Loki der Quaeler, Doug Mesner, and William Morrison	A blog inspired by the Process but not limited to it
www.processchurchofthefinaljudgment.com	The Process Church	The website of a Processean group trying to relaunch
theprocesszine.tumblr.com	The Process Zine of the Final Judgment	A fanzine edited by Michal Matysiak in Poland
kaliyugaeditions.weebly.com	Kali Yuga Editions	The website of a publisher that issued a book of Process literature
feralhouse.com/propaganda-and-holy-writ-of-the-process-church-of-the-final-judgment	Feral House publisher, specializing in unusual books	A book reproducing three Process artistic magazines

The website that represents itself as The Process Church is indeed a small, cohesive group, which will be considered in following sections. The group's members are a mixture of elderly original members and new young adult recruits.

The remarkable quality and huge extent of scriptures and other writings of the 1966–1975 period have given anyone who possesses copies the opportunity to post them online and gain some public notice thereby. Independent publishers, notably Kali Yuga in Italy and Feral House in the United States, have sold well-produced modern editions of some of the most appealing Process literature. Processeans generally believe that Robert de Grimston took legal custody of the literature's intellectual property rights in a settlement after the Separation but has been content to let Processeans and their sympathizers share the culture as they wish. Both online databases and second-hand reports by former associates indicate that de Grimston is still alive but not in direct communication with his followers.

The Internet is radically changing the nature of most forms of publication, even books. For example, the online publisher Lulu claims to have published nearly two million items since its launch in 2002.¹¹ Currently, Processeans are aware of three books written by former members, two of them autobiographies and the third a novel, that were published through new means and can be purchased through Amazon.com. *Xtul: An Experience of the Process* by Sabrina Verney is especially valuable for the social science of religion because it recounts her experience in the very early days of the Process in London and at Xtul [30]. *Coast to Coast* by Jonathan DePeyer is an emotionally challenging account of the youth of a son of Processeans whose mother left the Foundation during the period when the group moved to the Southwest [31]. *Beyond the Cabin* is a rather sophisticated *Bildungsroman* (coming-of-age novel) by Jared Nathan Garrett, another member of the second generation, fictionalizing and thus possibly intensifying the conditions that Garrett experienced by growing up within the Foundation.¹² The true story of the Process inspired me to write a novel and a short story, science fiction that plays with the group's beliefs and practices, thus exploring possible future religious innovations [32, 33].

For many readers, Process literature is a substantial part of the esoteric library defined by cult leaders such as Aleister Crowley and Anton Szandor LaVey [34, 35]. This genre has been called the *left-hand path*, although the meaning of this phrase is in dispute. It naturally reminds Processeans of Matthew 25:33: "And he shall set the sheep on his right hand, but the goats on the left." In their reading, the sheep who have taken the right-hand path do good Christian deeds, while the goats are selfish Satanists, and the Processean symbol for Satan was indeed the face of a goat, borrowed from Eliphas Lévi. Other aficionados of this genre see different origins for this left-right distinction and read different meanings into it.

During this research in the spring of 2015, a would-be messiah named Malphas sought to interest Processeans in his book *The Black Ship: Concerning the Sovereign*

¹¹ www.lulu.com/about/our-story, accessed July 7, 2015.

¹² Jared Nathan Garrett, *Beyond the Cabin* (ISBN 9781503192980: Many recent books lack a formal publisher or place of publication; this one is sold through Amazon Digital Services.)

Company of Pandemonium the Royal Blood of Chaos and the Dominion of Eternal Night, a rather well written and intelligent book of personal rituals and theology [36]. A key distinction Malphas makes between the two paths is that the right-hand path requires strong social connections with other believers, comparable to membership in a Christian church, achieving salvation through group rituals and sharing a common faith. For Malphas, the left-hand path takes one through total individualism, seeking to transform oneself by solo rituals consisting largely of focused meditations, preparing one to cooperate with other people who have taken the left-hand path but not binding the individual to them. This conception of the left-hand path is compatible with paganism and can describe the value of Process culture for many of the people who are currently attracted to it.

3.4 A Book of Faces

Facebook, which is among the most popular social media, is especially well designed to promote low-commitment social movements that are compatible with paganism. Over the first half of 2015, I explored the pages most directly connected with the Process. Table 3.5 outlines the most important examples. The first four are organizations, whose popularity is suggested by how many people have clicked a “like” icon when visiting the page. The other three are groups with memberships consisting of identifiable people who have personal Facebook pages.

The Best Friends Facebook page is managed by the group itself and has a quite respectable number of likes, far more than those belonging to the page that seeks to revive the original Process. Three other promotional pages created by organizations link to items in earlier tables: the Process Church, the amateur Process Zine and the professional Sabbath Assembly.

Most significant in terms of traditional social science of religion are the three membership groups listed at the end of Table 3.5. The group with 372 members represents the main network of sympathizers seeking to relaunch the Process, although neither commitment nor an initiation ritual is required to join. The closed Reunion Group requires permission to join, and applicants must prove that they were members of the original Process or Foundation. The Reunion Group is administered by four former Processeans, who harbor some ambivalence toward the Process but consider their involvement to have been important life experiences. The group’s “About” area says,

This group is for ex-members and friends to be in touch again. We’ve scattered to the ends of the earth and are doing so many different things. We have families, and careers, and new lives. Maybe some of us are missing some old and dear friends. Hopefully we will find each other here. If you know of other ex-members who are on Facebook, please invite them to join too.

This group has fifty-one members, stable in size from July 2015 to October 2016, but two of them are alternate identities for the same people, so the real membership

Table 3.5 Facebook pages related to the process

Title	Address	July 2015		October 2016	
		Likes	Members	Likes	Members
Best Friends Animal Society, Animal Shelter	bestfriendsanimalsociety	856,850		1,234,240	
The Process Church of the Final Judgment, Church/ Religious Organization	TheProcesschurch	2672		3423	
The Process Zine of the Final Judgment, Magazine	The-Process-Zine/260697207274362	895		1129	
Sabbath Assembly (official) Musician/ Band	SabbathAssembly	5175		6290	
The Process – Church of The Final Judgement, Public Group	groups/41914447583		245		372
Process Church Of The Final Judgement, Public Group	groups/273754665374		29		39
Reunion Group for The Process Church and The Foundation Faith, Closed Group	groups/141575203849		51		51

is forty-nine. One of the leaders visited Best Friends in Kanab, Utah, in the spring of 2015 and shared pictures and text about the trip with fellow members of the Reunion Group. During the period of observation, two members separately shared terrible problems they were suffering, related to the aging process in the context of economic distress, and they received both practical advice and emotional compassion.

This congenial group of Processeans provided considerable information for this research study. For example, at one point, I asked whether it was correct that “Lucifer,” performed by Sabbath Assembly, had originally been written by Brother Christopher. One of the most active members not only confirmed this fact, but also posted for the closed group a scan of original text of the song, handwritten and signed by Christopher, which he had kept for 40 years. Further, the member reported he had been contacted by Sabbath Assembly:

A while back, I got contacted by someone associated with that group, wanting to know more about Processean Music. I talked with them over the phone and played several songs for them... The understanding was that they would record the call for future reference but

my performance as it was would not be used. Well, the first thing you hear on that YouTube file is me singing Lucifer over the phone, contrary to their promises. I don't know who crucified the song for their performance after that, but note that it bears little resemblance to what I sang for them.

Another member contributed a similar assessment: "Christopher wrote this brilliant piece. He taught it to us in New Orleans and Sister Bernadette used to sing it in the coffee house. It is a stretch, however, to equate the YouTube version with the hauntingly beautiful song I remember." In the discussion, it became clear that Bernadette was now a leader at Best Friends, using a different name; Christopher was happily married and living outside these groups; and the participants in the discussion looked forward to sharing more widely their knowledge of how the music was originally performed.

Much of the Process-related Facebook activity took place on the large group's page as members posted pictures or statements and others responded with comments. On August 12, 2014, the group's leader posted this question: "What calls you to this group? Write the first answer that comes to your mind." A total of forty-five people provided answers, including these single-word responses, in chronological order: freewill, knowledge, understanding, learning, truth, fellowship, Lucifer, enlightenment, wisdom, transcendence, spirituality, Genesis, memories, curiosity, and history. Here, "Genesis" refers to Genesis P-Orridge rather than the book from the Bible. Some of the multiple-word responses were as follows:

Enlightenment and higher spiritual being.

Unique perspectives

De Grimston's Teachings are compelling. The alchemy and transcendence of opposites.

Reconnecting with friends

I think the world could use reconciliation of perceived opposites.

Because nothing has ever made existence clear for me except The Process.

I've been interested in The Process for many years (since I first heard Skinny Puppy's album, actually) and I find the history and the philosophy fascinating

I'm already here.

The devil made me do it

The Darkness hollows, the Light fills ...

I wanted to hear about the Process from people who've actually practiced it.

Apocalypse – in the esoteric sense, but am certainly fine with corresponding results in the colloquial sense.

The insight that allowed me deeper understanding of my role in Christianity and the roles of the devils, Lucifer, Satan, astro-theology & the psychological aspects

I was introduced to The Process through the nonsense written in books like "The Family".

Although that lurid, gonzo, tabloid sensationalism can make for an entertaining read it never really rang true to me. Next I discovered how beautiful the graphics in the magazines were and that got me on to reading the true story which, rather than explaining things away, has drawn me in further. I'm fascinated.

It is uncertain which kinds of systematic data analysis will work well with Facebook, but I tried a number of explorations. For example, I checked the pages for the individual members of the Reunion Group to see which other groups they belonged to, finding no commonality among them other than a few who belong to a Best Friends public group. Individual members of the Reunion Group did serve as

weak links to culturally similar groups, including the following, with their self-descriptions and populations as of October 25, 2016:

H. P. Lovecraft Historical Society (59,955 members): Chronicling the strange goings on of the HP Lovecraft Historical Society. We encourage people to get involved with us and share their interest in all things Lovecraft and the Cthulhu Mythos.

The Largest Bahá’í Facebook Group Ever (19,999 members): The Bahá’í Faith is an independent world religion. With more than five million adherents residing in over 124,000 localities, the Bahá’í Faith is established in 204 countries across the planet. The spiritual principles of the Bahá’í Faith affirm its overall purpose—to bring about the oneness of humanity.

Spiritual Free Thought Study Group (18,245 members): A group of like-minded people whose purpose is to search for knowledge, seek the Truth, raise questions, raise more questions and together explore the paths of various answers to these questions. All views are respected and are valid.

The Necronomicon Press (Lovecraftians Unite!) (4,168 members): The Necronomicon Press was founded 1976 by Marc Michaud, and has been running ever since. The press publishes everything Lovecraftian, including not just work and analyses of Lovecraft, but other authors as well.

Aura-Soma Friends (3,848 members): This space is an opportunity for all friends of Aura-Soma Equilibrium to share their experiences with these vibrant colours. It is especially a place to share peace and inspiration, so that we are reminded to connect with the Star we are. This is an international group of many colours and backgrounds, all with the same aim to bring greater consciousness to the decisions we make each moment of our lives.

Pagan Unity Festival (2,702 members): For those who attend or are interested in attending Pagan Unity Festival in Burns, TN! PUF is a 4 day family friendly festival with workshops, music, rituals, drumming, shopping, food and fun!

These selected examples have far more members than the Process groups and cover a good deal of cultural territory, although all are potentially compatible with paganization. The two Lovecraft connections illustrate the possibility that for many people, religion will morph into an artistic medium, aesthetically attractive but not salvational. Aura-Soma Friends illustrates how a commercial company selling products may claim quasi-religious qualities for its “soul system.” The Pagan Unity Festival is a privately owned annual event that includes rituals and classes taught by Pagan entrepreneurs.

3.5 Repeating a Revisit

Recently, the main online group has been active in posting more and more Process culture, through the www.processchurchofthefinaljudgment.com website, the main Facebook group, and YouTube. As of October 28, 2016, the Process Church YouTube channel had just 264 subscribers, and had been viewed 6,329 times.¹³ Of course, many people prefer to bookmark a channel rather than to subscribe to it, but it is worth noting that like many other innovative religious groups, the original Process

¹³ www.youtube.com/channel/UCPAk9uqkhof-N6KIZpL4NAQ, accessed October 28, 2016.

consisted of a few hundred dedicated members, probably less than a thousand if one had counted how many people attended meetings on a regular basis. This is consistent with paganization, if over time tens of thousands of religious and quasi-religious groups emerge, some registered as religions, others as psychotherapy or meditation services, and most not formally established at all. Table 3.6 lists the dozen videos accessible from the Process Church YouTube channel.

Table 3.6 The Process Church YouTube channel

Title	YouTube ID	Published	Duration	Views
Dangerous Minds Interview Timothy Wyllie On The Process Church	CDQfqic0uwM	September 10, 2016	25:38	54
An Alternative History Of The Process Church of the Final Judgement	YRk04V3BmAE	September 10, 2016	50:51	169
The Gods On War: Jehovah [Holy Writ Of The Process Church] – Robert DeGrimston	WzeMPOSB8NQ	February 17, 2015	24:34	1112
The Gods On War: Lucifer [Holy Writ Of The Process Church] – Robert DeGrimston	NrBqqLkVrpU	March 31, 2015	30:17	2283
The Gods On War – Satan [Holy Writ Of The Process Church]	HEozmxErumg	July 2, 2015	16:28	1010
Exit #1: BI 7: The Universal Law by Robert De Grimston – Process Church of the Final Judgment	Qndo3S-h2Mw	April 28, 2016	25:43	610
Exit #2: BI 5: The Cycle Of Ignorance by Robert De Grimston – Process Church of the Final Judgment	n1DysiQVo2s	April 28, 2016	29:56	186
Exit #3: BI 13 The Separation by Robert De Grimston – Process Church of the Final Judgment	-B4E5Ef47to	May 3, 2016	17:43	192
Exit #4: BI 14 The Self by Robert De Grimston – Process Church of the Final Judgment	-xE68wwtG6g	May 3, 2016	19:52	160
Exit #5: BI 16 Control Is Contact by Robert De Grimston – Process Church of the Final Judgment	kVg5ebL6xVo	May 16, 2016	1:10:00	147
Humanity Is The Devil – The Process Church	15qgf9RNqJE	August 17, 2016	12:52	338
A Candle In Hell – Robert DeGrimston – The Process Church Of The Final Judgment	Xs0fwsYBIV4	September 10, 2016	7:21	83

The first two of these videos are reposts that were already online, and have been seen by many people at other locations. The interview by Richard Metzger from the online countercultural group, Dangerous Minds, with former Processean leader and prolific author, Timothy Wyllie, is a video of the two men talking.¹⁴ An earlier post of this video, dating from September 10, 2013, has received 18,394 views.¹⁵ An Alternative History Of The Process Church of the Final Judgement is a reposting of Unveiling the Mysteries of the Process Church of the Final Judgement, which exists in a version posted July 10, 2014, with 4,518 views, and one dating from September 23, 2012 with 29,608 views.¹⁶ It is a monologue narrative illustrated by many still pictures, two of which were among the many photographs I took during the first phase of my Process research and were included in Wyllie's book, and two others were of the cover and an illustration of Processean symbols from my 1978 book about the group.

The ten other YouTube postings were audio readings of scripture created by the revival group of Processeans. *The Gods on War* was a book of scripture published during the period when Christ was not yet considered a co-equal god, in which each of three deities proclaimed the meaning of human conflict. Exit was a slightly edited version of a few of the internal documents called Brethren Information or BIs, selecting just the parts that might make sense to the general public. Especially interesting for this book is BI-13, "The Separation," because it offers a theological model of secularization. Here is the introductory part, in the original version dated April 22, 1969, from the set I have kept from the phase of my research that began soon after that date:

- 1.1 The separation is within the dimension of Time. In Time there is that which is of GOD and that which is not of GOD. There is negative and positive, evil and good, sin and virtue, salvation and damnation. There is division; and from the initial division of GOD and antiGod, there springs the fragmentation of all things, and the scattering of all the parts of One throughout the Universe of Time and Space.
- 1.2 GOD is divided and divided and divided, until It is stretched from one end of eternity to the other.
- 1.3 But without Time there is no separation. Ultimately there is no division. There is no right and wrong, good and evil.
- 1.4 The burden of Time is the conflict of the division. And this is our burden. We embody the whole separation, from one extreme to the other. We must; otherwise the parts cannot be brought together. We are stretched across the whole span of the Universe. We are at the pinnacle of Heaven, and in the deepest depths of Hell. We are totally good, and at the same time totally bad. We are wholly of GOD, and we are wholly not of GOD. We manifest the ultimate of all things, both negative and positive.
- 1.5 And our function is to separate; to raise up that which within Time is of GOD, and to condemn that which within Time is not of GOD; to create GODliness, and to destroy unGODliness, at the same time manifesting both within ourselves.
- 1.6 And within Time, that is as it is – divided. But beyond Time, everything is a part of GOD – not of GOD divided, but of GOD united, resolved and brought together into

¹⁴ dangerousminds.net/contributors, accessed October 28, 2016.

¹⁵ www.youtube.com/watch?v=asim-1Tqjpo, accessed October 28, 2016.

¹⁶ www.youtube.com/watch?v=3j2KaD7VWXE, www.youtube.com/watch?v=f9ZC1TFLF4I, accessed October 28, 2016.

One. Within Time, there is an eternity of agony for all beings not of GOD. But when Time is no more, eternity is no more, the separation is no more. There is no condemnation, because there is no division. There is no damnation, because there is no separation.

Most of the editing from BI-13 to *Exit #3* concerned punctuation, and capitalizing *separation*. But two word changes suggest how the exact meaning and expression of the theology was constantly evolving. The words *antiGod* in Verse 1 and *unGODliness* in Verse 5 were both changed to *GODlessness*. Applying Processean thinking to secularization today, we might say: God separated into four parts in order to have the opposition required to play a game: Jehovah against Lucifer, Satan against Christ, and even Satan against Satan. In order to have a world in which to play this Game of the Gods, They split further, to create planets and people, sects and cults. Today, Separation dominates, and all human institutions will disintegrate, churches among them. The Process hoped to survive until Separation would be replaced by the Union and the Unity, eventually to the end of this world, and the rebirth of God.

On November 4, 2016, a new closed group called “4P the Process Church of Final Judgement” joined the mix, intended to serve as a hospitable forum for people who wished to experience Processean culture.¹⁷ As Jack McLimans who created the group told me, the existing Process groups seemed “resentful, jealous and vindictive,” being used by one or more old time Process members as “a means to ridicule, insult and witch hunt others.” This was an offshoot of a “public figure” page named Robert deGrimston, not connected with the man himself but serving since the beginning of the year as a reflection of the compatible Holy Terror modern music tradition, and the Integrity group that had been inspired by the Process in its *Humanity is the Devil* album.¹⁸ In 2010, one of the representatives of this diffuse subculture had described it in an online interview:

On the surface the Holy Terror Process Church in its artistic form is a loose collective of musicians and artists dedicated to the preservation of artistic integrity and the progression of such. It itself is an offshoot of a 60’s religious cult called the Process Church of Final Judgement. Primarily, they believed in 4 gods. Hence the 4P logo seen here we and many other HT bands adopted as a coat of arms and to provide a unifying image. They believed that in the end of times the 4 gods God, Christ, Satan, Lucifer would reconcile. God and Christ to determine the wicked and the good, and Satan and Lucifer to carry out the judgement of each.¹⁹

McLimans explained, “My friends and I have been actively sharing Process ideas since the early 1990s. We had the forum Holy Terror in 1995, one of the first online resources for Process.” Aleister Crowley was a member of his extended family, and he had visited the Abbey of Thelema personally, posting pictures of it on Facebook in the summer of 2015. The current Holy Terror website offers for sale several

¹⁷ www.facebook.com/groups/1221804861271062/admins, accessed November 11, 2016.

¹⁸ www.facebook.com/Degrimston/, accessed November 11, 2016.

¹⁹ alexandercashin.blogspot.com/2010/02/interview-with-adam-of-withdrawal.html, accessed November 11, 2016.

embroidered patches and pieces of jewelry bearing the P-Sign, which the group calls the 4P logo, plus a pin of the Satanic goat with the P-Sign on its forehead. Most challenging is a \$50 skateboard deck that combines the P-Sign with the cover of the Integrity *Humanity is the Devil* album. By November 11, the 4P group had 138 members and was distributing Process scriptures and scripts for two of the traditional rituals I had contributed. Whatever the future of the Process may be, it is not dependent upon the activities of survivors of the group that disintegrated over 40 years ago.

Many of the original Processeans have already died, Mary Ann MacLean among them. Two of the surviving Processeans most active in reassembling their culture have shared their own serious health concerns. There is talk of a small group reassembling when others formally retire from their secular jobs. Whether or not that happens, the wide distribution of music, scripture, symbols, and even simulated artifacts in the form of newly crafted jewelry and clothing, offers the possibility of revival of a radical religion that was once thought to be extinct. Or not, as the case may prove to be.

3.6 A Virtual Second Life

Once upon a time, the siege catapult was the most powerful military weapon, and sailing ships were the most huge and complex vehicles for long-distance travel. Which of today's technologies will fade into dim memories, or become the rare toys of rich people? As suggested by the example of *Echo of Soul* in Chapter 1, over the past two decades, half the time since the Process disintegrated, online virtual worlds have been a creative, disruptive technology, yet the most significant non-game virtual world, *Second Life*, passed its peak popularity around 2008. As a context for an active form of Processean meditation, I decided to conduct a personal ritual inside *Second Life*.

The most flexible Process ritual was like an amateur hour in which volunteer Processeans performed music, comedy, dancing, and drama. Called the *Processcene*, it was not only an entertainment, but expressed the doctrine that many troubling human behaviors are *enactments* that dramatize inner psychological conflicts. Obviously, a Processcene can be held in almost any realistic environment, but cultural appropriation would benefit from finding one that had close affinity with the Process. In *Second Life*, I purchased a costume that would allow one of my avatars to resemble a reanimated corpse, which happened actually to be a *Star Trek Borg* costume. Since the Sabbath Assembly video on YouTube that represents the Hymn of Consecration from the weekly ritual actually named "Sabbath assembly" uses footage scanning the human skeletons in the Sedlec Ossuary, I planned for my avatar to dance inside an appropriate *Second Life* sim, with that music playing in the background.

At the time an ideal location existed in one of the erotic *Second Life* sims, Thelema Abbey, which the sim's notecard describes thus: "My main sim, Thelema



Fig. 3.4 A Processean dancing at Thelema Abbey

Abbey (adult), is non commercial; nothing is bought and sold there; it is simply a multi-level sims of Sky Temples dedicated to sacred sex in the world of Virtual Reality, and many of the animated sex furniture there is by other designers; however it also a showcase for my custom Temple architecture, spas and so forth.”²⁰ The connection to the Process is very direct, as noted above, because its leaders pilgrimaged to the real world Abbey of Thelema at Cefalú on the north coast of Sicily. Figure 3.4 shows my Processean avatar dancing his Processcene in the Thelemic sim.

Adaptation of religious culture to new contexts may involve many adjustments, so if real-world Processeans were to go virtual, they would have some work to do. For example Processcenes seldom contained much erotic content, and the Process imposed celibacy on low-level members living in its communes, rather than encouraging uninhibited eroticism. Figure 3.4 required some minor photographic adjustments. After finding a good location within the Thelema Abbey complex, I set the *Second Life* camera to keep the same viewpoint, while hitting function keys that would make the avatar go through various pre-programmed dance-like gyrations. The sim itself generated the fairies seen flying through the air, apparently at random, but never more than one or two. After taking many screenshots, I pasted areas of several of them together to produce the picture, which conveys a sense of the constant movement despite not being a video.

The Thelema Abbey had a public group inside *Second Life*, comparable to a Facebook group, which my avatar joined in addition to three other Thelemist groups, in order to get a perspective on their cultural orientations and memberships. Searching groups for “process” turned up one called The Process Collective, which

²⁰thelemaabbey.wordpress.com/, accessed November 10, 2015.

Table 3.7 Five Process-related *Second Life* groups

Group name	Brief description in <i>Second Life</i> search	Members	On in month	Oldest loss
Thelema Abbey	The Thelema Abbey group and sim attempts to be a loving, tantric, polyamorous, BDSM and esoteric community based upon the thelemic principles of Aleister Crowley.	151	60	October 29, 2009
2ndL Thelemites	“Do what thou will shall be the whole of the Law.” “Love is the Law, love under will.” (Crowley’s commandments)	138	19	April 25, 2007
Thelemic Order of the Golden Dawn	The Thelemic Order of the Golden Dawn is a Spiritual Order based on the teachings of Aleister Crowley.	120	28	May 20, 2009
Thelemite	“Do what thou wilt shall be the whole of the Law.” We are a group of individuals proclaiming the Law of thelema. We have different perspectives on the consequences of that Law, but we are bound together by a mutual work: to examine and understand the philosophy, psychology and culture of thelema.	94	20	January 23, 2008
The Process Collective	As it is.... so be it! What is the Process? Make of it what you will.	10	2	May 21, 2009

is the name of yet another band within the musical movement derived from the original Process.²¹ They are listed in Table 3.7, with data from November 10, 2015.

Only the Thelema Abbey explicitly advertises itself in sexual terms. Sixty of the 151 nominal members had been online in *Second Life* during the previous month, which indicates it is a fairly active group. The information available about the group in the interface lists all the members, along with the last date the particular avatar entered *Second Life*. The fact that one had not entered since October 29, 2009 – “oldest loss” – indicates that the group was established on or before that date, and probably the leader had not conducted a major purge of inactive members. It is not uncommon to have more than one avatar – I have four – optimized to play different roles, and being on in the past month does not prove activity in the group. The three other Thelemic groups are also still active, long after their foundation. The Process Collective was established by an avatar that had not entered *Second Life* since March 9, 2012, and only two members had been on in the past month, indicating it is not an active group. Other information about the founder indicates that he is a musician, a fan of the Skinny Puppy band that drew upon Process culture, and part of the more general desacralized Processean musical heritage.

Since it seemed to be inactive, joining The Process Collective group has qualities suitable for appropriation, potentially using it as a temporary communication channel for religious Processeans, prior perhaps to creating another group explicitly

²¹ en.wikipedia.org/wiki/The_Process_(collective), accessed November 10, 2015.

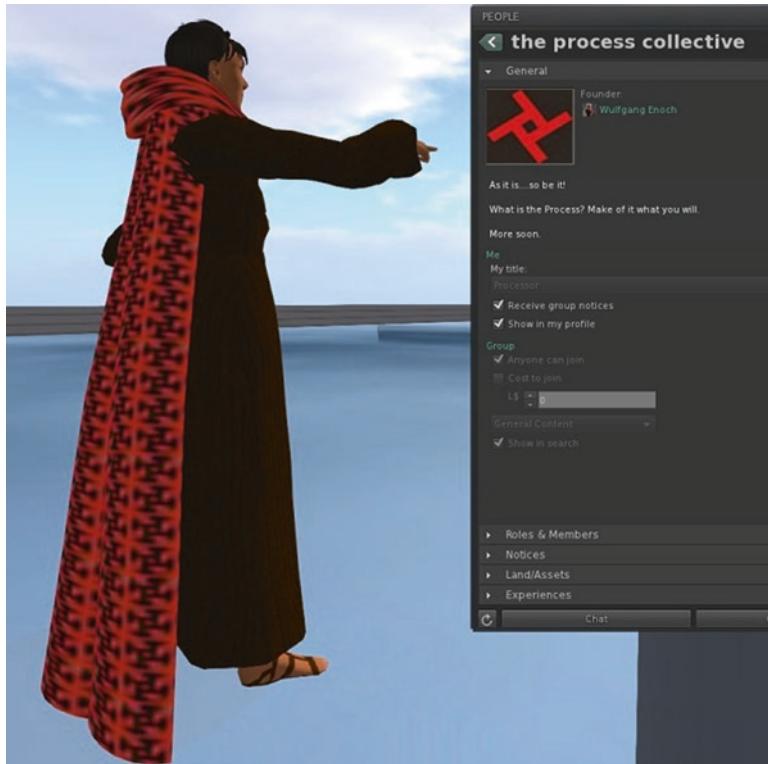


Fig. 3.5 Appropriating virtual clothing and groups

structured in a religious hierarchy. Figure 3.5 shows my avatar pointing at the group's original information page in the *Second Life* search utility, which was decorated with the straight-line form of the original P-Sign. His cape is covered with many copies of the alternative curved-line form of the same symbol. If we were faithfully *translating* the Process into *Second Life*, we would create uniforms from scratch, duplicating the traditional clothing with high accuracy. My avatar represents mere *appropriation*, because his main attire is a monk's costume purchased years before at a *Second Life* monastery, merely darkened a bit given that this clothing gave owners permission to modify. Similarly, the cape was obtained from the admirable Roma sim that represents ancient Rome, and then modified by uploading on it a graphic of the Process symbol.

Given the often quite radical views of the cybernetic future that have been promoted by otherwise highly respected leaders in new technology development, and that will be considered in later chapters, it is possible that earlier developments such as the Process will be overshadowed and fade from public awareness as the original members pass away. Yet consideration of its current admittedly tenuous revival suggests five ways in which a religious group may dissolve into the larger culture in a way that feeds into a much larger process of paganism:

1. As specializations derived from selected elements of a former religious tradition, as illustrated by Best Friends.
2. As desacralized genres of art and music that provide attenuated forms of aesthetic transcendence, such as the music of Sabbath Assembly.
3. As enduring bodies of literature that offer concepts, metaphors, and values that contrast with majority viewpoints, such as the preserved scriptures of the Process.
4. As low-commitment online communities that provide a measure of social stimulation and fellowship, such as the Facebook groups.
5. As fragments of culture that lost their interconnections when a religion disintegrated, appropriated by other movements and social phenomena.

A chief difficulty facing both theorists and empirical researchers is that paganism blurs the distinction between religion and other societal institutions. Conceptions of religion based on familiarity with Christianity have made it difficult to conceptualize some major Asian traditions, notably Confucianism and Zen Buddhism, so terminological problems have always been with us, if not always recognized. As Psychoanalysis, Scientology, and the Process illustrate, one framework for classification has been the legal system, which distinguishes medical organizations from religious ones, and applies different principles to the two categories. But the changes that are apparently underway today challenge any simplistic system of classification. In the future, social scientists will need to find a proper intellectual balance between rigidity and flexibility in the definitions of terms. We will not be able to measure secularization, let alone properly understand it, unless we invest both energy and imagination in our research on this highly significant phenomenon.

References

1. O'Donnell, J.J.: The demise of paganism. *Traditio*. **35**, 45–88 (1979)
2. Hadden, J.K., Cowan, D.E. (eds.): *Religion and the Internet*. JAI Press, Greenwich (2000)
3. Bainbridge, W.S.: *Satan's Power: A Deviant Psychotherapy Cult*. University of California Press, Berkeley (1978)
4. Bainbridge, W.S.: Social construction from within. In: Richardson, J.T., Best, J., Bromley, D. (eds.) *The Satanism Scare*, pp. 297–310. Aldine de Gruyter, New York (1991)
5. Bainbridge, W.S.: *The Sociology of Religious Movements*. Routledge, New York (1997)
6. Burawoy, M.: Revisits: an outline of a theory of reflexive ethnography. *Am. Sociol. Rev.* **68**, 645–679 (2003)
7. Adler, A.: *Understanding Human Nature*. Fawcett, Greenwich (1954)
8. Lewis, J.R. (ed.): *Scientology*. Oxford University Press, New York (2009)
9. Binswanger, L.: On the psychogalvanic phenomenon in association experiments. In: Jung, C.G. (ed.) *Studies in Word-Association*, pp. 446–530. Moffat, Yard, New York (1919)
10. Jung, C.G.: *Synchronicity: An Acausal Connecting Principle*. Routledge and Kegan Paul, London (1972)
11. Bainbridge, W.S., Stark, R.: Scientology: to be perfectly clear. *Sociol. Anal.* **41**, 128–136 (1980)
12. Bainbridge, W.S.: Science and religion; the case of scientology. In: Bromley, D.G., Hammond, P.E. (eds.) *The Future of New Religious Movements*, pp. 59–79. Mercer University Press, Macon (1987)

13. Bainbridge, W.S.: The cultural context of scientology. In: Lewis, J.R. (ed.) *Scientology*, pp. 35–51. Oxford University Press, New York (2009)
14. Bainbridge, W.S.: Cultural genetics. In: Stark, R. (ed.) *Religious Movements*, pp. 157–198. Paragon, New York (1985)
15. McIntosh, C.: *Eliphas Levi and the French Occult Revival*. Rider, London (1972)
16. McIntosh, C., *The Rosicrucians: The History, Mythology, and Rituals of an Occult Order*. Crucible, Wellingborough (1987)
17. Symonds, J.: *The Magic of Aleister Crowley*. Muller, London (1958)
18. Lyons, A.: *The Second Coming: Satanism in America*, p. 133. Dodd, Mead, New York (1970)
19. Ed Sanders, *The Family: The Story of Charles Manson's Dune Buggy Attack Battalion*, p. 81 (New York: E. P. Dutton, 1971)
20. Spencer, H.: Progress: its law and causes. *Westmin. Rev.* **67**, 445–485 (1857)
21. Steven, M.: *Tipton, Getting Saved from the Sixties: Moral Meaning in Conversion and Cultural Change*. University of California Press, Berkeley, California (1982)
22. Glen, S., Friends, B.: *The True Story of the World's Most Beloved Animal Sanctuary*. Kensington, New York (2001). p. xv
23. Kilzer, L.: Friends find their calling. *Rocky Mountain News*, February 28, 2004., available at culteducation.com/group/1102-the-process-church/17415-friends-find-their-calling-.html. Accessed 24 Oct 2016
24. Kennedy W.H.: Lucifer's Lodge: Satanic Ritual Abuse in the Catholic Church (No publication location: Reviviscimus, 2004)
25. Sanders, E., *The Family: The Story of Charles Manson's Dune Buggy Attack Battalion*. Dutton, New York (1971)
26. Bugliosi, V., Skelter, H.: *The True Story of the Manson Murders*. Norton, New York (1974)
27. Clinton, G., Be, B.: *Yo Like George, Ain't That Funkin' Kinda Hard on You?: A Memoir*. Atria, New York (2014.) p. 113
28. Wyllie, T.: *Love Sex Fear Death: The Inside Story of The Process Church of the Final Judgment*. Feral House, Post Townsend (2009)
29. Hultkrans, A.: Due process. *Artforum*, October 12, 2009., available at www.artforum.com/diary/id=23921. Accessed 23 Oct 2016.
30. Verney, S.: *Xtul: An Experience of The Process*. PublishAmerica, Baltimore (2011)
31. DePeyer, J.: *Coast to Coast*. PublishAmerica, Baltimore (2007)
32. Bainbridge, W.S.: Processional. *Commun. ACM*. **58**(10):104–105 (2015)
33. Bainbridge, W.S.: Revival: Resurrecting the Process Church of the Final Judgment. *Feral House*, Post Townsend (2017)
34. Aleister Crowley, A.: *The Confessions of Aleister Crowley*. Hill and Wang, New York (1969)
35. LaVey, A.S.: *The Satanic Bible*. Avon, New York (1969)
36. Malphas: *The Black Ship: Concerning the Sovereign Company of Pandemonium the Royal Blood of Chaos and the Dominion of Eternal Night*. Sirius Ink, Wilsonville (2012)

Chapter 4

Residualism: Online Survival of Rejected Religions

Abstract Using information obtained online, this chapter considers how some rather well-known religious traditions of the past have given birth to genres of secular culture, and how online communications can accelerate the decline of controversial religions. The title “residualism” refers to the fact that the disintegration of a religion does not necessarily lead to the death of all its features, because some residue of its culture may persist, even become cherished within the wider culture. Brief consideration of Transcendental Meditation notes how this Hindu practice was able to migrate to the United States and survive, despite separation from Hinduism and the collapse of popularity of the organization that popularized it. A more extensive section documents the scandals that devastated the Children of God, in the modern context when journalists exploit religious conflict, and anyone may post disparaging information about a group online. We cannot be sure how much the CoG was responsible for its own decline, but insightful member Claire Borowik believes Internet renders religious experimentation even more risky than in earlier days. The next case considered is the Shakers, noting that beginning two centuries ago Mary Marshall Dyer had great difficulty battling this communal Christian group that she felt had stolen her family, and the remarkable fact that some elements of Shaker culture, like the hymn “Simple Gifts,” have become popular among people who today have not a clue what the Shakers really were, such as the performers and audience of *Lord of the Dance*. The most striking example of quasi-survival of religious residue is Richard Wagner’s *Ring* operas, which retold the ancient myths of Nordic polytheism, now constantly reinterpreted by performances that can be viewed in YouTube. The chapter concludes with the case of biorhythm pseudoscience, a secularized form of astrology that first spread through specialized calculating devices, and now offers automatic readings from websites with specialized computing programs.

If faith fades, can religion shuffle off this mortal coil peacefully? Or will violence result, as mainstream denominations leave the battlefield to the most radical groups? This chapter will consider a range of possibilities, including how two of the most intense American religious communes have fared in the context of Internet, the Children of God and the Shakers. A more international example is how a kind of revival of Nordic or Teutonic religion took place within the realm of the high arts,

specifically the transformations accomplished through Richard Wagner's ring when distributed through video services like YouTube. A perplexing example is the pseudoscience called biorhythms, which can be conceptualized as secularized astrology, and migrated from its earlier home on electronic calculators to websites. For balance, we begin with an exceedingly mild example, lacking Valkyries and calculators, documenting a gentle invasion of American culture from abroad, at the boundary between religion and science. Transcendental Meditation is an example of *residualism*, the situation in which a portion of a religious tradition survives without significant support from its wider tradition [1].

On October 7, 2016, the online EurekAlert news service of the American Association for the Advancement of Science publicized a press release claiming that an objective scientific experiment had demonstrated that Transcendental Meditation could reduce symptoms of psychological trauma in prisoners, thus implying that convicts who practiced TM would be less likely to return to a life of crime when they were released.¹ The news article linked to an apparently scientific article published in *The Permanente Journal*, “a peer-reviewed journal of medical science, social science in medicine, and medical humanities” that was operated by a subsidiary of the Kaiser Permanente medical consortium.² However, the article was followed by a quotation from an arguably mystic publicizer of Hindu religion in the West: “Meditation is not a means to an end. It is both the means and the end. – Jiddu Krishnamurti, 1895–1986, Indian theosophist, public speaker, and author” [2]. Four of the seven authors were connected with Maharishi University of Management in Fairfield, Iowa, the legacy of Maharishi Mahesh Yogi’s Transcendental Meditation movement.

Many questions can be raised about this study. How did it get featured on the online press release archive of the AAAS? Indeed how reliable are the studies listed in its Social & Behavior section? Did the prison inmate research subjects give informed consent to participate? How was the improvement in the experimental group measured in comparison with the control group? This last question has a straight-forward answer. Two self-report and thus subjective questionnaire tests were used. The items of the Trauma Symptom Checklist 40 are presented like this: “How often have you experienced each of the following in the last two months? Headaches... Insomnia (trouble getting to sleep)... Sexual feelings when you shouldn’t have them.”³ The Perceived Stress Scale is similar: “In the last month, how often have you been upset because of something that happened unexpectedly?” [3]. The control group was apparently not given a placebo treatment, so the improvement of scores in the experimental group could be the result of the Hawthorne placebo effect or what Chapter 2 called *priming*. Another question may be more relevant here: Why did two prisons run by the Oregon Department of Corrections permit religious indoctrination to be imposed on prisoners?

¹ www.eurekalert.org/pub_releases/2016-10/muom-tmr100316.php, accessed October 9, 2016.

² www.thepermanentejournal.org/about-us.html, accessed October 9, 2016.

³ www.johnbriere.com/tsc.htm, accessed October 9, 2016.

Table 4.1 Meditation trainer rates per million population

Geographic Division of US	States	TM teachers		Instruction centers
		1972	2016	
New England	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	18.0	2.2	13.5
Middle Atlantic	New Jersey, New York, Pennsylvania	7.4	1.3	7.2
East North Central	Illinois, Indiana, Michigan, Ohio, Wisconsin	6.7	0.5	4.0
West North Central	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	7.8	1.2	3.6
South Atlantic	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia	5.6	0.9	5.8
East South Central	Alabama, Kentucky, Mississippi, Tennessee	2.2	0.6	2.4
West South Central	Arkansas, Louisiana, Oklahoma, Texas	4.9	0.6	3.6
Mountain	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	28.7	1.1	10.2
Pacific	Alaska, California, Hawaii, Oregon, Washington	37.4	1.2	10.1

Transcendental Meditation is a clear and well-studied example of a religious practice that sought to gain scientific support when it was spun off as a secular service. The Maharishi had visited the US in 1959, but the real opportunity to evangelize did not come until the counter-culture of the 1960s had grown to the point when numerous students at famous universities were receptive to exotic ideas. At University of California, Los Angeles, he got such a great response in 1965 that the Students' International Meditation Society was founded. In 1967 he spoke at UCLA, Berkeley, Yale and Harvard, reportedly training 4459 people in the rather simple practice of TM. His organization collected good statistics, and trained 292,517 students in the peak year of 1975. But this number dropped precipitously to 49,689 in 1977. As this point there were TM trainers across the nation, and some of them continue to offer this service, but with low rates of success [4].

Table 4.1 lists the numbers of TM teachers across the nine regions of the United States in 1972, when the movement was growing rapidly. At the beginning of July 2016, I used TM's system of websites to count the teachers actively promoting TM so many years after the movement's peak.⁴ Indeed, the numbers are much lower, but the good standardized design of the websites gives a favorable impression. However, many splinter groups from Hindu traditions of meditation and yoga now offer training across the country. The final column of figures in the table report the results of searching each state in [YellowPages.com](#) for "meditation instruction."⁵

⁴ www.tm.org/site-map, accessed July 3, 2016.

⁵ For example www.yellowpages.com/search?search_terms=meditation+instruction&geo_location_terms=WV

The geographic differences in rates of many measures of new religious movements show high numbers in the Mountain and Pacific states, while secularized offshoots of Asian religions and pseudoscientific forms of magic are also somewhat high in the North East. The chief factor is the low church membership rates in the west, which correlate with high rates of geographic migration and thus social disorganization, while the secularization experienced inside mainstream Christian denominations in the North East may also be a factor [5]. The slightly high rate for the two TM measures in the West North Central division of the country merely reflects the fact that Iowa contains Maharishi University of Management. Florida is responsible for the somewhat high rate for the South Atlantic states, with a little help from the area around Washington, DC.

Almost by definition, meditation is mild, whether couched in religious or scientific terms. Yet some of the most visible religious movements that dominated the news when TM was most active were very far from peaceful. The deaths of over 900 people in the religious ritual suicide of the People's Temple at Jonestown in Guyana in 1978 did much to amplify the already substantial public hostility toward religious cults [6]. Less clear is how much such dramatic events promote secularization more generally. The rise of Internet may possibly promote weak cultural movements like biorhythms and meditation, but what does it do for intense movements?

4.1 Children of God

One of the most interesting new religious movements on Wikipedia's list is reported with this complex name: "Family International, previously known as the Children of God, the Family of Love and the Family."⁶ The founder and year founded are given as David Berg and 1968. Wikipedia classifies the group as belonging to this complex type: "Jesus movement offshoot, with countercultural and Evangelical beliefs." Yes, but the founder called himself Moses David, and the group was communal, millenarian, world-wide and free-sex, even at Moses David's hidden headquarters involving children in sexual activities with adults. Its preferred means of economic support were collecting donations while passing out tracts in a street ministry, collecting left-over food from willing groceries and restaurants, and perhaps at one early point in its history through a sanctified form of sexual prostitution. However such behavior might be judged today by conventional people or the legal system, it harmonized with aspects of the 1960s counterculture and was legitimated by a reasonably coherent theology.

For several years in the 1990s I studied the Children of God ethnographically through observations and interviews, visiting 12 of its communal homes in or near Baltimore, Chicago, Los Angeles, Paris, San Francisco, Toronto, and Washington.⁷ The distinctive data collection technique was a long questionnaire completed by

⁶en.wikipedia.org/wiki/List_of_new_religious_movements, accessed September 3, 2016.

⁷William.

1025 members in 1997. It was based on the scientifically influential General Social Survey (GSS), so in the book I published about the group I was able to compare the attitudes and beliefs of members with the American public. Now, 20 years later, we can use Internet to learn how the Children of God have survived and what new challenges they face. The comparable General Social Survey data are freely available online.⁸

A reasonable starting point for any student or social scientist would be the data from the survey, which are available to anyone who wants to download them from the website of the Association of Religion Data Archives. Simply scanning the questionnaire's codebook reveals that 90.8% consider themselves "born again," 99.5% have "tried to encourage someone to believe in Jesus Christ or to accept Jesus Christ as his or her savior," and 95.0% say Hell "definitely" exists, with another 4.6% saying it "probably" does.⁹ While these are high percentages, the beliefs are common in American culture. More unusual, and reflecting the group's millenarian ideology, are the responses to this question: "Do you believe that the Endtime has begun or will begin very soon?" Only 1.9% tended to reject this prophecy, while 81.2% said "definitely," and 15.9% said "probably."

In 2014 I published an exploratory factor analysis of the conceptions of the afterlife held by the members of the Children of God, based on items from the General Social Survey, and a brief summary here will offer further insights into their beliefs [7]. A set of 10 phrases describing the afterlife followed this introduction: "Of course, no one knows exactly what life after death would be like, but here are some ideas people have had. How likely do you feel each possibility is? Would you say very likely, somewhat likely, not too likely, or not likely at all?" The items clustered into three factors, here given with the factor loading and the percent who judged the particular description to be "very likely."

Factor I:

- 0.67 A paradise of pleasure and delights (86.5%)
- 0.64 Union with God (93.1%)
- 0.58 Reunion with loved ones (97.7%)
- 0.56 A place of loving intellectual communion (72.7%)

Factor II:

- 0.71 A spiritual life, involving our mind but not our body (7.2%)
- 0.62 A life without many things which make our present life enjoyable (4.6%)
- 0.52 A pale, shadowy form of life, hardly life at all (0.1%)

Factor III:

- 0.71 A life of intense action (41.7%)
- 0.65 A life like the one here on earth only better (72.0%)
- 0.49 A life of peace and tranquility (65.4%)

Only 35.6% of respondents to the General Social Survey felt the afterlife was very likely to be "a paradise of pleasure and delights," compared with fully 86.5 %

⁸ sda.berkeley.edu/sdaweb/analysis/?dataset=gss14, accessed September 3, 2016.

⁹ www.thearda.com/Archive/Files/Codebooks/ENDTIME_CB.asp, accessed September 3, 2016.

Table 4.2 Extremely likely these images of God will come to mind

Image of God	Children of God			General social survey			CoG/ GSS
	Men	Women	Total	Total	Men	Women	
Creator	89.3%	86.2%	87.4%	81.4%	77.6%	84.2%	107.4%
King	86.3%	86.8%	86.6%	52.1%	47.4%	55.5%	166.3%
Father	85.1%	85.2%	85.1%	62.3%	56.1%	66.7%	136.7%
Friend	81.3%	86.0%	84.2%	62.0%	55.0%	67.0%	135.7%
Healer	75.9%	74.8%	75.2%	69.7%	64.1%	73.6%	108.0%
Redeemer	70.6%	62.2%	65.5%	61.4%	56.4%	65.1%	106.8%
Master	69.7%	62.5%	65.3%	55.4%	52.1%	57.8%	118.0%
Liberator	64.2%	60.0%	61.7%	43.9%	39.4%	47.3%	140.5%
Lover	58.2%	62.8%	61.0%	42.2%	40.6%	43.4%	144.5%
Spouse	28.9%	44.4%	38.2%	16.6%	16.8%	16.4%	230.2%
Judge	26.4%	17.3%	20.9%	47.1%	47.2%	47.0%	44.4%
Mother	18.4%	15.3%	16.5%	24.9%	21.7%	27.1%	66.4%
	402	608	1010	2007	840	1167	

of the Children of God, which seems like rather direct evidence of the group's merger of supernatural faith with hedonistic eroticism. The three other items in Factor I all concern social intimacy: union, reunion, and communion. Among GSS respondents, 46.3% consider the afterlife to be "a spiritual life, involving our mind but not our body, compared with only 7.2 percent of the CoG, Factor II being essentially the opposite of Factor I. Only 11.8 percent of GSS respondents felt "a life of intense action" would follow death, compared with 41.7% of the Children of God. Indeed, Factor III imagines a second life after the finish of the first one.

Here we can do a new analysis to see how the CoG members conceptualize God. Sociologist and Roman Catholic priest, Andrew Greeley, had included a module in the GSS in 1983 and 1984, listing a dozen words and asking, "When you think about God, how likely are each of these images to come to your mind? Would you say extremely likely, somewhat likely, not too likely, or not likely at all?" Table 4.2 reports the percentages responding "extremely likely," slightly different from those on the ARDA's website or in my book, because here I included in the divisor any respondents who answered some of the dozen questions, but excluded those who entirely skipped this set of items. The reason for returning to the data after so many years is to look at the gender differences.

The dozen items are listed in descending order by percent of Children of God who conceptualized God with the particular term. To facilitate comparison, the totals columns for the CoG and GSS are together in the middle of the table. Since the CoG is a religious movement, it is not surprising that their numbers are higher than the general public for 10 of the 12 terms, but the magnitudes of some differences, and the two exceptional terms, provide some insights into the distinctive culture of the group. In the middle of the second row, we see that they are much more likely to consider God as their King, 86.6% versus 52.1%. They live their religion every day, and by claiming to live in accordance with God's new command-

ments they can reject the norms of the surrounding society. Their deviant sexuality is given religious justification by being more likely to conceptualize God as liberator and spouse. As an antinomian movement, however, they are less likely to conceptualize God as a judge. Being more likely to conceptualize God as father, and less likely as mother, they may merely reflect Evangelical conventions. The right-hand column of the table expresses these differences as ratios in percentages.

In the General Social Survey data, we see that women are more likely than men to think of God in terms of most of the popular images, which may represent their greater religiosity. In the Children of God, there are no gender differences for the most popular terms and complex differences for some of the others. Men are more likely to select redeemer, master, liberator and judge. We can speculate that some fraction of the men have joined this religious group to cope with behavior problems, and thus emphasize the moral control afforded by religion. Women are more likely to select friend, lover, and spouse, apparently reflecting a greater need for social relationships. The final row of the table gives the number of respondents for each column, and both the CoG and GSS have far more women responding than men. In the case of the GSS, the usual explanations are that more women may be at home when the GSS is administered, and by living longer more women are available to be respondents. Essentially none of the CoG respondents were elderly, and their questionnaire was mailed, so either men were less likely to complete the survey, or in fact fewer men belonged to this religious movement.

Over the past 20 years, I have kept in touch with the group, which is currently named The Family International, chiefly through one of its most trustworthy representatives, Claire Borowik, who has recently published three scholarly book chapters about her group [8–10]. Her essays and my book both chronicle the traumatic episodes in several nations around 1990 when police removed hundreds of children from the communes and arrested some of the adults, only to have their legal cases collapse and be forced to return all of them. In a series of reformations, the CoG ended the sexual outreach practice they called *flirty fishing*, instituted rules against erotic relations with children, and generally moved the group in a series of steps toward conventional society.

Wikipedia's page for The Family International (TFI) reports that the group "initially spread a message of salvation, apocalypticism, spiritual 'revolution and happiness' and distrust of the outside world, which the members called 'the System.'" Focusing on the period after my book was published in 2002: "In 2004, there were also major changes in the group. Internal publications spoke of arresting a general trend towards a less dedicated lifestyle, and the need for re-commitment to the group's mission of fervent evangelism. In the second half of 2004, a six-month period was held to help members refocus their priorities (known as The Renewal). The group was reorganized, with new levels of membership defined into the following categories: Family Disciples (FD), Missionary Members (MM), Fellow Members (FM), Active Members (AM), and General Members (GM)." In 1995, soon after the death of David Berg, his widow had issued *The Love Charter* which formalized changes in the organization and rules for behavior of individual members, and this document continued to guide the Family Disciples, while other rules

were drawn up for the second and third categories. “According to TFI statistics, at the beginning of 2005 there were 1238 TFI Homes and 10,202 members worldwide. Of those, 266 Homes and 4884 members were FD, 255 Homes and 1769 members were MM, and 717 Homes and 3549 members were FM.”¹⁰ The other two categories are informal, and neither enumerated nor given strict codes of behavior.

As is standard for articles about organizations, Wikipedia links directly to the main website for The Family International, which is very attractive and professionally designed. Its introductory page does not describe a network of communes, but something rather more abstract:

The Family International (TFI) is an online Christian community of individuals committed to sharing the message of God's love with people around the globe. Founded in California during the late 1960s, the Family International has expanded into an international network with members currently in over 80 countries.

TFI is a network of globally-minded locally-focused individuals. We are committed to bettering our world through empowering people to develop a personal relationship with God, who can in turn effect change in their part of the world. Members of TFI have been active in mission and charitable work in 95 countries for over four decades.¹¹

Other pages emphasize that proper care of children is a fundamental principle for the Family, and offer links and email addresses for many branches and special projects, including NuBeat, its musical group, which posted many videos on YouTube, chiefly aimed at children.¹² A total of 231 had been uploaded in 2009, apparently produced over the prior years, and only 22 since then, the 3 most recent dating from 2013 and seeming to have nothing to do with the group, as if whoever was responsible for the YouTube list had started posting personal items. The 2009 videos had a median length of 3 minutes and median number of views of 5800.

Searching YouTube itself locates The Family International’s official channel, with just 18 videos, viewed so seldom that they are apparently known only to members.¹³ The earliest was uploaded January 7, 2009, had only 305 views by August 2016, and features a member named Haven singing a song she wrote. Two others date from Christmas 2009, one being a professional quality children’s cartoon illustrating a song about a child who wishes to become like the star that guided the three wise men to Jesus, “I’ll Shine,” with 3737 views. Deepa Daniels, who created the song, was born in the Family in India in 1985 and now works as a talented but conventional professional in Denmark, with the personal motto, “If I can dream it, I will do it.”¹⁴ The animator of the video uses the professional name Zebtoonz and reports, “In 1974 I became a missionary and worked primarily in publications helping to produce hundreds of pages of books, pamphlets, comics and posters which have

¹⁰ en.wikipedia.org/wiki/Family_International, accessed September 3, 2016.

¹¹ www.thefamilyinternational.org/en/about, accessed September 3, 2016.

¹² www.youtube.com/user/NubeatVids/videos, accessed September 3, 2016.

¹³ www.youtube.com/user/TheFamilyInterna/videos, accessed September 3, 2016.

¹⁴ deepadaniels.wordpress.com/about/, accessed September 3, 2016.

Table 4.3 Videos of talks by Steve Kelly Early in 2013

Title	YouTube	Duration	Uploaded	Views
Introduction	DbxqrLEh29I	5:37	February 18	429
The Reboot in Hindsight	sGlFyxkzXqQ	16:45	February 18	720
What is TFI Today Part 1	PR-I2wwMafs	26:08	February 18	493
What is TFI Today Part 2	eAR6tSL3nuI	17:57	February 18	225
Is TFI a Dying Movement	bpF65y7nAgo	8:00	February 18	1359
Why be a TFI Member Today	XaipMjJh8Ko	18:16	February 18	668
Endtime and Current Events	YaQbxKfWTdQ	6:28	February 18	424
More Meaty Word	Xe1IrlbykkY	5:18	February 18	200
Heart of It All and Gospel Series	NNStrCkZIX4	4:02	February 18	114
The Big Why	jcONoh5oZL8	31:09	February 18	340
Community and Structure 8:00	haDuXp37nTY	20:35	March 11	160
Financial Challenges	OPVtjxjX4zo	23:11	March 11	607
Succession – Busyness – Classes – Tips – Music – News	frctkmJuEDY	12:48	March 21	223
The Wrap	0RpFn2bUMo	15:50	March 22	324

been distributed internationally. In 2009 I retired from missionary work and now do freelance animation and cartooning for a living.”¹⁵

The other 2009 video is a dignified 3 minutes Christmas greeting from the couple that has led the Family since the death of David Berg, his widow Karen (Maria) Zerby and Berg’s successor as her partner, Steve Kelly, whom I knew as Peter Amsterdam when I met him during my original research. With 8269 views, we can assume that CoG members tended to view it every Christmas thereafter. Fourteen of the videos are a series of talks by Steve Kelly, who speaks directly into the camera with a featureless background, with a style that combines lecture with conversational style. Changes in his attire indicate there were at least four recording sessions, but most of the videos were released February 18, 2015, and the rest soon after, as listed in Table 4.3.

At times apologetic, Kelly acknowledged that many members had resented major changes that had been instituted and suffered difficulties in consequence of them. He said the current formal membership was 3568, which is about a third what the group’s population had been 8 years earlier. The video titled “The Reboot In Hindsight” said that God had required the biggest change, abandonment of the commune-based way of life, in order for members to become more integrated into conventional society, so they could effectively spread God’s message. The website of the Family International describes the Reboot thus:

In 2010, after a two-year process of evaluating its structure, doctrine, and practices, much of which was rooted in its longstanding cooperative household model, the Family International undertook a comprehensive reorganization, known as the Reboot. This reorganization resulted in the adoption of a new organizational model and the closure of the

¹⁵ www.zebtoonz.com/about_me.htm, accessed September 3, 2016.

majority of TFI's previous communal centers, in order to better achieve our purpose of reaching the world with the gospel message, and to allow for greater diversity. Currently, TFI is organized as an online community.¹⁶

Frankly the numbers of views achieved by these 14 videos are small. Of course, two or more people may have viewed a video together, thus counting as one, and many members are not fluent in English and received Kelly's words in other forms. The most popular of Kelly's videos, with 1359 views, raises the question of the movement's viability going forward, and the second most popular is the one explaining and apologizing for the disruptive Reboot.

The most recent video in this YouTube channel, uploaded May 22, 2014, is a 13-minute high-quality advertisement emphasizing the group's humanitarian efforts, and proclaiming: "The Family International is a Christian fellowship active in over 100 countries, dedicated to sharing God's Word and love with others."¹⁷ It is also available in several short segments from the main website, as is the 2009 Christmas video, thus indicating that far more people have seen it than the 982 views reported by YouTube. The website reports: "The Family International's membership currently comprises nearly 3000 members... Over 35,000 people have at some point devoted themselves to Christian service with the Family International."¹⁸ Even accounting for mortality, given the young age at which most people joined the group, the overwhelming majority of members must have defected, and still be alive. What is their perspective?

The most cited source on the Wikipedia page for the Family International is a Wiki titled xFamily with this goal: "Due to the secrecy that shrouds many of The Family's activities, we work together to collate and divulge information."¹⁹ Apparently many of the contributors are indeed former members of the group, because they have been able to collect thousands of internal publications and place them on the site, including excerpts of:

The Story of Davidito (Ricky Rodriguez), commonly referred to as the *Davidito* book, was a 762-page book published by The Family International in Spain in 1982. It consisted of a compilation of a publication series known as the Davidito Letters, which were circulated from about 1975 until 1981. According to the Pubdex, 2700 copies were printed and distributed to Family Homes around the world. It was intended to be an example of child rearing. The early years of the second generation were influenced by the style of childcare in the book, and sexual liberties were a part of the second generation's childhood to varying degrees, depending on the commune.²⁰

Members of the first generation were already alienated from the wider society, and their children typically received home schooling and indoctrination in the original, radical beliefs. Given the fact that the Children of God was millenarian, there may not have seemed much motivation to prepare children for lives in a

¹⁶ www.thefamilyinternational.org/en/about/our-history, accessed September 4, 2016.

¹⁷ www.youtube.com/watch?v=rW_r42E88, accessed September 4, 2016.

¹⁸ www.thefamilyinternational.org/en/about/membership, accessed September 4, 2016.

¹⁹ www.xfamily.org/index.php/Main_Page, accessed September 4, 2016.

²⁰ www.xfamily.org/index.php/Story_of_Davidito, accessed September 4, 2016.

secular society that would cease to exist long before they reached adulthood. For some members, the birth of Davidito may even have seemed like the Second Coming itself. However, that is not the reason he is currently honored by a Wikipedia page:

Rodriguez was born in Tenerife, one of the Canary Islands. He was the biological son of Karen Zerby and a local hotel employee there whom she “Flirty Fished”. He was considered to be the adopted son of David Berg, Zerby’s partner and leader of the COG, although no official adoption ever took place. Rodriguez later developed a deep-seated resentment towards Berg and Zerby, due to the sexual abuse he had suffered as a child. His sister Christina Teresa Zerby (aka Techi), whom he grew up with and who is still a member of The Family, does not hold the same views.

The group published a childcare manual called *The Story of Davidito* in January 1982, which described the education, home life, and care of Rodriguez. The 762-page book also included at least a dozen photographs depicting the child engaged in sexual activity with his governesses, particularly Sara Kelley (also known as Sara Davidito or Prisca Kelley). The COG later ordered this book to be heavily sanitized and, eventually, destroyed completely. In the late 1990s, it was reprinted in heavily sanitized form...

In January 2005, he arranged a meeting with a former associate of his mother’s who was involved in his childhood sexual molestation, Angela Smith (formerly Susan Joy Kauten), and stabbed her to death in his apartment. He then drove to Blythe, California, where he shot himself in the head. He had earlier filmed a video, where he explained what he planned to do.²¹

That video is not only available at [xFamily.org](#), but several times in YouTube, and partially in an hour-long documentary in which former member “Noah Thomson sets out to interview other ex-Children of God, discovering that these young, second-generation members have often failed to thrive in the outside world, turning to drugs, crime and suicide, unable to adjust to a society indifferent to their abuse as children.”²² At several points in his documentary, Thompson calls his mother on the phone, and we hear her voice discouraging him from visiting her in one of the communes, to which she still belongs, undoubtedly because the documentary would be harmful to her way of life. It can be seen by anyone in seven episodes on YouTube, and by any subscriber to the HBO television service.

Nearly an hour long itself, Ricky’s video was recorded solo, showing him playing with weapons as he rambles about violence, suicide, and childhood sex abuse. He threatens to destroy “Mama and Peter” – his mother, Karen (Maria) Zerby, and Steve Kelly (Peter Amsterdam) – but lacks an easy opportunity.²³ The opportunity to kill one of their accomplices presents itself, and he ends his own life soon after. One YouTube copy of the full video, uploaded in 2013, received 50,322 views.²⁴ The excerpt in Thomson’s documentary, intercut with erotic images of Ricky as a small boy from *The Story of Davidito*, has 275,102 views.²⁵

²¹ en.wikipedia.org/wiki/Ricky_Rodriguez, accessed September 4, 2016.

²² www.youtube.com/watch?v=Ud4Z9xkre6g, accessed September 4, 2016.

²³ www.xfamily.org/index.php/Ricky_Rodriguez_Video_Transcript, accessed August 6, 2016.

²⁴ www.youtube.com/watch?v=3p0-iLcx4es, accessed August 6, 2016.

²⁵ www.youtube.com/watch?v=Ud4Z9xkre6g, accessed August 6, 2016.

Whatever vitality the reformed Family International might have achieved after the 1994 death of David Berg, it has been the target of harsh criticism that no amount of reform has quieted. In recent centuries, Christian communes have looked to Acts in the New Testament, especially Chapter 2, to legitimate the communal form of life that Children of God renounced in the 2010 Reboot:

- 43 And fear came upon every soul: and many wonders and signs were done by the apostles.
- 44 And all that believed were together, and had all things common;
- 45 And sold their possessions and goods, and parted them to all men, as every man had need.
- 46 And they, continuing daily with one accord in the temple, and breaking bread from house to house, did eat their meat with gladness and singleness of heart,
- 47 Praising God, and having favour with all the people. And the Lord added to the church daily such as should be saved.

Yet, we really do not know exactly how the early Christians lived, nor do we have impartial testimony about the social origins of the other great world religions. In the case of Islam, the tradition itself recognizes that violence was central to the early successes, yet today sells itself as a religion of peace. With that qualification, we may postulate:

New religious traditions are most likely to survive in societies with primitive information technologies, capable of preserving holy scriptures and official histories, but not yet advanced enough to publicize and preserve the intimate details of life among the early disciples, or the criticisms of opponents.

The first chapter of this book raises the question of why apparently few new religions have been formed recently in post-industrial societies. A theory that deserves consideration, but certainly is currently unproven, suggests that Internet may be responsible. Born in the same decade as the Children of God, Internet gave birth to the World Wide Web, and by miracle or coincidence, the World Wide Web Consortium was established in the same month David Berg died, October 1994. Today, anyone may instantly upload damaging information or personal calumny against even the tiniest new religious movement. In one of her thoughtful retrospectives of the movement to which she dedicated so many years of her work, Claire Borowik ended with a paragraph suggesting this theory, and she concluded by quoting from my book:

Unconventional new religions may be left with little defense in cyberspace due to the monetary resources and manpower required to mount an adequate response and the permanence of and ease of access to information indiscriminately posted on the Internet. The religious debate, as it now continues in the realm of cyberspace, has repositioned itself on a new and unregulated frontier. New religions, in their quest for religious tolerance and the free exercise of their religion, portend to continue to test society's ability to accommodate, or at least to tolerate, novel religious expressions and innovative lifestyles that challenge contemporary society and culture.

How are we to understand radical religious movements that depart from the traditions of the ordinary churches and challenge the deadness of secular society? Are they, as their opponents would have us believe, pathological collections of abnormal individuals and conspiracies based on fraud and deception? Or are they shining examples of honest religious dissent? [11, 12]

4.2 The Shaking Quakers

In many ways similar to the Children of God, but in some ways very different, the Shakers were a religious commune founded over two centuries ago, and passed its peak long before any living person was born. On September 24, 1850, a census taker named Pliny Hall visited the Enfield, New Hampshire, Shaker commune represented by Caleb M. Dyer, age 50, who was trustee for property worth \$30,500, or perhaps 9 million dollars in today's money. We know this because the handwritten manuscripts of the US census for that year have been preserved, and are currently available online for anyone willing to pay the small subscription cost of [Ancestry.com](#). Caleb was born August 25, 1801, and died July 21, 1863. We know this because the online Find A Grave service copied this information from the plot plan for the Shaker Cemetery (Church Family) on display at Enfield Shaker Museum. It could not be copied from a personal gravestone, because as a photograph shows, a single stone bearing the word SHAKERS is the only monument standing in the middle of a green field:

The Church Family Cemetery is the resting place of 330 Shakers. After the Shakers left Enfield in 1923, they asked the new owners, the Missionaries of LaSalette, to remove the individual headstones and replace them with a single stone marked "Shakers." It was felt that one stone expressed the Community's belief in a shared spiritual inheritance in life and death.²⁶

Buried with Caleb are his father, Joseph Dyer Sr. (1773–1858), and two brothers, Elder Orville Dyer (1811–1889) and Joseph Dyer Jr. (1809–1840). Of course the deceased brother was not enumerated in the census a decade after his death, but the three other Dyers were recorded by Pliny Hall in the census manuscripts. Where is Caleb's mother?

Four legitimate answers can be offered. The Shakers would say that Mary Marshall Dyer (1780–1867) was in Hell, even before her death, because she was their worst enemy. Historians and social scientists would say she has been immortalized in the annals of Feminism, Anti-cultism, and perhaps even Secularization because her published accusations against the Shakers carried such weight, despite her failure to get the New Hampshire legislature to act against their religious radicalism. Pliny Hall found her living alone in the town of Enfield, in possession of property worth \$100. She herself would have said she was moving Heaven and Earth to save her sons from the Shakers, and about to achieve some success. Pliny

²⁶ www.findagrave.com/cgi-bin/fg.cgi?page=cr&CRid=2420271, accessed September 4, 2016.

Hall listed another son, Jerub Dyer (1806–1886), age 44, in the census of Shakers, but he is buried in the nearby Glenwood Cemetery, not with his father and brothers, but with a wife named Lucy.²⁷ In her detailed biography of Mary Marshall Dyer, *Shaking the Faith*, Elizabeth De Wolfe tells the story:

In October 1852, Jerrub Dyer left the Enfield Shakers, and Mary, in small part, finally achieved the liberation of one of her beloved children. Jerrub had been with the Shakers since the age of five. As an adult he had held the position of community physician and was described in Shaker journals throughout the years as a solid Believer. At age forty-seven, Jerrub was slightly older than the typical seceder, but as a physician he had marketable skills enabling him to provide easily for himself in the world. But in addition to economic possibilities, Jerrub likely left for a more emotional reason. He had fallen in love [13].

The 1850 census of Enfield Shakers does give Jerub's occupation as "physician," spelling his name with one "r" as does his tombstone. Two daughters of Jerub and Lucy, Harriett and Rose, are buried near them. The Dyer family had joined the Enfield Shakers in 1813, but Mary did not accept their deviant culture as her husband did, and left in 1815. At that point, all of her five children, aged 15 and under, remained in the commune, her daughter Betsey dying there in 1824. Her attempts to get custody of her children though legal actions failed, largely because husbands' rights were then prioritized over wives.²⁷ Unlike other vocal critics of Shakerism, she worked diligently with other victims, for all the remainder of her life, and 3 years before the 1850 census self-published her masterwork, *The Rise And Progress Of The Serpent From The Garden Of Eden, To The Present Day: With A Disclosure Of Shakerism, Exhibiting A General View Of Their Real Character And Conduct*, which begins:

As the Shakers yet believe that Ann Lee was of pure character, and that she is now a Savior of the world, I feel it a solemn duty to lay before them and the public the following sheets. From my knowledge that the Shaker spirit is Magnetism, mingled with sexual passion, and absolutely opposed to the pure spirit of Christ, I could find no rest but in exposing this delusion, particularly as my dear family were under its influence, and the public liable to the same. By unshaken testimony the reader will see the origin of this delusion, and trace its progress. He will see that it has caused falsehood, injustice and cruelty, which is utterly opposed to the consoling power of truth [14].

By *Magnetism*, Marshall means the animal magnetism of Mesmerism, the hypnotic equivalent of brainwashing. Her reference to "sexual passion" suggests that the Shakers monopolized eroticism, allowing members to express it in repressed form in their group dances, but forbidding normal sexual intercourse for all members. Today we could theorize that the Children of God and the Shakers were equally deviant sexually, merely going to opposite extremes. Yet given Christian traditions of celibacy, that is not how the general public perceives them. With the debatable exception of a tiny community at Sabbathday Lake, Maine, the Shakers are today extinct, yet their heritage is revered.

²⁷ www.findagrave.com/cgi-bin/fg.cgi?page=gr&GSln=Dyer&GSiman=1&GScid=102875&GRid=106772036&, accessed September 4, 2016.

At the online auction house eBay, entering “shaker furniture” into the search field turns up a vast number of pieces of furniture and even books about furniture, but replicas and merely Shaker in style.²⁸ The site offers alternative search terms, “vintage shaker furniture” and “antique shaker chair,” that produce a hodge-podge of items for sale, some of which claim to be authentic and conceivably might be, but most obviously are not. With greater confidence we can find genuine products of Shaker craftsmanship for sale online from an antique store: a circa 1840 little two-drawer table for \$9500, a circa 1830 storage chest for \$42,000, a circa 1880–1890 settee for \$22,000, and a circa 1830 desk for \$85,000.²⁹

The Enfield Shaker Museum that provided death records for Find A Grave has a website that advertises tours and proclaims: “Nestled in a valley between Mt. Assurance and Mascoma Lake, in Enfield, New Hampshire, the Enfield Shaker site has been cherished for over 200 years. At its peak in the mid nineteenth century, the community was home to three ‘Families’ of Shakers. They practiced equality of the sexes and races, celibacy, pacifism and communal ownership of property. Shakers farmed over 3000 acres of land, educated children in model schools and worshipped in the ‘Shaker Way.’”³⁰ Its “Shaker resources” page has links to 11 other Shaker museums and tourist destinations, as well as a link to a musical group: “The Enfield Shaker Singers are dedicated to the music of the Shakers, an American utopian society. We sing songs and re-create dances from many periods in Shaker history.”³¹ From their website can be purchased a DVD titled “We Find No Harm in Dancing.”

Mary Marshall Dyer would be horrified, if she were alive today, to see that the reputation of the Shakers in American public life is entirely positive, even exploited politically as a symbol of what it means to be an American. A prominent example is the popularity of “Simple Gifts,” a song created in 1848 by Elder Joseph Brackett at the Sabbathday Lake commune.³² Wikipedia reports, “The song was largely unknown outside Shaker communities until Aaron Copland used its melody for the score of Martha Graham’s ballet Appalachian Spring (Shakers once worshipped on Holy Mount, in the Appalachians), first performed in 1944. Copland used ‘Simple Gifts’ a second time in 1950 in his first set of Old American Songs for voice and piano, which was later orchestrated. Many people thought that the tune of ‘Simple Gifts’ was a traditional Celtic one but both the music and original lyrics are actually the compositions of Brackett. ‘Simple Gifts’ has been adapted or arranged many times since by folksingers and composers.”³³ Table 4.4 lists a small subset of the performances available on YouTube, selected because they demonstrate the range of adaptations, with views tabulated September 5, 2016.

²⁸ www.ebay.com, accessed September 5, 2016.

²⁹ www.jkrantiques.com/shaker_antique_furniture.html, accessed September 5, 2016.

³⁰ www.shakermuseum.org, accessed September 5, 2016.

³¹ www.shakersingers.org, accessed September 5, 2016.

³² en.wikipedia.org/wiki/Joseph_Brackett, accessed September 5, 2016.

³³ en.wikipedia.org/wiki/Simple_Gifts, accessed September 5, 2016.

Table 4.4 Selected Shaker “Simple Gifts” YouTube videos

Title	YouTube	Duration	Uploaded	Views
Martha Graham’s Appalachian Spring Part 3/4	91y-NEdTj-g	7:32	January 11, 2010	114,374
Scotland, the Brave/Simple Gifts – Lindsey Stirling and the Mormon Tabernacle Choir	pbAmXyYTLBI	4:08	July 24, 2013	333,007
Simple Gifts sung by Fr. James DiLuzio	CoEEQGJmbNE	2:26	October 31, 2012	1063
Jewel – Simple gifts	amcGIfMu0bw	2:47	July 29, 2009	744,241
Michael Flatley – Lord of the dance finale	jjxTTjJtXDA	7:50	May 14, 2008	8,990,991
“Simple gifts” from “The lord of the dance” (VielHarmonie Orchester Elmshorn)	VFGCVL9i4no	6:07	August 8, 2012	17,292
Simple Gifts [from Blast!]	1mvewRB9CN4	7:37	January 10, 2007	385,865
JUDY COLLINS – “Simple Gifts” 1963	fnpwiMTVkxI	1:36	August 7, 2009	69,031
Marilyn Horne sings at Clinton Inauguration 1-20-1993	SokDZzd9iNE	4:46	November 18, 2009	9922
Air and Simple Gifts Yo Yo Ma Itzhak Perlman John Williams Live at the Inauguration	8GoRIQ9cwG8	5:22	January 20, 2009	94,410
3D Printed Recorder: Simple Gifts	F9VdXtTlhCU	0:26	October 7, 2011	11,959
Shaker Heights – Simple Gifts	YttbjMH6lwc	3:15	June 23, 2012	388
A Shaker Worship Service by Salli Terri	fcoAkNU24Vw	20:10	January 23, 2015	6227

The first video in the table is a black-and-white 1959 video of Martha Graham dancing to Copeland’s orchestral version of the song. Ironically given its religious connections, in the second video the Mormon Tabernacle Choir describes “Simple Gifts” merely as a “traditional song” and sees no contradiction in blending it with one of the unofficial national anthems of Scotland. James DiLuzio, whose website describes him as a “missionary preacher” of the Roman Catholic Paulist Fathers, sings “Simple Gifts” in the third video as a Christian sermon, mentioning Copeland but not the Shakers.³⁴

³⁴ www.paulist.org/who-we-are/leadership/fr-james-diluzio, accessed September 5, 2016.

The fourth performance is an example of adaptations that may violate intellectual property rights, despite the fact that any copyright on the song has long since expired. A YouTube user in the Netherlands has uploaded the sound track of popular singer Jewel Kilcher singing the song, about as originally intended, with a still picture of her as the image, and her performance presumably still carries copyright. The information posted about the video lacks any explicit statement that this is a Shaker song, but it does offer the approximate lyrics, which do not exactly match either the original or what Jewel sang, beginning:

‘Tis the gift to be simple, Its a gift to be free,
‘Tis the gift to come down where you ought to be,
And when we find ourselves in the place just right,
Will be in the valley of love and delight.

The most popular modern version of “Simple Gifts” is *Lord of the Dance*, a flashy transmogrified translation. In 1963, English songwriter Sydney Carter adapted the Shaker melody, within a personal conception of Christianity, writing new words from the perspective of Jesus describing his life as a dance, but according to Wikipedia also influenced by Hinduism.³⁵ Dancer and choreographer Michael Flatley appropriated the idea that life was a sacred dance, plus the Shaker music without apparently giving any heed to the meaning they invested in it, to produce the spectacular multi-dancer epic, *Lord of the Dance*, in the Irish style.³⁶ The video is the climax, which begins with dozens of dancers clapping and tap-dancing the rhythm of the song vigorously.

As an indicator of the international diffusion of translated versions of “Simple Gifts,” the next video in the list describes itself as “Getanzt von Mitgliedern der Irish Harp School of Irish Step Dancing aus Kiel. Musikalisch begleitet vom VielHarmonie Orchester Elmshorn.” The Irish Harp School of Irish Step Dancing was founded by Seán F. Carmody, who moved from Ireland to Germany in 1994 and founded the school in 2002.³⁷ Five youthful dancers perform in an exaggerated Irish style, their arms held straight down at their sides while their legs frantically move but remain beneath their bodies, thus expressing great energy under constraint, which with some difficulty we can re-interpret as a derivative of Shaker values. It is followed by an excerpt from *Blast!*, a brass, percussion, and dance extravaganza that in 2001 won the Tony Award for “Best Special Theatrical Event” on Broadway and the Emmy Award for “Best Choreography” on television.

The next three videos document how artists aligned with the Democratic Party have given “Simple Gifts” a political meaning, presumably about American unity and mutual respect across ethnic and social class lines. As the description of the first of these videos says, the popular semi-folk singer “Judy Collins sings ‘Simple Gifts’

³⁵ [en.wikipedia.org/wiki/Lord_of_the_Dance_\(hymn\)](https://en.wikipedia.org/wiki/Lord_of_the_Dance_(hymn)), accessed September 5, 2016.

³⁶ [en.wikipedia.org/wiki/Lord_of_the_Dance_\(musical\)](https://en.wikipedia.org/wiki/Lord_of_the_Dance_(musical)), accessed September 5, 2016.

³⁷ www.irish-harp-school.de/lehrer.html, accessed September 5, 2016.

for the February 1963 TV broadcast of Dinner with the President, the 50th anniversary celebration of B'nai B'rith in Washington, D.C. President Kennedy received a Democratic Legacy Award and spoke during the broadcast.” The next video cuts between the singer and Bill Clinton and Al Gore, in the ceremony in which they celebrated their election victory to be president and vice president of the United States. The third political video is the performance at the inauguration of Baraka Obama: “For the first time, a classical quartet has been invited to participate in the swearing-in ceremony of President-elect Barack Obama and Vice President-elect Joseph Biden on Tuesday, Jan. 20, 2009.” An announcer interrupted the music to report that according to the clock, Obama became president during the performance.

The briefest video shows a young man playing the tune on a recorder woodwind musical instrument which he had made using a Fablicator 3D printer. The best video, in production quality as well as spiritual authenticity, is also the least popular. It was produced for the modern community of Shaker Heights, a suburb of Cleveland, Ohio, that had been the North Union community of Shakers: “The Shaker Heights community celebrates its past, present and future during 2012, its Centennial.” The final video is the nearest thing I could find to a genuine, traditional Shaker religious service: “Performed at Shaker Village by the University of Kentucky Choristers annually from 1979 to 1992,” but using genuine Shaker music other than “Simple Gifts.”

Comparing the Shakers with the Children of God may be unfair in one respect, because children raised in the Shaker communities did gain valuable skills that allowed them to make a living if they departed. However, the Shakers prohibited the production of new children, and when recruitment fell off after the 1840s, they sank toward extinction, even as their cultural heritage survived.

4.3 Twilight of the Gods

A polytheist may be forgiven for joking that the difference between monotheism and atheism is statistically insignificant. When did a difference of only one case support a counter-intuitive theory in competition with the null hypothesis? Here, the null hypothesis is that no gods exist. Observation of hundreds of them would be more convincing than a rumor of only one. A racist might not be forgiven for complaining that the dominant monotheism, the Judeo-Christian-Islamic tradition, is a refugee from the most confused part of the world, namely the Middle East, and thus is not to be trusted. Something strange did happen roughly 2000 years ago, and since the rise of secularism scholars have been struggling to explain the Twilight of the Gods.

Richard Wagner’s 1869–1876 remarkably influential *Ring* operas feature the Germanic gods of yore. Wagner said that his goal was to create *total works of art*, and in my monograph about the Process I suggested that this term could be applied

to religions [15]. A total work of art combines many specific artistic modalities – poetry, music, and visual images for example – and the novel religious communes I had studied transformed all aspects of life into sacred dramas. What can we learn about Wagerianism online?

Recently a colleague who is not of European or Middle Eastern ethnic origins travelled to Washington, DC, to attend the 2016 performance of Wagner's *Ring* cycle, perhaps attracted by the very positive reviews it received. As of August 6, its Facebook advertisement had garnered fully 557,923 likes.³⁸ The main page advertising the Ring on the website of the Kennedy Center summarizes the stories of the four operas³⁹:

The Rhinegold:	From gold stolen from the Rhinemaidens, the dwarf Alberich forges a magical but cursed Ring that will be sought by everyone, from giants to Wotan, lord of the Gods.
The Valkyrie:	A forbidden love between Siegmund and Sieglinde leads to a conflict between Wotan and his Valkyrie daughter Brünnhilde, whose punishment is to sleep atop a mountain within a circle of fire until awokened only by the greatest hero.
Siegfried:	Siegmund and Sieglinde's son Siegfried escapes from the clutches of his caretaker Mime, re-forges the sword of his father, slays a dragon, and awakens the sleeping Brünnhilde with whom he falls in love.
Twilight of the Gods:	The curse comes full circle as Siegfried is murdered and Brünnhilde sacrifices herself to destroy the Ring and return the gold to the Rhine, bringing an end to the time of the Gods but allowing the world to be purified and reborn.

Christians can take comfort from the implication that all Pagan gods needed to vanish so that Christ could purify the world in the name of one God. Two of Wagner's other operas, *Tannhäuser* and *Parsifal*, praise Christianity, and at least *Tannhäuser* of the two contains some good music. Arguably his best opera, *Tristan und Isolde*, is the most psychological, placing its magic in the sexual frustrations of two human beings that symbolize fundamental principles without being deities. The romance between Siegmund and Sieglinde was comparable if briefer, although resulting in a son, and noteworthy for the fact that his parents were brother and sister.

We must start at the beginning: *Das Rheingold*. In the first scene, we hear the supernatural Rhinemaidens singing as they swim in the Rhine river that fertilizes all the land: “Weia! Waga! Woge, du Welle, walle zur Wiege! Wagala weia! Wallala, weiala weia!” The online service Google Translate does not help very much in providing enlightenment about what this means: “Weia! Waga! Wave, you wave, walle the cradle! Wagala weia! Wallala, weiala weia!” But one human translation clarifies: “Weia! Waga! Waft your waves, ye waters! Carry your crest to the cradle! Wagala weia! Wallala weiala weia!”⁴⁰ Note that German *Welle* is cognate with the English verb *to well up*, as in the rising of waters or a metaphor for something increasing

³⁸ www.facebook.com/events/1683790401889541/, accessed August 6, 2016.

³⁹ web.kennedy-center.org/Marketing/Ring/Landing, accessed August 6, 2016.

⁴⁰ www.rwagner.net/libretti/rheingold/e-rhein-s1.html, accessed August 6, 2016.

powerfully. The fact the Germans generally do not use die Welle to refer to *a water well* should remind us how fluid language can be.⁴¹

Along comes a dwarf named Alberich who is erotically drawn to the Rhinemaidens, but they shun him. In the *Ring*, clearly the Rhinemaidens represent Nature, and two mythical races of men represent unnatural technology: Dwarves and Giants. Dwarves dig metal and gems from deep in the earth, while Giants build huge structures notably the castle named Valhalla. The Rhinemaidens have a sacred mission, not merely to give their own supernatural grace to the great river, but also to guard the Rheingold (Rhinegold) that imbues the river with its magical powers. Unable to have one of the female demigods, Alberich seizes the gold. Wikipedia summarizes the second scene succinctly:

Wotan, ruler of the gods, is asleep on a mountaintop with Fricka, his wife. Fricka awakes and sees a magnificent castle behind them. She wakes Wotan and points out that their new home has been completed. The giants Fasolt and Fafner built the castle; in exchange Wotan has promised to give them Fricka's sister Freia, the goddess of youth and beauty and feminine love. Fricka is worried for her sister, but Wotan is confident that they will not have to give Freia away, because he has dispatched his clever servant Loge, the demigod of fire, to search the world for something else to give the giants instead.⁴²

Loge is called Loki in other versions of Nordic mythology. He is a shape-shifter, trickster, amoral God, and his leit motif, or tune, in Wagner's operas does not remain within any one musical key. He may represent rational self-interest, lacking loyalty to any principle other than his own benefit, but he is also a principle of intelligent destruction, and at the very end of the operas his melody becomes the fire that burns Valhalla to the ground.

The alternate payment is the Rheingold, stolen by Wotan at the instigation of Loge from Alberich. Exactly what the *Ring* means is open to debate, but clearly it concerns the end of an era in mythological history, as the Pagan gods of Germany and the Nordic countries prepare for a war against other forces, which ultimately they lose. It is plausible that Wagner, who had been a rebel during the abortive left-wing revolution of 1848, intended the gods to represent capitalist industrial society. In any case, the gods sell their souls (Freia and the Rheingold) to engineers (Dwarves and Giants) in order to build a physical castle (Valhalla) in which they might be safe from the chaos welling around them. Whatever Wagner intended, it is conceivable that the *Ring* is a prophecy of the fall of the civilization to which Wagner contributed, but we now precariously inhabit.

Consider the most popular minutes of the many-hour *Ring*: The Ride of the Valkyries. As of August 30, 2016, all of the *Ring* can be experienced in multiple performances on YouTube, but there are also many, many videos of the Ride. Loge would love the "ambiguity" of the intellectual property rights. Some of the videos appear to be advertisements for higher fidelity versions that can be purchased; others are clearly stolen property, and many are uncertain as to their legality. Table 4.5 lists a dozen that illustrate the great diversity of meanings a secular world has given

⁴¹ translate.google.com/#en/de/well, accessed August 6, 2016.

⁴² en.wikipedia.org/wiki/Das_Rheingold, accessed August 6, 2016.

Table 4.5 Multiple rides of the Valkyries on YouTube

Title	YouTube File	Duration	Uploaded	Views
Richard Wagner: Ride of the Valkyries (Berliner Philharmoniker, Daniel Barenboim)	P73Z6291Pt8	5:05	June 2, 2013	815,732
The Ride of the Valkyries. Scala Milano. Barenboim, 2010	-XFLaVdHdjw	5:47	December 8, 2010	57,005
Die Walküre-The Ride of the Valkyries (Bayreuth)	uOk_lqPlXQE	8:32	February 10, 2009	83,117
WAGNER – Ride of the Valkyries (Die Walküre Akt 3)	svMHBPed9Bs	10:00	May 8, 2012	323,033
Wagner: The Ride of the Valkyries – Copenhagen Ring	FPcrqkViZKw	7:40	January 20, 2010	163,844
The Ride of the Valkyries from Wagner's Ring Cycle at the Met	xeRwBiu4wfQ	6:23	September 3, 2012	519,328
Walküre 9/12 – R. Wagner – Akt 3 Walkürenritt Hojotoho Valencia 2008	FU0dglxXhHM	9:25	June 23, 2010	46,525
Ride of the Valkyries – Apocalypse Now (3/8) Movie CLIP (1979) HD	30QzJKCUekQ	4:43	March 15, 2012	866,601
Gate – Ride of the Valkyries Recut	qvoHn1v2JXA	7:49	August 9, 2015	29,732
World of Tanks, Warships & Warplanes. Ride of the Valkyries. Let's Battle	2HAxv-GQYRw	5:47	July 14, 2014	5223
Hydra Presents: The Ride of The Valkyries (Alterac Valley)	J5B5p9HBBnk	2:00	April 21, 2016	128
Richard Wagner – The ride of the Valkyries	NbNv7njA-Aw	6:11	May 31, 2012	1,003,407

to this scripture from a dead faith. Let us imagine for a moment that the Ride videos do not depict a brief scene from a grand opera, but the actual world we inhabit today, as human beings struggle to preserve civilization, even as it inexorably begins to fall.

The first video shows Daniel Barenboim conducting the Berlin Philharmonic Orchestra in a performance lacking singers. Either we take the music as an abstraction, perhaps expressing galloping horses or simple human excitement in its rhythms, or recognize that this scene in the opera has much more explicit religious meaning. The nine Valkyrie demi-goddesses are assembling, riding on supernatural horses, preparing to enter Valhalla and bring with them the fallen warriors who will

resurrect to defend the castle of the gods against their enemies. Drawing upon two translations of the libretto:

Gerhilde sings:

Together they ride.

(In a bank of clouds, passing from the left, Rossweisse and Grimgerde appear, illumined by a flash of lightning. Both are on horseback, and each carries a slain warrior on her saddle. Helmwig, Ortlinde and Siegrune have come out of the wood and wave to the approaching Rossweisse and Grimgerde from the edge of the precipice.)⁴³

Rossweisse sings:

If we're all assembled
then don't wait any longer.
We'll make our way to Valhalla
to bring Wotan his warriors.⁴⁴

But at this point the ninth Valkyrie, Brünnhilde, has not yet joined them. Indeed, none of the Valkyries appear in the first video, but they do in the second, because this time Barenboim conducts the complete scene at La Scala in Milan. The singers perform on a darkened stage, where we can just barely see that they are walking up and down a set of large blocks on the floor, as a gray video of dead men's bodies swirling around a cosmic horse projects in the obscure background. As individual Valkyries sing their lines in German in Italy, French subtitles appear.

In the third Ride, the dead warriors stand in gray shrouds, surrounded by mists, as the Valkyries arrive via a zig-zag ramp. This performance was also conducted by Barenboim, but at the Bayreuth Festival in the Festspielhaus, a cathedral-like opera house designed according to Wagner's own specifications. As Wikipedia reports, "The Festival has become a pilgrimage destination for Wagner enthusiasts, who often must wait years to obtain tickets."⁴⁵

Remarkably, this sacred Festspielhaus was run by the composer's son, Siegfried Wagner, until his death in 1930, after which Siegfried's wife, Winifred, took over until the end of the war in 1945. She had been an ardent supporter of Adolf Hitler, himself an enthusiast for the music, so she was not allowed to continue as the leader when Bayreuth reopened in 1951. Her sons, Wieland Wagner and Wolfgang Wagner, played this role, and Wieland instituted important innovations. Wikipedia explains: "Wieland Wagner is credited as an initiator of Regietheater through ushering in a new modern style to Wagnerian opera as a stage director and designer, substituting a symbolic for a naturalist staging and focusing on the psychology of the drama."⁴⁶ "Regietheater (German for director's theater) is a term that refers to the modern (mainly post-World War II) practice of allowing a director freedom in devising the way a given opera or play is staged so that the creator's original, specific intentions

⁴³ www.murashev.com/opera/Die_Walk%C3%BCre/libretto_English_Act_3, accessed August 30, 2016.

⁴⁴ www.rwagner.net/libretti/walkure/e-walk-a3s1.html, accessed August 30, 2016.

⁴⁵ en.wikipedia.org/wiki/Bayreuth_Festival, accessed August 30, 2016.

⁴⁶ en.wikipedia.org/wiki/Wieland_Wagner, accessed August 30, 2016.

or stage directions (where supplied) can be changed, together with major elements of geographical location, chronological situation, casting and plot. Typically such changes may be made to point a particular political point or modern parallels which may be remote from traditional interpretations.”⁴⁷

Note how the radical concept *Regietheater* may relate to secularization. The *Ring* was never an orthodox statement of Teutonic Paganism, but an adaptation of it for modern purposes that found a mixture of original meaning and new significance in its symbolism. When Wolfgang Wagner took over Bayreuth in 1960, he developed a remarkably abstract form of *Regietheater*, as Penelope Turing, a loyal Bayreuth pilgrim, recalled:

For this *Ring* Wolfgang used a large concave disc – in German the Scheibe – which was soon nicknamed the saucer. But it did not remain a platform. It was also symbolic of the story, starting as the placid bed of a pool in the Rhine, it was later split and segments of it set at different angles. Each scene used the Scheibe in a different form, often roofed by a companion disc in various broken sections. Strife and suffering mark the development of the saga, and this design depicted the tumult of passions and events in bold, jagged shapes, until at the very end when the Rhinemaidens have regained their golden talisman, when all passion is spent and peace heals the passing of gods and men, the great disc sank back into its first simplicity. Bare and smooth it lay, under a silvery blue light. Of all the *Rings* I have seen in many different opera houses this was by far the finest ending of *Götterdämmerung* [Twilight of the Gods] [16].

The fourth Ride in the table is “A concert performance from the BBC Proms in 2005, from the Royal Albert Hall.” The Valkyries stand in a row, each wearing a different concert dress she presumably chose for herself, with the huge orchestra behind, and the audience before. Some of the viewers said they wished the video had continued after 10 minute, when it abruptly stopped. The poster explained, “For those asking – it cuts off abruptly as this was originally uploaded on to Google Video back around 2006. In those days it only allowed exactly 10 mins of video, so truncated my original version. When Google Video closed down, it automatically uploaded everything to YouTube.” This aside reminds us that everything on Internet is mortal, and we are not aware that any Virtual Valkyries are ready to carry these videos to Valhalla after electronic civilization erases.

The fifth Ride is “the critically acclaimed and controversial Copenhagen Ring from Royal Danish Opera.” Why controversial? The Valkyries are boozing thieves who steal from the bodies of the dead warriors, fight over trinkets, are black-winged angels in ballroom dresses, the hems of which are red from the blood of the corpses. Certainly, some radical secularists consider priests to be thieves, but if supernatural beings actually exist, what right do humans have to depict them as criminals? Of course, this is part of the appeal of monotheism, the notion that there exists one, transcendent moral order, whereas polytheism preaches a moral relativism in which even perfidious Loge deserves devout disciples.

The steeds in the sixth Ride, performed at the Metropolitan Opera in New York, are huge seesaws, one end pointed at the audience, that surge up and down as the

⁴⁷ en.wikipedia.org/wiki/Regietheater, accessed August 30, 2016.

Valkyries sing. Promoted by Deutsche Grammophon to commemorate the 200th birthday of Richard Wagner in 2013, this was clearly an advertisement video, legal, high in quality, and seeking an investment of over \$100 per customer for the entire magnificent performance of the Ring.

The Met's rival, at similar cost, is the *Ring* as performed in 2008 at Valencia, Spain, in an intense Regietheater staging. At the beginning of Ride Seven we see Zubin Mehta conducting an orchestra, with a strange, huge shape swinging back and forth above a stage with dim blue lighting. It is a spherical framework, from which innumerable tight-clad humans hang. Clearly it represents a morbid Earth, swinging as the Valkyries enter and check the arrow-filled bodies lying beneath the sphere, some Valkyries riding high in the air on mechanical cherry-picker steeds.

Two other scenes from the Valencia Ring reflect Wolfgang Wagner's abstraction, as if drenched in the sweat of Freud's theories, and graphing the sociology of religion.⁴⁸ Three gods float in the air, elevated by cherry-picker machines operated by nearly invisible stagehands, as Wotan steps out before a distant form shaped like a human head. This is the final scene of *Das Rheingold*, as the gods prepare to enter Valhalla. The giant shape opens, like a gateway, revealing in the darkness 30 human beings hung on ropes. As Wotan and his wife Fricka sing, the ropes pull the people higher into five rows of six. Loge rides around on a Segway scooter, aloof and practically contemptuous, until he responds to the sad song of the Rhinemaidens in the background, telling them to forget the shine of their lost gold, in favor of the radiance of the gods. The roped people awaken, spreading their legs and holding the feet of people above them, forming a huge surface that closes about the gods, becoming thereby Valhalla.

At the end of the fourth opera, Brünnhilde sets ablaze Siegfried's funeral pyre, ascends it herself, and Valhalla burns to the ground, leaving the 30 Valencia performers lying as if dead at the ends of their ropes. One God apparently survived in this production. Not Jehovah, but Loge.

Bizarre? Powerful? Yet it is certainly not the most familiar surreal interpretation, which is the eighth Ride, the scene in the highly acclaimed 1979 movie, *Apocalypse Now*, when a squadron of American helicopters annihilates a peaceful village in the Vietnam War. Based on Joseph Conrad's *Heart of Darkness* and other psychological literature, this background music suggests the Americans are wrong to glorify their war, just as Conrad critiques European colonization of Africa in his novel [17].

The ninth Ride is a Japanese imitation of the scene, but in an animated version of the *Gate* novels and mangas, when the Japan Self-Defense Forces repel a mysterious invasion – conceivably mythologized Americans. Ride number ten is a virtual reality battle advertising three online games, *World of Tanks*, *World of Warships* and *World of Warplanes* from a company called Wargaming, located in Nicosia, Cyprus. The eleventh is an amateur machinima video of a battle between two raiding parties in *World of Warcraft*, in which the winged attackers fly down upon their opponents.

⁴⁸ www.youtube.com/watch?v=BryfDHcjD9o, www.youtube.com/watch?v=A8njyLeEfQ, accessed August 30, 2016.

The last video of the Ride, with over a million views, was edited from the movie *Pearl Harbor* by a Latvian, “dedicated to the memory of victims of World War II.” A commentator complained in German, “mit dem video und der musik dazu denke ich, du würdest den angiff [Angriff] der Japaner feiern” – “with the video and the music with it, I think you would like to celebrate the Japanese attack.” Commentators stumbled over each other, trying to decide whether Japan deserved the atom bombs it received in return, and even whether Americans have killed more innocent people than the Nazis did. In addition to many comments in English and German, there were also some in Spanish, Russian, Korean, Chinese, and, yes, Japanese. A quarter century ago, David Littlejohn, pondered what meanings people might read into the *Ring* after the fall of the Soviet Union, making the following prediction we now know to be incorrect:

Chaos, as Wagner himself sometimes suggested, is likely to be the rule, rather than the exception, in our world (and in productions of *Der Ring des Nibelungen* that try to reflect or comment on that world) until another cruel divine order emerges to force things back into unity. *Rings* devoted to the evils and collapse of Eastern European communism are surely on the drafting boards already, now that *Rings* devoted to the evils and collapse of capitalism and fascism are becoming routine [18].

If in the abstract the *Ring* was a vast parable of the rise and fall of a cosmic order, then here we are inspired by all the other interpretations to wonder how the demise of Christianity, or of Science, might be construed in future millennia.⁴⁹ Yet many forms of secularization will be trivializations, as illustrated by the following example.

4.4 Biorhythms: The Skeleton of Astrology

The term *biorhythm* sounds scientific, perhaps equated with the circadian rhythm, the biological cycle that supports sleep at night and action during the day. If psychological theories are secularizations from folk cultures, then biorhythms can better be described as a secularized version of astrology, using a person’s birth date as the only input for predictions about changing conditions throughout life. The positions of the planets do not matter, so there is no need to suggest a supernatural force exerted by heavenly bodies upon human bodies. If biorhythm theory lacks supernaturalism and psychology, why is it important to consider it in this book? It is important precisely because it is not important. It is an example of the vast variety of minor cultural fragments that can result from the disintegration of religious orthodoxy.

In its standard form, biorhythm theory asserts that humans have three precisely rigorous biological rhythms, that can be measured as sine waves beginning at the moment of birth, in periods of 23 days, 28 days, and 33 days. Note the assumption

⁴⁹“Wagner Documentary: In the Eye of the Ring,” www.youtube.com/watch?v=CvpIbfslS9w, accessed November 12, 2016.

shared with modern astrology, that the moment of birth sets the algorithms that throughout life will determine important aspects of a person's nature or fate. The 23-day cycle governs physical strength; the 28-day cycle governs emotion, and the 33-day cycle, intellect. Each aspect of the person is stronger during part of the cycle, weaker in the opposite part, and becomes unstable at the critical days when the sine wave crosses the zero axis of the graph. The three numbers 23, 28, and 33 have no common factors, so the pattern of cycles does not repeat exactly for $23 \times 28 \times 33 = 21,252$ days. Immediately it should be obvious that biorhythms are computational, and indeed several websites currently calculate the user's current biorhythm situation as a free online service.

Starting in 1976, I undertook a modest study of the biorhythm fad by joining the Northwest Biorhythm Association in Seattle, Washington, taking a class taught by its organizer, and reading available literature [19]. I also obtained various biorhythm calculating devices available at the time, notably two Japanese devices, the Biomate analog calculator consisting of three plastic gears in a frame that could be set for the birth date, and then rotated to report the three changing rhythm magnitudes, and an electronic calculator called Biolator that I used to test the theory using data on winning days for golfers, no-hit games of baseball pitchers, sports star deaths, mothers' rhythms when they gave birth, and test scores of students. In each case, biorhythm theory failed. About two decades later, Terence Hines reviewed results of 134 studies, including mine, of which 99 gave no support to biorhythm theory [20]. In the 35 that seemed to support biorhythms, Hines found numerous methodological problems, from failure to report results clearly, to statistical miscalculations, even in a few publications some hint the cases were selected for study from a larger set because they were in line with the theory.

The Japanese manufacturer of the plastic Biomate calculator incorrectly asserted, "The science of Biorhythm, established by Professor Sigmund Freud, a leading psychiatrist of the early 20th century, has been studied by scholars worldwide to become a proven science."⁵⁰ This was certified by the Japan Biorhythm Association, but rests on two misunderstandings. Not only is the theory not a proven science, but Sigmund Freud did not establish it, because Wilhelm Fliess did. However he was directly involved, as Terence Hines reported:

For much of the period in which Fliess was developing his biorhythm theory, he was a friend and frequent correspondent of Sigmund Freud. It is clear that Fliess's ideas had a major influence on Freud while the latter was developing psychoanalytic theory. Freud was enthusiastic about Fliess's biorhythm theory. In a letter to Fliess dated June 22, 1897, Freud urged Fliess not to write "a short article" on the theory, but to "within a year present to us a small book which solves the organic secrets in series of 23 and 28." In fact, Fliess published his first book in which biorhythm theory was considered in any detail in 1897. According to Jones, Freud termed Fliess the "Kepler of biology," so great was his admiration for Fliess's biorhythm theory [21].

⁵⁰Japan Biorhythm Association, "Biomate Application Guide," no date or place of publication, but prior to 1979.

The Jones to which Hines refers is Freud's biographer, Ernest Jones. In a book on occult influences in the work of Freud and Jung, Nandor Fodor comments on the sexual aspect of Fliess' biorhythm theory:

As to Wilhelm Fliess, he was started off on his flight of ideas by his "discovery" of a "nasal reflex neurosis," a new syndrome that he announced in 1897, claiming that dysmenorrhea was of nasal origin and that behind menstruation there was a wider process, a tendency toward periodicity in all vital activities of both sexes. The key to this periodicity was hidden in the numbers 28 and 23. The first number patently stands for the normal period of menstruation. The second may have been derived, so Jones believes, from the interval between the close of one and the onset of another. As Fliess considered all human beings bisexual, 28 was the female component and 23 the male one. These numbers were said to operate in all organic beings, and determined the biological phenomena of growth (including the sex and date of birth of the child), the date of illness, the date of death, going even beyond the human sphere to the realm of astronomy [22].

The 33-day intellectual rhythm rests entirely upon the research of Alfred Teltscher, whom Wikipedia says was a professor of engineering at the University of Innsbruck, who seemed to see such a cycle in performance by his students.⁵¹ Thommen admits: "Unfortunately, my own search abroad brought to light no original documentation, scientific paper, or book of his, and so my knowledge of Teltscher's work is based on secondhand reports and on articles that discussed his findings" [23].

I still have the Casio Biolator H-801 "electronic calculator" I used to calculate biorhythms four decades ago, and electronically it still works. However, because of limitations in the hard-wired program, I cannot calculate biorhythms for any date after December 31, 1999. Casio provides a solution for this problem, an online Biorhythm Calculator that is free to use. Remarkably, several of the "reviews" posted by users indicate that they are older people, many of whom encountered the biorhythm fad earlier in their lives⁵².

Many other online biorhythm websites exist, including one that offers a way to add a biorhythm calculator to your own website.⁵³ The basic computer program for cranking out biorhythm charts was published in *Byte*, a popular computer magazine, way back in 1976, and many amateur programmers have adapted it to more recent systems [24]. That suggests one of the social-psychological factors encouraging the survival of pseudo-scientific ideas: People can become enthusiastic about an unverified claim, if they are able to use it in their own cognitive processes, especially if accomplishing something that other people may respect.

Recent evidence can be gleaned from the Facebook group named Daily Biorhythms set up in 2010 by Martin Mützenberg, with the self-description "Do you believe in Biorhythms? Yes? No? Not sure? You're invited to discuss these questions in this group."⁵⁴ On August 28, 2016, it had 828 members. Despite the high membership

⁵¹ en.wikipedia.org/wiki/Biorhythm, accessed August 20, 2016.

⁵² keisan.casio.com/exec/system/1340246447, accessed August 20, 2016.

⁵³ biorhythms.perbang.dk/, accessed August 20, 2016.

⁵⁴ www.facebook.com/groups/138796562807775, accessed August 28, 2016.

number, it has been over a year since anyone posted on it. The page links to a free bi-lingual biorhythm calculator web page Mützenberg had set up in 1998. The English version claimed it had received 7,390,816 visits since January 1999, while a German version received 1,128,212 during the same period. Without interviewing a person, it is hazardous to analyze their motivations in promoting a pseudoscience, yet clearly one psychological benefit may be an increased sense of personal value from the attentions received from other people. How does conventional religion shape communications about an ideology as simplistic as biorhythms?

Based on data from a mailed questionnaire in Canada, in 2002 Alan Orenstein reported a curvilinear relationship between religion and paranormal belief [25]. Biorhythms may be pseudoscience, but that does not immediately assign it to the category of the paranormal. Biorhythms are so secularized that they do not imply any supernatural effects whatsoever, merely some kind of amazingly accurate biological clock built into our bodies. In contrast, astrology implies that constellations of stars have some supernatural integrity and influence on our lives. The extent to which ordinary people infer supernatural qualities in a concept may vary over time. When Rhine was first publicizing his ESP research, some educated people may have accepted it as good science, but it soon became parapsychology, the pseudoscience, in the minds of educated people. It may be that deviant supernatural beliefs have a curvilinear relationship with religion, but not beliefs like biorhythms that are not readily tagged as supernatural.

We can replicate Orenstein's findings, and examine whether biorhythms have a curvilinear relation to religion using data from *Survey2001*, a major international questionnaire administered on the World Wide Web by a team led by James Witte in which I participated [26–28]. One section of *Survey2001* consisted of 30 agree-disagree items written in pairs, one expressing acceptance of a general idea, and the other expressing rejection. For example, two statements concerned biorhythms: "Every person's life is shaped by three precise biological rhythms – physical, emotional, and intellectual – that begin at birth and extend unaltered until death." "Numerology, biorhythms, and similar attempts to chart a person's life with numbers are worthless." Respondents could choose one of five responses: strongly disagree, disagree, do not know, agree, or strongly agree.

The following analysis focuses on respondents who answered all agree-disagree items. And also answered a 7-choice subjective religiosity question, "How would you describe yourself?" Seven responses were offered: extremely religious, very religious, somewhat religious, neither religious nor nonreligious, somewhat nonreligious, very nonreligious, or extremely nonreligious. Table 4.6 shows the results for the two biorhythm items, compared with astrology and ESP statements, as the percent who either agreed or agreed strongly with each statement, within the given religiosity category.

Of the 107 extremely religious respondents, just 17.8% agreed with the pro-biorhythms statement, compared with 32.3 of those who were neither religious nor nonreligious, and 25.5% of those extremely nonreligious. This is a curvilinear relationship, with the least acceptance among those existing at the extremes of the religiosity dimension. We see the same pattern for astrology, but with lower numbers,

Table 4.6 Percent who agree with statements about pseudoscience, by religiosity

	Extremely religious	Very religious	Somewhat religious	Neither	Somewhat nonreligious	Very nonreligious	Extremely nonreligious
Number of respondents	107	531	1173	834	318	392	333
POSITIVE BELIEFS:							
Every person's life is shaped by three precise biological rhythms – physical, emotional, and intellectual – that begin at birth and extend unaltered until death.	17.8%	24.5%	31.5%	32.3%	23.9%	27.0%	25.5%
There is much truth in astrology – the theory that the stars, the planets, and our birthdays have a lot to do with our destiny in life.	8.4%	13.0%	17.6%	16.5%	10.4%	10.5%	7.2%
Some people really experience telepathy, communication between minds without using the traditional five senses.	43.0%	48.6%	53.2%	51.7%	43.7%	40.3%	29.4%
NEGATIVE BELIEFS:							
Numerology, biorhythms, and similar attempts to chart a person's life with numbers are worthless.	59.8%	51.8%	42.5%	41.0%	47.2%	51.0%	65.5%

(continued)

Table 4.6 (continued)

	Extremely religious	Very religious	Somewhat religious	Neither	Somewhat nonreligious	Very nonreligious	Extremely nonreligious
Astrologers, palm readers, tarot card readers, fortune tellers, and psychics can't really foresee the future.	68.2%	67.0%	57.4%	53.0%	60.7%	68.1%	76.0%
Extra-sensory perception (E.S.P.) probably does not exist.	36.4%	20.2%	13.6%	15.2%	19.5%	28.3%	38.1%

which suggests that biorhythms are presented in such a way that they are not immediately equated with astrology, despite their similarities. The positive statement about telepathy shows the same curved relationship, just as Orenstein predicted. The three negatively stated items show curvilinear patterns, too, merely opposite in shape, with the lowest fractions agreeing in the middle of the religiosity scale.

While we should avoid overinterpreting any particular research finding, this one suggests several meanings. First, it could signal an *interstitial effect*, the concentration of subcultures between two major cultures, in this case the borderland between Christianity and Science. Along cultural borders, social control is weakened by competing forces. Second, this could reflect a *wavefront*, as secularization eats into the existing religious culture, eventually giving all the cultural territory to science. The third possibility, that will become progressively more clear over the following chapters, will see the disorganized frontier of parascience and pseudoreligion expand until only small, doubtful redoubts of science and religion remain, sinking islands of clarity in the ocean of human chaos.

References

1. Jacob, S., Willits, F.K., Jensen, L.: Residualism and rural America: a decade later. *The Journal of Sociology & Social Welfare*. **23**(3), 151–162 (1996)
2. Nidich, S., O'Connor, T., Rutledge, T., Duncan, J.; Compton, B., Seng, A., Nidich, R.: Reduced trauma symptoms and perceived stress in male prison inmates through the transcendental meditation program: a randomized controlled trial. *Perm. J.* **20**(4), 16–007 (2016). www.thepermanentejournal.org/issues/2016/fall/6227-incarcerated-healthcare.html. Accessed 9 Oct 2016
3. Cohen, S., Kamarack, T., Mermelstein, R.: A global measure of perceived stress. *J. Health Soc. Behav.* **24**(4), 385–396 (1983)
4. Bainbridge, W.S., Jackson, D.H.: The rise and decline of transcendental meditation. In: Wilson, B. (ed.) *The Social Impact of New Religious Movements*, pp. 135–158. Rose of Sharon, New York (1981)
5. Stark, R., Bainbridge, W.S.: *The Future of Religion*. University of California Press, Berkeley (1985)
6. Barker, E.: Religious movements and Anticult since Jonestown. *Annu. Rev. Sociol.* **12**, 329–346 (1986)
7. Bainbridge, W.S.: Personality Capture and Emulation, pp. 14–18. Springer, London (2014)
8. Borowik, C.: Courts, crusaders and the media: The Family International. In: Bellanger, F., Richardson, J.T. (eds.) *Legal Cases, New Religious Movements, and Minority Faiths*, pp. 3–24. Ashgate, Farnham (2014)
9. Borowik, C.: The Family International: rebooting for the future. In: Barker, E. (ed.) *Revisionism and Diversification in New Religious Movements*, pp. 15–30. Routledge, Abingdon (2016)
10. Borowik, C.: The Family International: The Emergence of a Virtual New Religious Community. In: Gallagher, E.V. (ed.) *Cult Wars' in Historical Perspective: New and Minority Religions*, pp. 108–102. Routledge, Abingdon (2017)
11. Bainbridge, W.S.: *The Endtime Family: Children of God*. State University of New York Press, Albany (2002)
12. Borowik, C.: Courts, crusaders and the media: The Family International. In: Bellanger, F., Richardson, J.T. (eds.) *Legal Cases, New Religious Movements, and Minority Faiths*, p. 20. Ashgate, Farnham (2014)
13. De Wolfe, E.A.: *Shaking the Faith*, p. 165. Palgrave Macmillan, New York (2004)

14. Marshall, M.M.: The Rise and Progress of the Serpent from The Garden of Eden, to the Present Day: With a Disclosure of Shakerism, Exhibiting a General View of Their Real Character and Conduct, p. 5. Marshall, Concord (1847)
15. Bainbridge, W.S.: Satan's Power, p. 149. University of California Press, Berkeley (1978)
16. Turing, P.: New Bayreuth, p. 63. Jersey Artists, St. Martin (1969)
17. Conrad, J.: Heart of Darkness and Other Tales. Oxford University Press, Oxford (2002)
18. Littlejohn, D.: The Ultimate Art: Essays Around and about Opera, p. 214. University of California Press, Berkeley (1990)
19. William Sims Bainbridge, "Biorhythms: evaluating a pseudoscience," *Skept. Inq.*, 1978, 2(2): 40–56, reprinted pp. 191–207 in *Paranormal Borderlands of Science*, edited by Kendrick Frazier (Buffalo: Prometheus, 1981)
20. Hines, T.M.: Comprehensive review of biorhythm theory. *Psychol. Rep.* **83**, 19–64 (1998)
21. Hines, T.M.: Comprehensive review of biorhythm theory. *Psychol. Rep.* **83**, 20 (1998)
22. Fodor, N.: Freud, Jung, and Occultism, p. 71. University Books, New Hyde Park (1971)
23. Thommen, G.S.: Is This Your Day? p. 18. Avon, New York (1973)
24. Fox, J., Fox, R.: Biorhythms for computers. *Byte* (April), 20–23 (1976)
25. Orenstein, A.: Religion and paranormal belief. *J Sci Study Relig.* **41**(2), 301–311 (2002)
26. Witte, J.C., Amoroso, L.M., Howard, P.N.: Method and representation in internet-based Survey tools: mobility, community, and cultural identity in *Survey2000*. *Soc Sci Comput Rev.* **18**(2), 179–195 (2000)
27. Witte, J.C.: The case for multimethod design. In: Howard, P.N., Jones, S. (eds.) *Society Online*, pp. xv–xxxiv. Sage, Thousand Oaks (2003)
28. Bainbridge, W.S.: The future of the internet. In: Philip, N. (ed.) *Society Online*, pp. 307–324. Sage, Howard and Steve Jones (Thousand Oaks (2003)

Chapter 5

Jediism: The Most Popular Online Virtual Religion

Abstract Jedi religion is a perplexing cultural phenomenon, based on the Jedi Master mythology of the *Star Wars* movies, which drew heavily upon westernized visions of Zen Buddhism. In official government censuses held in 2001 there were 70,509 Jedis in Australia, 21,000 in Canada, 53,000 in New Zealand, 390,127 in England and Wales, and 14,052 in Scotland. It seems likely that most of these people were secularists who merely used a Jedi campaign to complain against any connections between church and state, yet within these larger numbers there were smaller groups that seriously proclaimed themselves adherents to the new Jedi religion. This chapter closely examines the online presence of the Temple of the Jedi Order and the Jedi Church, and considers more briefly several competing groups including the Institute for Jedi Realist Studies, the Church of Jediism, and the Temple of the Jedi Force. These groups occasionally hold local meetings or conventions, but most often communicate actively through website-based forums and Facebook groups. Thousands of other would-be Jedis interact within an online virtual world named *Star Wars: The Old Republic*, which is called a multi-player game but actually is more like a living novel or movie series in which the user becomes one of the characters having somewhat realistic adventures on a galaxy of planets that are caught in a cold war between two factions, each of which has a religion: Jedi for the Republic, and Sith for the Empire. Three censuses – of 2000 and 3082 and 1424 avatars – document that supernatural Jedi and Sith roles are more popular. These virtual Jedi and Sith may not “really believe” in the divine Force or possess real magical powers, and yet for hundreds and even thousands of hours of their lives they experience transcendent roles by means of information and communication technology. Whether experienced as faith or fantasy, Jediism encourages meditation, martial arts, and completion of quest dreams. To at least some degree it confers meaning upon the universe, and asserts that humans have cosmic significance.

Secularization is not merely a weakening of religion but the disintegration of the conceptual framework that traditionally defined what religion is and how it relates to other institutions of society. Implicitly, “religion” was defined by the Roman Catholic Church as a unified organizational structure dedicated to an enduring set of beliefs and practices oriented toward a single supernatural deity and anchored by an unchanging book of scriptures. Protestantism disputed some of the organizational

details and established competing bureaucracies, but the sectarian struggles it constantly suffered remained largely within the theology that had been defined a thousand years earlier. As the Age of Discovery put the church in direct contact with very different traditions, they were simplistically called “religions,” which may have been logical for Judaism and Islam, but strained the definition for Hinduism and totally distorted it for Buddhism and Confucianism. The emergence of pseudo-scientific psychotherapies actually in the nineteenth century but more visibly in the twentieth corrupted terminology still further, and the dynamic secularization of the twenty-first century of the so-called Christian Era may dissolve it utterly. Yet the breaking of definitional barriers has enabled a reverse flow, as many forms of online communication transform fictional religions into apparently real faiths.

A remarkable illustration of dynamic secularization is the emergence of apparently real religious groups based on the fictional supernaturalism of the *Star Wars* mythos [1, 2]. In the 1977 movie, *Star Wars: A New Hope*, Luke Skywalker becomes the apprentice of a Jedi Master named Obi-Wan Kenobi, who dies but remains able to guide his student in defeating the transcendent technological evil of the Death Star. In the 1980 sequel, *The Empire Strikes Back*, Luke received extensive spiritual training from Yoda, who may at that point be the only surviving priest of the Jedi religion, and the revivalist title of the third movie in 1983 was *Return of the Jedi*. Vicariously, the audience also underwent spiritual training that conferred a new hope for those who had lost faith in traditional religion. Four decades of real-world history have established actual Jedi temples, with real members, at least in the online universe.

This chapter will survey the variety of online Jedi phenomena, finding that some call themselves churches, others are loose associations of individuals who share their personal quests for sacred meaning, and others achieve fellowship and emotional satisfaction while defining their culture as a fictional mythos. At this point in their history, Jedi primarily communicate asynchronously by means of ordinary computers more than mobile devices, but employ a variety of specific technologies, notably videos accessible through YouTube, websites with text-based forums, Facebook groups, and participation in the current *Star Wars* massively multiplayer online game or virtual universe.

Some of the groups also have vigorous real-world manifestations, including somewhat informal meetings of local friends, or larger scheduled gatherings like festivals and role-playing events. A few of the most dedicated members of this complex movement have actually sought to create the master-apprenticeship dyad relationships that are so important in the movies. Given the durability of the *Star Wars* franchise, and the fact that we are now in the midst of the third trilogy of films, there is every reason to believe that Jediism will evolve for some years to come.

5.1 Origins of a Religious Movement

The script of the very first *Star Wars* film explicitly uses the word “religion” three times to refer to the Jedi. Admiral Motti calls it an “ancient religion;” Han Solo calls it a “hokey religion,” and Governor Tarkin tells Darth Vader: “The Jedi are extinct, their fire has gone out of the universe. You, my friend, are all that’s left of their religion.”¹ Yet, this religion does not seem to have a god. It’s fundamental principle, the Force, lacks consciousness, but is an energy field that permits Jedi to perceive, communicate, and even perform actions psychically. In the original 1977 movie, Obi-Wan Kenobi is able to influence the thoughts of enemy storm troopers, and appears to provide guidance to Luke Skywalker even after death. In the 1980 sequel, the magical powers of the Jedi become more visible and thus open to possible disproof, as Luke, Yoda and Darth Vader are able to move physical objects by power of the mind alone. The second trilogy of movies provides an obscure interpretation of the Force that explains it in pseudoscientific rather than religious terms, referring to Force-generating “midi-chlorians” that exist inside living cells and may be more numerous in the cells of Jedi.² Thus one of the challenges for real-world Jedi groups is how seriously they will take the supernatural or pseudoscientific aspects.

This chapter will conclude with an exploration of role-playing inside the massively multiplayer online game, *Star Wars: The Old Republic*, because this virtual universe allows Jedi to possess paranormal powers, at least subjectively. Figure 5.1 shows what a highly advanced Jedi knight looks like, brandishing two light sabers and surrounded by a protective field. Behind him, a robot companion possessing advanced artificial intelligence looks on admiringly, because she lacks biological cells containing midi-chlorians and thus cannot commune with the Force. At some level, for all members of the Jedi movement, this picture represents the ideal they would like to achieve, whatever other goals they also seek and whatever degrees of hope they may possess. We begin by sketching the emergence of Jediism and the mythos from which it sprang.

I hesitate to say I predicted the rise of Jediism, yet its potential for religious innovation was obvious from the very beginning. Twenty years ago, in my textbook *The Sociology of Religious Movements*, I described the religious situation of the galaxy in the period depicted in the first trilogy of *Star Wars* films:

The chief principle of Jedi philosophy was called the Force, an energy field that permeates all existence and binds the galaxy together. It has no personality of its own, although sensitive humans can communicate through it, and thus it is not a god. Indeed, outside the ranks of the Jedi, belief in the existence of the Force was scarce and possessed none of the organization and practices that would allow it to be called a religion. Even before the forces of the Emperor crushed the Jedi, therefore, the galaxy lacked wide-ranging religious denominations, much less an established ecclesia. Two factors seem likely to have created this situation. First, the galactic civilization was an amalgam of many highly diverse societies created by almost as many independently evolved intelligent species, so there may not have

¹ www.imsdb.com/scripts/Star-Wars-A-New-Hope.html, accessed June 30, 2016.

² [en.wikipedia.org/wiki/The_Force_\(Star_Wars\)](https://en.wikipedia.org/wiki/The_Force_(Star_Wars)), accessed June 30, 2016.



Fig. 5.1 The ideal of a virtual religion: becoming a Jedi Knight

existed the common assumptions and institutions that could have been the basis for a universal religion. Second, the progress of science and technology, which had advanced furthest in areas that emphasized power and control, had driven traditional religions out of the thoroughly secularized interstellar society, to survive precariously only in isolated pockets of cultural rebellion in remote regions of backwater planets [3].

Thus, the *Star Wars* universe represents issues that face today's real civilization, as globalization mixes incompatible cultural traditions, and secularization erodes the authority of established institutions. Indeed, it has become an interesting test case for theories of globalization and secularization, because in its origins it is an amalgam of at least two pre-existing cultural traditions that arose on different

sectors of the globe, and because some undetermined number of people have come to treat the *Star Wars* religion as their own, giving meaning to their real-world lives.

In creating *Star Wars*, George Lucas very explicitly imitated the *Flash Gordon* movie serials of 1936–1940, which themselves were derived from the Mars novels by Edgar Rice Burroughs, the first of which was written in 1911, both of which were saturated with imaginary religions. But Lucas was also deeply influenced by the movies of Japanese filmmaker Akira Kurosawa, in connection with them also by westernized impressions of Taoism and Zen Buddhism. Several scholars have explored the similarities and direct connections between the philosophy of *Star Wars* and numerous religious and philosophical traditions of both Europe and Asia [4, 5]. My recent book, *Star Worlds* compared the *Star Wars* and *Star Trek* universes, primarily as expressed in four virtual worlds: *Star Wars Galaxies*, *Star Wars: The Old Republic*, *Star Trek Online*, and the *Star Trek* community in *Second Life*. The chief theme was the tension between freedom and control, in real life as well as in fantasy games, a theme of relevance here, where reality and fantasy converge [6].

The *Star Wars* franchise was so successful, that vast numbers of products were produced over the years, including technological toys that possessed philosophical content. Standing on the table before me, not even half as tall as my computer monitor, is an artificially intelligent Yoda, the Jedi Master who took Luke Skywalker as his apprentice. I press his left hand, and he proclaims, “The Force and its wisdom are all around us.” He then invites me to ask a question answerable by yes or no, and press his hand again. Pressing many times, I discover that he gives two dozen responses, including: “Strong I am with the Force, but not that strong to see the answer.” This intellectual toy has the trademarked name Ask Yoda, was produced in 2002 by the Hasbro company, and is well documented today online.³

My most challenging *Star Wars* artifact is a technology enhanced book, my Sith VAULT. I believe, but cannot prove, that VAULT stands for Virtually Automatic Unlimited Library Technology. Its physical form is a red and black pyramid about ten inches across. Each of the four triangular sides has smaller triangles trimmed in gold, and one of them is solid gold. I press it. A whirring, grinding sound begins, and that face of the pyramid rises. Lights flash and the sound shifts. Out slides a conventional paper volume titled, *Book of Sith*. Its [Amazon.com](#) page explains:

The Sith have existed in the galaxy for centuries, lurking, waiting for their chance to seize control. As various Sith Lords emerged and rose to power, they recorded their thoughts, exploits, and plots for Sith control of the galaxy. When they fell, their knowledge vanished with them forever. Or so it seemed.

Over the years, these writings were passed among numerous Sith and Jedi, who added their comments to the pages. In his quest for domination, Darth Sidious tracked down what remained of five pivotal Sith texts written by his most powerful predecessors. Then, drawing on the knowledge within the compiled pages, he wrote a sixth text – his own manifesto. Together, these documents, along with several collected objects associated with them, shed light on the philosophy, achievements, and failures of the Sith Order. For years, this

³ www.hasbro.com/common/instruct/SW_Electronic_Ask_Yoda.pdf; toyhaven.blogspot.com/2011/04/y-is-for-yoda.html; www.youtube.com/watch?v=u20WRUPzuCw, accessed May 14, 2016.

collection remained hidden, existing as legend only. But now all who are tempted may unlock the Book of Sith and delve into the dark side.⁴

The book appears to be an historic copy, in which several of the key *Star Wars* characters wrote hand-written notes, including many by Luke Skywalker, who apparently owned this copy at some time. There are several odd scraps that somebody in the *Star Wars* universe placed as a bookmark, including an origami of the Imperial icon and a tactical map that belonged to a stormtrooper. The book overflows with history and propaganda, but the most striking text is the Sith Code:

Peace is a lie. There is only passion.
Through passion I gain strength.
Through strength I gain power.
Through power I gain victory.
Through victory my chains are broken.
The Force shall free me [7].

Placing the book back it its VAULT tray and pressing the gold triangle cause it to retract noisily back into the device, which then closes and falls silent. There also exists a VAULT version of *The Jedi Path*, although different in form. While the Sith follow the Dark Side of the Force, without often using this term the Jedi follow the Light Side. The Jedi Code is nearly the opposite of the Sith Code:

There is no emotion, there is peace.
There is no ignorance, there is knowledge.
There is no passion, there is serenity.
There is no chaos, there is harmony.
There is no death, there is the Force [8].

Before we leap to the conclusion that the Sith are evil and the Jedi are good, we should remember that both renounce love. Passion is a distortion of love, but peace is its absence. The Sith seek individual freedom, but the Jedi seem to accept control, for example in authoritarian training that is supposed to begin in early childhood. A minor but long-lasting debate in the psychology of religion concerns whether religious people feel an *external locus of control* because God rules their lives, while a perception of *internal locus of control* typically means self-esteem and better mental health. Proposed in the 1950s by Julian Rotter, internal-external locus of control is one of many supposedly real dimensions of personality variation that can be measured by a simple questionnaire scale [9–12]. Yet it may be as much an obsession in the mind of the particular personally ambitious psychologist, as it is a distillation of a preexisting social construct.

The Wikipedia article on psychology of religion draws on a 1950 book by Gordon Allport to make a “distinction between Mature religion and Immature religion. Mature religious sentiment is how Allport characterized the person whose approach to religion is dynamic, open-minded, and able to maintain links between inconsistencies. In contrast, immature religion is self-serving and generally represents the negative stereotypes that people have about religion. More recently, this distinction

⁴ www.amazon.com/Book-Sith-Secrets-Dark-Vault/dp/1612182615, accessed May 14, 2016.

has been encapsulated in the terms ‘intrinsic religion,’ referring to a genuine, heartfelt devout faith, and ‘extrinsic religion,’ referring to a more utilitarian use of religion as a means to an end, such as church attendance to gain social status.”⁵ In the *Star Wars* saga, Darth Vader was drawn to the Dark Side as much by his love for his murdered mother, as by any instrumental urge to achieve power, while his son Luke Skywalker left training with Yoda prematurely to help his friends, including the totally unreligious Han Solo.

Beginning in 1983, a very large number of *Star Wars* video games have used computing technology to offer the player an experience of actually being within a fantasy universe, but more important for the subsequent emergence of Jedi religious groups were the real-world role-playing games, that apparently were first published in 1987.⁶ While there were many precursors, most prominent was the table-top fantasy game *Dungeons and Dragons*, which dates from 1974 [13]. In such games, the players typically sit around a table, usually with one of them taking the role of gamemaster who selects a story line and characters to play that have a diversity of statistics such as their degree of Force sensitivity. As they take turns, each player’s character will encounter a series of challenges and will roll dice to see if each attempt will succeed or fail. In many such games, players may fight each other following algorithms like those of computer games, but usually without any electronic equipment.

As a 1996 rule book illustrates, the rigid algorithms are embellished by philosophical principles: “Force-sensitive characters feel the pull of both the light and the dark. They must be careful not to do evil or they risk being forever corrupted by the dark side. Force-sensitive characters can’t be as mercenary as Han Solo is at the beginning of *A New Hope*. They must be moral, honest and honorable, like Luke Skywalker and Obi-Wan Kenobi, or the dark side will dominate them.”⁷ A later *Star Wars* rulebook nicely states the fundamental principles of such role-playing games:

It’s a game of your imagination, where you get to tell stories by taking on roles of the main characters – characters you create. It’s a game that offers a multitude of choices to those characters – more choices than even the most sophisticated computer game, because the only limit to what you can do is what you can imagine. The story is like a movie, except all of the action takes place in your imagination. There’s no script to the movie (other than a rough outline used by the Gamemaster); you decide what your character says and does. The Gamemaster is the director and special effects designer, deciding what the story is about and taking on the roles of all the other characters – the villains, the extras, the special guest stars. The Gamemaster also keeps track of the rules, interprets the outcome of actions, and describes what happens. Together, players and Gamemaster create a story, and everybody has a great time [14].

It is literally a short step from a table-top fantasy role-playing game to the acting out of scenes outdoors, wearing costumes for what is called *cosplay*, and with some

⁵ en.wikipedia.org/wiki/Psychology_of_religion, accessed May 14, 2016.

⁶ en.wikipedia.org/wiki/List_of_Star_Wars_video_games, en.wikipedia.org/wiki/Star_Wars_role-playing_games, accessed May 21, 2016.

⁷ *Star Wars Roleplaying Game*, second edition, revised and expanded (New York: West End Games, 1996), p. 29.

degree of personal conviction that the role is real. A definitive history of the transition from game to reality has not been written, and indeed may be difficult to accomplish, because the information currently available online documents long-gone websites posted by people using assumed names. For example, the first serious Jediism website may have been created by Kharis Nightflyer in 1995, while others from that general period used the names GEDI, Tionne, Baal Legato, Mitth'raw'nurida and Streen.⁸ The second trilogy of *Star Wars* movies was launched in 1999, which gave the mythos new energy, but another kind of boost came in 2001, when several nations of the British Commonwealth held censuses.

A frequent challenge for the census bureaus of democratic nations has been how or even whether to count the membership of religious organizations. In the United States, once the Census Bureau was firmly established, it began doing surveys of religious organizations asking them for memberships statistics, and the report based on data collection at four points in time have been especially useful for social scientists: 1906, 1916, 1926 and 1936. After serious debates in the 1950s, the US government has generally relegated collection of such data to private organizations, and the ordinary decennial census has long been prohibited from asking people to report their denominational affiliations. In nations where the government provides any kinds of resources to religious institutions, modern democracy requires fair distribution across denominations, so a census is a reasonable way to allocate shares. In any case, many other nations have asked people to report their religious membership in a decennial census, and I was able to use Australian censuses from the early twentieth century to show a strong correlation between geographic migration and religious non-conformity [15]. The simultaneous censuses of many Commonwealth nations in 2001 included such a question [16].

In the context of secularization, we could accurately say, “All Hell broke loose.” Viral Internet campaigns urged people who objected to the census question on religion to answer “Jedi.” According to the Wikipedia page on the “Jedi census phenomenon,” in 2001 there were 70,509 Jedis in Australia, 21,000 in Canada, 53,000 in New Zealand, 390,127 in England and Wales, and 14,052 in Scotland.⁹ Secularists have complained that this phenomenon artificially reduced the apparent number of people who had abandoned religion. The Australian government urged its citizens to be careful when answering the question about religious affiliation:

The religion question is included in the census as religious organisations are the biggest providers of services, outside of government, in a number of areas such as schooling, health services, aged care services, and community support facilities. The question is not designed to measure the degree of participation in particular religions and philosophies. Rather, as many people access services in accord with their nominal religious affiliation, the statistics are highly useful for planning these services (eg many Catholics who do not actively participate in their religion send their children to Catholic schools). The religion question has been optional in all Australian censuses; this follows from a requirement in the Australian Constitution... If your belief system is “Jedi” then answer as such on the census form. But

⁸jedirealism.org/index.php/history-of-the-jedi-movement/, jedihistory.weebly.com/the-founders.html, accessed May 21, 2016.

⁹en.wikipedia.org/wiki/Jedi_census_phenomenon, accessed June 30, 2016.

if you would normally answer Anglican or Jewish or Buddhist or something else to the question “what is your religion?” and for the census you answer “Jedi” then this may impact on social services provision if enough people do the same.¹⁰

The 2011 census of England and Wales also counted Jedi, but classified them as a sub-category of “no religion.” In a total of 56,075,912 people, 33,243,175 called themselves Christian, while 2,706,066 were Muslim, 816,633 Hindu, 423,158 Sikh, 263,346 Jewish, and 247,743 Buddhist.¹¹ The ambiguous “other religion” category tabulated 240,530, of whom these are interesting for comparison: 56,620 Pagan, 11,766 Wicca, 4189 Druid, 2418 Scientology, 1958 Heathens, 1949 “own belief system,” 1893 Satanism, and only 452 in the Unification Church. Fully 14,097,229 people said they had no religion, striking evidence of the progress of secularization, and of these, 13,836,778 were unwilling to be more specific about their non-religious orientation. Of the others, only 29,267 were prepared to call themselves Atheists, and a further 32,382 were Agnostic. Four smaller labels assigned to “no religion” were 15,067 Humanists, 6242 Heavy Metal, 513 Freethinkers, and 348 Realists.

The number of Jedi Knights was 176,632, and we can only speculate what fraction of them were offended to be placed in the “no religion” category rather than “other religion.” Indeed, these Jedi were numerous enough to deserve ranking among the main religions, perhaps ironically right behind the Buddhists with whom they share some beliefs and practices. As the figures for England and Wales indicate, the Jedi fad has declined but not vanished since its inception, dropping from 390,127 to 176,632. Even if declaring oneself a Jedi on the census is merely a protest vote, the numbers do suggest a recruiting potential for serious Jedi groups, and the very successful launch of the third trilogy of *Star Wars* films in 2015 demonstrates that a cultural basis also exists.

5.2 From Movies to Videos

Since *Star Wars* is a movie franchise, it naturally makes sense to seek Jediism on the popular movie-like service, YouTube, where indeed thousands of related videos have been posted. Only some relate to a serious religion. I viewed 200 videos related to the Jedi movement, finding that few connected to the major groups considered later in this chapter. Therefore, while YouTube provides a good introduction, this overview will be brief.

In November 2013, Fox news television interviewed Kevin Trout, a spokesman for the movement who uses the name Opie Macleod when he plays that religious role. He is thoughtful, articulate and dedicated, but serving more as an individual

¹⁰ www.abs.gov.au/websitedbs/D3110124.NSF/0/86429d11c45d4e73ca256a400006af80?OpenDocument, dated May 2, 2001, accessed May 21, 2016.

¹¹ www.nomisweb.co.uk/census/2011/QS210EW/view/2092957703?rows=cell&cols=rural_urban, accessed May 21, 2016.

prophet for the religion than a representative of a formal organization. Fox identifies him as the administrator of the Jedi Academy Online, and he posted the video though his YouTube channel, Jedi Living.¹² When asked whether Jediism is really a religion, he replied, “Certainly it can classify as a personal religion, something you choose to follow as your religion and what you believe in.” He says the practices include meditation, physical fitness, a focus on diplomacy and general etiquette, plus community service. “As far as religious beliefs, that varies from person to person. If you’re looking for something in relation to a god or a deity, a specific definition of the Force, that does vary from Jedi to Jedi.” He says that the chief source for the Jedi Code was the 1987 role-playing guide. “The Jedi Code is certainly the core of it. The role-playing guide itself is not the bible. That code came out and it did offer that mantra, that philosophical basis to work from. It’s what all Jedi have held onto and used as a starting point.”

As of June 30, 2016, Opie Macleod’s Jedi Living YouTube channel offered 121 videos, including 30 about how to live as a Jedi, 18 “Opie Ramblings,” in which he spontaneously talks about things that are on his mind, and miscellaneous videos including an hour and a half in which he is interviewed.¹³ Notably, there are 9 roughly hour-long classes on Jedi history, conducted as group discussions led by Opie but with as many as five other Jedi participating through a conferencing system that displays their faces along the bottom of the main image of Opie himself or whichever of the others was speaking. The first lesson says that the original online manifestation was the Jedi Academy, launched around 1995 by someone calling himself Instructor Kharis Nightflyer, and it links to pages copied from that early site, on Opie’s extensive Jedi Living website.¹⁴ In addition to offering much detailed history about other Jedi, Opie provides some of the background to the Jedi Circle, which he himself founded in 2004, following this personal conception of Jediism:

The Jedi walk the circle; They live the Five Practices which enforce the Five Tenets, which nurture the Five Traits, which bring the Five Truths, which counteract the Five Misconceptions.

The Five Practices; Meditation, Physical Fitness, Diplomacy, Awareness, and Self-Discipline.

The Five Tenets; Peace, Knowledge, Serenity, Harmony, the Force.

The Five Traits; Reliability, Objectivity, Humility, Patience, Wisdom.

The Five Truths; Commitment, Self-Honesty, Learning, Sacrifice, and Guidance.

The Five Misconceptions; Segregation, Religion, Compassion, Star Wars, Infallible.¹⁵

Each of these 25 concepts is explained briefly, with this for religion: “The Jedi Path is not a religion. There is no form of worship, no doctrine or defined scripture for the creation of the world; or for what happens in death. That is for each person to chose and believe for themselves. The Jedi is a Way of Life, an ideology, a life-style choice.” Despite his substantial contributions to the movement, Opie operates

¹² www.youtube.com/watch?v=YiIZ8P_ep30, www.youtube.com/channel/UC3uwUwQ0fbgkr3xRJt37mQ, accessed June 30, 2016.

¹³ www.youtube.com/channel/UC3uwUwQ0fbgkr3xRJt37mQ, accessed June 30, 2016.

¹⁴ <http://jediliving.com/jediarchive/swja/>, accessed June 30, 2016.

¹⁵ jediliving.com/jedicircle.html, accessed June 30, 2016.

largely outside any well-organized group, which is not the case for several other leaders.

Chapter 3 suggested that secularization may take the form of repaganization, the eruption of informal subcultures that guide personal spiritual questing, without the formation of very large or well-organized church bureaucracies. Below, we shall consider two prominent groups, the website-based Temple of the Jedi Order and the Facebook-based Jedi Church, each of which seems to have many members who are only loosely-connected to the organization, intermittently communicating with a much smaller core of committed leaders, a social structure that seems rather like classical Paganism. A YouTube channel called Pagan Perspective debated whether these two specific groups could be classified as Pagan, given that they represent a nontheistic religious movement partially based in Eastern philosophy. If Paganism is defined broadly as non-Abrahamic, then they qualify as Pagan, but only if they are religious rather than philosophical. “So you would have to ask the Jedi whether they consider themselves Pagan.”¹⁶

When interviewed by *Huffington Post*, the founder of the Temple of the Jedi Order, Br. John, observed, “There is no one group of Jedi, or one Jedi Church. There are many different denominations, with drastically different schools of thought.” Speaking of his own group, he said, “We have elements of Zen, of Taoism, of Christianity, of Spiritual Humanism, of Existentialism.”¹⁷ The numbers of views for genuine Jedi videos tend to be very low, and the main Jedi groups do not seem to use YouTube extensively, as illustrated by the fact that this very prominent Order has posted only a few short videos, lacking any artistic design or special effects, but operates the most complex and technically advanced of the text-based Jedi websites.

5.3 Temple of the Jedi Order

Going to the website of the Temple of the Jedi Order does not immediately allow one to access much of it, because the group sought to achieve a degree of privacy so that members could express personal feelings and share intimate episodes from their lives, which are necessary for the development of strong social bonds. First, one must register as a *guest*, which is simple and does not require any profession of faith. This provides access to much but not all of the vast website-based communications, which exist on what is technically called the *deep web*, which Google cannot index. To further protect privacy, guests and full-fledged members use pseudonyms, many of which are very different from their real names. For example, Kevin Trout registered as a guest on July 4, 2010, using the name Opie Macleod. On July 2, 2016, we can learn he last accessed the site a month before, posted only 137 times on the forums over the previous 6 years, and never took the step of becoming

¹⁶ www.youtube.com/watch?v=x7DSCf-viaM, accessed June 30, 2016.

¹⁷ www.youtube.com/watch?v=k-vJCyL01Uk, accessed June 30, 2016.

a full-fledged member of the Order. On September 19, 2015, he posted a Jedi Living video interview with a pastor of the Order, Alexandre Orion, illustrating how Jedi of different persuasions can interact well together, even when one is in California, and the other, in France.¹⁸

An extensive Frequently Asked Questions page offers much information about the Order's structure, practices, and beliefs, including a link to a page where one can formally become a member.¹⁹ No profession of belief is required, but one must have been a guest for at least a week, be at least 18 years old, and provide correct information such as one's home address. A heading explains, "Applications are confidential. We are a church and non-profit Texas corporation protected by the first amendment of the constitution of the United States of America." One of several open-ended questions asks for information about the applicant's religious background. Another asks how the applicant can help the Order, and also offers these check-box answers: graphics, programming, journalism, teaching, fund raising, research and development, clergy formation and language translation.

Members are encouraged to begin a complex and well-developed educational program about Jedi beliefs and practices, although guests are also permitted to do so. The logical starting point is a long page stating the Doctrine of the Order, that begins by providing the cultural context:

Jediism is a religion based on the observance of the Force, a ubiquitous and metaphysical power that a Jedi (a follower of Jediism) believes to be the underlying, fundamental nature of the universe. Jediism finds its roots in philosophies similar to those presented in an epic space opera called "Star Wars". It is a religion in and of itself.

The Jedi religion is an inspiration and a way of life for many people throughout the world who take on the mantle of Jedi. Jedi apply the principles, ideals, philosophies and teachings of Jediism in a practical manner within their lives. Real Jedi do not worship George Lucas or Star Wars or anything of the sort. Jediism is not based in fiction, but we accept myth as a sometimes more practical mean of conveying philosophies applicable to real life.²⁰

A course called the Initiate Programme consists of 8 topic areas: (1) Myth, (2) The Self, (3) Meditation, (4) Connections, (5) Temple Doctrine, (6) World Religions (7) Personal Tools, and (8) Jediism Essays. The meditation topic consists of recorded lectures by two famous popularizers of Asian traditions, rather than being newly created Jedi materials. The first is a 90-minute audio of Alan Watts (1915–1973), who popularized Zen Buddhism in his 1957 book, *The Way of Zen*. The Jedi seem very much like Zen masters, at least as they had been presented to Americans like George Lucas through popular literature [17–19]. The second is a YouTube posting of an old black and white video of Jiddu Krishnamurti (1895–1986) lecturing at similar length, a native of India who had become prominent in the Theosophy

¹⁸ www.youtube.com/watch?v=TJdHlub61Dg, accessed July 3, 2016.

¹⁹ www.templeofthejediorder.org/faq, www.templeofthejediorder.org/jediapplication, accessed July 2, 2016.

²⁰ www.templeofthejediorder.org/doctrine-of-the-order, accessed July 2, 2016.

movement.²¹ The world religion topic requires the student to write an essay independently about these five traditions: Abrahamism, Atheism, Buddhism, Hinduism and Paganism.

The first of the lessons consists of a series of interviews about “The Power of Myth” by television journalist Bill Moyers with Joseph Campbell (1904–1987) conducted at Skywalker Ranch, belonging to George Lucas. While he was in the process of developing the original Star Wars script, Lucas consulted many pseudo-religious semi-scholarly works, including those in which Carlos Castaneda (1925–1998) reports his enlightenment training from a shaman who resembles a Jedi master, books that claimed to be factual anthropological studies but probably were fiction [20]. Then he read *The Hero With a Thousand Faces* by Campbell, saw a great affinity between Campbell’s perspective and the *Star Wars* saga, and adjusted the writing accordingly [21]. While Campbell’s work might seem to the general public to be anthropology, analyzing common factors across the myths of the world’s cultures, it follows literary rather than scientific norms, and can justly be defined as spiritual or even religious, seeking to reveal the unseen truth about the journey of the human soul through the challenges of life. Especially relevant for the Order, Campbell asserted that all great myths told the same story, as if giving the hero a thousand superficially different faces. That justified drawing upon several different religious traditions in creating a religious denomination based upon the *Star Wars* mythos [22].

Such complexities were set aside, when the Temple of the Jedi Order sought official status as a religious organization. The website dates from 2007, but formal registration was filed with the state of Texas on December 14, 2005.²² A decade later, Texas listed 9 representatives of the Order, giving their real names and addresses, as listed in Table 5.1. As in the case of Br. John, online news reports gave the name equivalences for Benjamin-Alexandre Miller and Michael James Kitchen, while others were discovered or deduced from extensive searches of the website forums.²³ *Councilors* are the seven current members of the Jedi Council; the *patriarch* and *matriarch* designations are honorifics, and terms like *bishop*, *priest* and *pastor* identify particular roles in the ministry.²⁴ As in the movies, high-level involvement requires becoming an apprentice to a well-trained Jedi. Contacts are the equivalent of Facebook friend connections, tabulated June 28, 2016.

The Order’s website offered the texts of 362 sermons, 92 of which had been posted by Ren Sydrick, who holds mere member rank, but was responsible for many of the pages of general information of the site, had 48 contacts and 3553 forum posts, using the uncapitalized name “ren.” While some of the sermons he posted

²¹ www.youtube.com/watch?v=ku6EWkHcyoE, accessed July 2, 2016.

²² mycpa.cpa.state.tx.us/coa/servlet/cpa.app.coa.CoaGetTp?Pg = tpid&Search_Nm = Temple%20Of%20The%20Jedi%20Order%20&Button = search&Search_ID = 32,018,723,158, accessed July 2, 2016.

²³ www.bienpublic.com/edition-dijon-ville/2015/08/20/un-maitre-jedi-a-dijon, www.bigissue.com/features/6072/how-do-jedi-celebrate-christma, accessed July 2, 2016.

²⁴ www.templeofthejediorder.org/council, accessed July 2, 2016.

Table 5.1 Official Leadership of the Temple of the Jedi Order

Real name	Corporate title	Location	Pseudonym	Roles	Contacts	Forum posts	Sermons
John Henry Phelan	President & Director	Beaumont, Texas	Br. John	Councilor, Bishop, Patriarch	86	2498	2
Benjamin-Alexandre Miller	Vice President & Director	Dijon, France	Alexandre Orion	Councilor, Bishop, Pastor	145	2831	33
Clint E. West	Vice President & Director	Arlington, Texas	Wescl Wardest	Councilor	114	3144	2
Michael James Kitchen	Vice President & Director	Canterbury, England	Akkarin	Councilor, Priest, Associate Pastor	129	3806	17
Robert W. Cannon	Vice President & Director	Jeffersonville, Indiana	Damion_Storm	Master, Bishop	17	206	4
James Jester Foster	Vice President & Director	Springfield, Illinois	Jestor	Councilor, Bishop	188	6555	9
Patricia Donaghy-Bolcerek	Director	San Tan Valley, Arizona	Neaj Pa Bol	Councilor, Bishop, Matriarch	36	324	9
Sandra Piehler	Director	Zwickau, Germany	Adhara	Councilor	61	417	0
George Ethan Mars	System Administrator	Dalzell, South Carolina	Proteus	Knight	59	1846	2

Table 5.2 Active participants in the Temple of the Jedi Order

Rank	Status	Number	Mean contacts	Mean groups
Councilor	Masters who govern the order	7	108.4	1.6
Master	Successfully taught three apprentices	3	12.0	0.7
Senior Knight	Completed advanced degree	4	80.5	1.8
Knight	Apprenticeship completion approved by council	19	60.5	2.4
Apprentice	Accepted by a teacher knight for training	51	26.2	1.7
Initiate	Completed initiate program	12	16.3	1.8
Novice	Student of initiation program	267	6.6	1.4
Member	Application form accepted	334	2.9	1.3
Guest	Registered on site	496	0.9	1.2
TOTAL	All ranks	1193	5.8	1.3

were written by specific other leaders, he does appear to play an important role in the Order, and like Proteus is a system administrator. Five other people had written at least 10 sermons. One using the pseudonym V-Tog (Victoria Fortin) held the ranks of senior knight and priest, having 77 contacts and 2751 forum posts. The others were identified as knights and deacons: Cabur Senaar (D. Alex Bird with 75 contacts, 1580 posts), Rosalyn J (Rosalyn Johnson with 76 contacts, 599 posts), tzb (Stuart Johnson 131 contacts, 2174 posts), and Phortis Nespin (anonymous with 50 contacts, 1296 posts). Four members of lower rank are licensed ministers, thus legally capable of presiding over weddings, two knights, an apprentice, and an initiate.

Table 5.2 reports a census of 1193 members, including those already named and adding everyone who had joined one or more of 20 open special interest groups within the Order. I had explored an alternate way of doing a census, by identifying everyone who had started a forum thread in the journals section where anyone of guest rank or above can begin to express themselves about Jediism and receive somewhat informal counseling about personal problems. That proved to be a massive challenge, given that there were 3483 journals with about 21,500 posts, and many of the posters became inactive long ago. The first open group was created May 1, 2013, thus excluding anyone who had not been active recently, but the work still required considerable effort, including going to each member's profile on the website to identify the rank and number of contacts.

Considering all 84 of apprentice rank or above to be central members, on June 27, 2016, I checked the profile of each to see how recently they had been logged into the site, finding that fully 45 were online within the past day and another 14 within the month. A few may have simply not logged out recently, and had been doing other business online, but checking several indicated that they had indeed posted in the forums when most recently logged in. These active members posted hundreds, even thousands of times since joining. Two of the three listed as Masters in Table 5.1 had not logged in during the previous 6 months, and seemed to be former leaders

who had become inactive. Of this core group of 84, 59 were male, 13 female, and the remaining 12 did not state their genders. While I do not have reliable numbers, it appears that many guests never return to the site after a short period of visiting, and those of member rank are rather diverse in their degree of involvement, some apparently avoiding the training required to attain higher ranks, but participating actively in the culture and informal communications of the Order.

The definitions of the 20 public groups suggest the range of informal activities. The largest, with 218 members on July 2, 2016, is Military Jedi, “A group for Jedi who are or were involved in any branch of any military force in the world.” The Jedi, after all, could be described as an elite defense force, just as well as a religion, and the samurai-like spiritual ideology may harmonize with the personality and style of truth-seeking that some military personnel may possess. In addition, recent veterans and current warriors may appreciate an online fellowship that does not require them to live at any particular location.

Four other topical groups concern activities: Jedi Poets (119 members), Minstrel Jedi (116), and the Jedi Craft Guild (55) create artistic expressions of the culture, while Off The Grid (104 members) shares ideas about daily living and Jedi activities that are not online. The remaining 15 groups facilitate communication and shared activities on a local basis, whether geographically defined or in terms of language: UK Jedi (212 members), Texas Local Group (94), Pacific Northwest Jedi (90), Jedi Hispano (81), Jediistes de France (79), Australian NZ Jedi (75), Canadian Jedi (71), Illinois Jedi (53), Deutschsprachige Jedi (38), TotJO: New York (37), Colorado Jedi (35), Arizona Jedi (29), Alabama Jedi (20), Minnesota Jedi (18), Nederlandse Jedi (14). Like many other *Star Wars* groups, the Temple of the Jedi Order is quite happy to serve as a communication hub for many people who share a passion for the mythos, without necessarily seeking to join an orthodox religious group. Brief mention of a comparably significant but more secular group can clarify the context.

The Institute for Jedi Realist Studies has a website of equal quality with that of the Order, greeting visitors with these words: “Has the Force awakened in you? It is a time of great change in the world where the darkness draws the most attention. Through it all the Light grows brighter, in part through a group of people following the call of the Force. The Force is awakening in many. Has it awakened in you? Join us in training at the Institute for Jedi Realist Studies and bring more light to the Universe.”²⁵ They explicitly say that the “Jedi path” is not a religion but “an active life philosophy.”²⁶ Their website has an extensive library, with 19 essays about different traditions of meditation and 44 about the Force. Their forum is rather smaller than that of the Order, but substantial in objective terms, with 4804 subjects and a total of 53,112 posts. The Training Journals section of the forum is public, despite the fact that they can be very personal discussions of each Jedi’s real life and spiritual quest, substantial but smaller than that of the Order, with 104 journals and 9440 posts. The journal of the Institute’s principal, Jax, has been viewed 48,200 times.

²⁵ <http://instituteforjedirealiststudies.org/>, accessed July 2, 2016.

²⁶ instituteforjedirealiststudies.org/visitorscenter/main-faq, accessed July 2, 2016.

The institute offers 15 courses online, and passing them can gain rank: novice, adept, Jedi knight savant, Jedi knight, and Jedi specialist.²⁷ However, the emphasis is personal development rather than status attainment: “Currently, most people interact online because there are not Jedi in their local area that they are aware of. However, the Jedi path is one that is lived and practiced offline, so standards are set to have meaning offline as well as online. While our standards are high, all students are given the tools to reach those standards. Whether or not you have the goal of attaining rank within the Institute, you will find Jedi training of value in your day to day life.”²⁸ While cautious about accepting the rank someone earns in a competing Jedi group, the Institute can do so, as it conceptualizes itself not as a separate order, but as a research and education institute that can benefit Jediism more generally.

5.4 The Jedi Church

Extensive search indicates that the largest Jedi religious group in Facebook is “Jedi Church (The Original)” with 9862 members as of July 2, 2016. It is important to realize there is no cost to join a public group in Facebook, so the intensity of involvement tends to be very low. However, that may represent well the future of secularization: A person’s spiritual life will tend to be multidimensional, fluid, and difficult to define. However, as on the websites of the Temple of the Jedi Order and the Institute for Jedi Realist Studies, it is possible to chart the orientation of many individual participants, at least approximately.

The Jedi Church was founded by Reuben Jackson, who has run a website construction company in New Zealand since the year 2000.²⁹ His own Facebook page gives the link to his company’s website, but offers no personal information in its “About” section, although his picture implies he is the father of a young child. While many people allow visitors to their Facebook pages to see their lists of friends and groups, he does not. The photos on his page include a Jedi Church poster proclaiming May 4th to be Star Wars Day: “May the Fourth be With You,” and a census form presumably from New Zealand showing “other religion” checked and the word “JEDI” written in. As of June 2016, the most recent post on his personal timeline dates from October 13, 2015. His most recent post on the page of his church is dated May 3, 2016, from Ponsonby, New Zealand, and wishing members a good Star Wars Day.

The church’s website uses the Facebook group as its forum, so it is much smaller than those of the two groups we examined above, and it also is much more universalist than the Order in that it does not connect Jediism to Asian traditions, does not

²⁷instituteforjedirealiststudies.org/training/current-courses, instituteforjedirealiststudies.org/training/training-start, accessed July 2, 2016.

²⁸instituteforjedirealiststudies.org/training/training-formats?view=category&id=90, accessed July 2, 2016.

²⁹www.reubenjackson.com, www.websitebuilder.nz, accessed June 18, 2016.

employ master-apprentice relationships, and leaves members free to craft their own version of the religion. The home page expresses its “faith” succinctly: “The Jedi Church believes that there is one all powerful force that binds all things in the universe together. The Jedi religion is something innate inside everyone of us, the Jedi Church believes that our sense of morality is innate. So quiet your mind and listen to the force within you!”³⁰ Note the double use of the word “innate,” and the implication that evangelism is superfluous. This offers a very general concept of post-secular religion, that minimizes the significance of formal organizations and rejects establishment of any orthodoxy.

A page titled Jedi Doctrine leaves questions about the afterlife and the existence of a conscious God to the individual Jedi. Its one absolute principle is the existence of the Force: “This is a concept that most religions of the world concur with. Some refer to it as their deity, some refer to it as a life force, but the one thing nearly all religions agree with, is that there exists a single unifying force.”³¹ The doctrine page notes that not all religions assume that the Force is a self-conscious person deserving to be called God, citing Buddhism and Scientology as examples, and then contrasting itself with Scientology while asserting that like Scientology the Jedi Church has the right to be legally recognized as a religion. A section asks whether Jedi religion is fiction and offers an answer that can be interpreted different ways:

Most non fiction is a discussion of science and life, of things that can be observed, quantified and readily challenged for its truth and authenticity. But not religion. Any religion put to scrutiny is merely words on paper, with no ability to confirm its authenticity. The Jedi church makes no denial that its name and terminology originates from a fictitious past, but the concepts and ideals that are identified by Jedi followers are known for their innate truth. The sun existed before it was given a name, and it could be revered as a God, however, when the sun finally had a human name, it could be written about and communicated with others. The Jedi religion is just like the Sun, it existed before a popular movie gave it a name, and now that it has a name, people all over the world can share their experiences of the Jedi religion, here in the Jedi Church.

So, religion has affinity to fiction, and is not non-fiction, yet it may express aspects of reality that humans have always known but had difficulty articulating. That shifts the question from whether the organization is a religion to whether the members are religious. The church states very clearly that it gained significant impetus from the protest movement that inspired thousands of New Zealanders to give their religion as Jedi when answering the census. It also argues that New Zealand must recognize the church as a religion, and it reports progress getting Jedi Church leaders the right to officiate at weddings. A page titled Jedi Ministries offers links to nine groups or individuals, listed here with descriptions from their own websites or that by the Jedi Church:

NZ Jedi or Jedi Society (Auckland, New Zealand): “We are based in New Zealand, but are global, galactic and inter-galactic in outlook. The Society was created to provide Jedi

³⁰jedichurch.org, accessed June 19, 2016.

³¹jedichurch.org/jedi-doctrine.html, accessed June 19, 2016.

training, establish the Jedi community and assist with being at one with the Force. The Society welcomes new members who want to follow the path of the Jedi.”

Argenteum Astrum (Burbank, Washington USA): “Facilitate, encourage, and promote the Jedi Order as a spiritual path through life. Our way is primarily based upon Buddhism and Hermetic Traditions & Principles. As the belief in Jesus defines Christians; How, we see the Force defines us as Jedi.”

Arkinnea Jedi Order (Cedar Hill, Missouri USA): “The Arkinnea Jedi Order is for the study of Jediism. We are not a role playing group, or affiliated with Star Wars, Lucasfilms, or Disney. We are Old World spiritual beliefs with New World adaptations. We believe everyone has the right to interpret the Force however it is laid upon their hearts. Everyone also has the right to give the Force whatever name they wish.”

Ordem Jedi do Brasil (Brazil): “May the Force be with us all, and that peace of this temple is ours, an open place to think and speak, a sphere of mutual respect, and refuge of shared noble purpose. That we take these seats together, with no one above the other. We work together, free from the constraints of ego and jealousy at this meeting and the others come.”

Br1mmStone (Columbus, Ohio USA): “I teach. Before one can teach, one must learn. The Order is about Knowledge, Wisdom, Discipline, and justice. These are the things one studies and understands if trained by me.”

Gadian Society (Greystanes, Australia): “...practices the fourth religion, called the Art of Man, the first three being orthodox, occult, astrological, which are very well known. The Gadians, spelt Gaadians is from an ancient text referred to in the white temple, where the G symbolised, I, or life force, the Da, or Ta, or Iu, referred to the uses or nearness of the person to it, and the I, An, mean the first spiritual masters of heaven, not as religious heaven, but of the life force of heaven.”

Jedi Path (Modesto, California USA): “The current goal of the Jedi Path is to provide a resource for those that wish to apply Jedi Philosophy to their day to day lives through study and training. We do not have a comprehensive curriculum and acknowledge that there are many paths to knighthood and mastery. It is our mission to provide some ‘paving stones’ upon the path to help you on your journey, but it is you that must do the walking.”

Simon Dunn (London, UK): “Peace to all JEDI, let the Force flow free and true. I wish all JEDI to work towards making the JEDI a recognised religion in all worlds and regions on Earth, those who agree please lobby the government of your world/ region.”

Trust In The Force (unknown): “Members of ‘The Force’ love life and are active in many different ways. They are serious contributors to the wider spiritual and social agenda. To the best of their ability they network, collaborate and influence and enjoy a gracious, modest, sustainable community that promotes a culture of Love and Peace.”

The text representing Ordem Jedi do Brasil was rendered from the Portuguese by Google Translate, and is a version of the oath spoken by the members of the Jedi High Council, originally published in a *Star Wars* comic book, yet expressing serious sentiments.³² Br1mmStone, Simon Dunn, and Trust In The Force are individuals who seek to lead the Jedi movement in different directions. The last of these uses the name Angelsforce and merges Jediism with a rather traditional form of apparently Protestant Christianity. The Gadian Society appears to be the ministry of a man named Thomas Jordan, who became dedicated to assembling a new spiritual culture from multiple sources, after having a near death experience, but is not closely connected to Jediism. We can reasonably assume that the website of the Jedi Church expresses the views of its creator, Reuben Jackson, and these links appear to be

³² starwars.wikia.com/wiki/The_Gathering_(Jedi_High_Council), accessed June 19, 2016.

connections he made early in the history of his efforts, rather than being either very recent or contributions from the wider membership. For that, we must consult the Facebook group.

As of mid-afternoon, June 19, 2016, the first item in the discussion was posted by Ally Thompson, a mother who lives in Greenville, South Carolina, who has a major role maintaining the Facebook page. Posted May 12, it was the guidelines for participation: “This group is for Jedi Church, Jedi and related topic discussion, and are to be engaged in a pleasant and fun manner. This group is run by Jedi Church for the promotion of our religion and communicating to our Community members. These forums are not for discussing topics such as politics, sex, adult topics, and the like.” The group is public, which in Facebook terms means anyone may join without a vetting process, and none of the information is private.

Immediately below Thompson’s post is one that arrived much more recently, on June 19, just minutes before I checked the site, from Trevus Morris Nethemia, of North Bay, Ontario, Canada. He represents a division of Jediism called the Grey Jedi, who seek to navigate between the Light and Dark sides of the Force. He shared a poster from the Facebook page of the Philosophy Of The Grey Jedi, quoting a source explicitly called Unknown: “Peace. It does not mean to be in a place where there is no noise, trouble or hard work. It means to be in the mindset of those things and still be calm, in your heart.” Peace was an issue high on everyone’s agenda, because the mass media were dominated by emotional reports about the June 12 murders of 49 people in the Pulse gay nightclub in Orlando, Florida, which seemed to have religious motives, and the June 16 murder of Jo Cox, a member of the British parliament, which appeared to have political motives.

Eight hours earlier, Jason Parkman had posted some text: “People die everyday. Murder, rape, racism, oppression and by nature. We are smashed with media hatred. Every life is the same. To us to those to families there is no distinction. There is no hate in any path.”

Talon Trevor MacDonald in Midland, Michigan, had later posted a comment on Parkman’s post: “Our respect and love for every life should be the same, However, Of themselves, Every life is not the same. Some choose to be better, or worse, and some, through the choice of someone else, are better or worse. And there is plenty of hate. And plenty of paths with hate. Just make sure it is not in YOU”.

As I was copying the above text, a new message was posted on the page by Cory Jakubowski in Cape Coral, Florida, nicely unifying the themes of Jediism, with a connection to Father’s Day, then being celebrated. I immediately asked him if I could quote the entire paragraph for this book, he immediately agreed, and here it is:

Jedi and Sith, old and young, close to your heart or miles apart, good, bad, or indifferent, father or son, living, passed, or soon to life, everyone has a story to tell, and a lesson to teach. Some show you how you can be, some, how you shouldn’t be. Some change your whole perspective, some solidify your beliefs. Some lessons are easy and pleasant, some are long, arduous, and painful. All that matters is that we keep our minds open to all the lessons, and that we be aware of what lessons we might be giving to others. We are all one in the

Force, one in Life. We live, learn, and love together. Happy Fathers day to all of the dads training their young padawans, and congratulations.³³

If Jediism were to become a major world religion, then all its online information would be like the rough drafts of bible verses, and even now an entire worthwhile book could consist of all the postings on this Facebook page. Yet rather than quote more of them here, we should use the page as a vantage point from which to view the wider Jedi community. The most efficient way to do that is through links created when a member of this Facebook group belongs to another. A total of ten people are administrators of the page, including both Reuben Jackson and Ally Thompson who on their personal pages have kept private their membership in groups. I checked the personal pages of the other members, recording which other *Star Wars* groups they belonged to, finding a total of 22. Then I did the same for the administrators of those groups, adding another 76.

Two of the 99 groups had more members than did the Jedi Church, but both were *Star Wars* fan clubs rather than religions, the Custom Lightsaber Owners with 16,948 members, and Star Wars HQ with 16,842 members having a diffuse focus. For purposes of this chapter, 17 of the other groups seemed worthy of being described as religions or para-religions:

Church of Jediism (2351 members): “Here at the International Church of Jediism we connect Jediism people of all walks of life from all genre and back grounds to the one goal of uniting the understanding and fulfilment of life in its greatest form.”

Temple of the Jedi Force (653 members): “Jediism is a modern religion which was born as a result of the Star Wars mythology. George Lucas, when he created the Star Wars saga, used various aspects of Taoism, Shintoism, Buddhism, Christianity, Mysticism, and many other Religions’ universal truths as well as a combination of different martial arts, and the Code of Chivalry, in order to create the Jedi and the philosophies behind the Force...”

Order of the Grey Jedi (295 members): “Grey Jedi, although having completed the teachings of either the Jedi Order or the sith, are Jedi/Sith that had either been exiled or had disassociated themselves from the path of either side. Consequently, they operate independently outside of both. Their former allies typically see them as misguided, though they have not necessarily succumbed to the either side of the Force. They are the mavericks of the universe, and often stray closer to the dark side than most.”

JEDI vallás (266 members): HUNGARIAN: “Become a JEDI! !! How?! Surely you have already learned of the 2011 census. The next task. The census questionnaire confirm that the Jedi religion you belong! It’s that simple! Dear brother has no other choice than to spread the word! May the force be with you! (Do it yourself! !!)”

The United Jedi Assembly (262 members): “The United Jedi Assembly is intended to be a Jedi Think Tank where we will discuss real world issues pertaining to Jedi and non-Jedi alike. This is the first effort in an attempt to unify the Jedi under the Jedi name. Every Jedi Organization is encouraged to join this group...”

Force Church (259 members): “The Force Church is a multi-denominational church that focuses on teaching and preparing force users to use the balance in the force.”

Jedi Federation (247 members): “The Jedi Federation is the gathering of offline chapters and affiliates to form a stronger organization. Inspired by the fictional Jedi in Star Wars, we choose to practice the Jedi Path as a way of life. We create a sense of community as we share our knowledge and resources with one another...”

³³www.facebook.com/groups/28586881121/, accessed June 19, 2016.

Thoughts Of A Jedi Guardian (234 members): "As one of the true active Jedi in the UK I set this group up to share thoughts with each other. Thoughts which can help us all in life to manage the lives we live. It is in no way religious group but a group to inspire us to better ourselves. May the Force (how ever you see it) be with you."

Gateway of the Jedi (199 members): "Open Jedi Community Communication. To share Projects, Knightings, and Community Happenings with all Jedi."

Jedi Gatherings (193 members): "This group is the Central (Main) Hub to conduct Jedi Gatherings, Meet Up's and Offline Events. We are directly a part of Gathered Force Community and Coordinate all materials between these branches..."

Jediismus SR-ČR Všeobecne (183 members): CZECH: "Jediism is faith / philosophy based on the teachings of the Jedi, described in literature, movies and sci-fi saga Star Wars. Jedi believe in the "strength", a mystical energy, which people can use. Originally a fictional religion in which authors mingled elements of Christianity, Buddhism and other religious or philosophical directions with sci-fi props, turned into a real movement to which the population census conducted in English speaking countries signed around 2000, approximately 500,000 people."

Jediism is a religion. (90 members): "It is now obvious many people are trying to bring jediism as a serious religion. We are not trying to bring starwars to life, but we got inspired by how the Jediism religion and philosophy was put into starwars..."

The Jedi Order of Light (86 members): "This is the National group for the Jedi Order of Light. We welcome all who are now or wish to become Jedi. Our Order is very new but it is a good Order with good people."

The Temple of The Jedi Lotus. (80 members): "'The Path to Enlightenment is a path chosen, not forced upon' -Sen-Tir Gar, Jedi. After the release of Star Wars, people fell in love with the philosophy and it resonated in the hearts of many and this gave birth to Jediism. Little did anyone know that the Jedi way could be lived simply by following any of the Eastern philosophies. It is here to stay so, in a way, Jediism is a modern schism of Eastern philosophy and all these aspects are shared worldwide."

UK Jedi Church (39 members): "The UK Jedi Church – A place where you can find out more about Jediism in the UK. Discussions about the best advancements in the Jedi Religion here in the United Kingdom."

The Temple of Anakin (27 members): "I, Luke Skywalker... do swear on my honor, and on the faith of the brotherhood of knights, to use the Force only for good, turning always from the Dark Side; dealing in all matters with justice and compassion, to dedicate my life to the cause. If I should fail of this vow, my life shall be forfeit, here and hereafter."

Heartland Jedi (25 members): "The Heartland Jedi Order is not a costuming, role playing or LARPing group. Our focus is on Jedi Realism. What does that mean? A Jedi Realist is one who has taken the philosophical ideal of the Jedi Knight, exemplified in the Star Wars fiction and endeavors to apply it to their real world life. This does not mean we try to recreate the fiction, only the philosophy shown to us in it."

The Hungarian and Czech texts were rendered into English by Google Translate, and this chapter offers much evidence that Jediism is remarkably international. The last of these groups was founded by Ally (Alethea) Thompson, an active member of both The Temple of the Jedi Order and the Jedi Church. The website of the Institute for Jedi Realist Studies published a fascinating essay she wrote, arguing that the Jedi Code governing real-world morality was much more important than the magical Force. In her conclusion, she dismisses the contemporary significance of divine beings:

They are so far removed from the world, that they may or may not truly know what is actually good for us (let alone the argument that it could just be purely a figment of our

imaginings created by old societies that don't even understand the problems we undergo in this day and age) Kind of like another person's parent disciplining your own over something you don't see as all that important just seems like a bad idea to you. The Code, however, was written to take into account a specific purpose: building morals and values in an individual to bring the world to greater harmony through the use of Human Action, rather than Divine Action. To us, it the sentience factor which makes our decisions so much more valuable to the human journey. Why else would some of the most valued philosophers and theologies preach free will? Or more importantly, why else would we as human beings value free will if we wanted everything to be left up to a divine being "taking the wheel"?³⁴

Her perspective is a theory of secularization that not only harmonizes with Jedi Realism but also can be found in very popular massively online role-playing games, notably *EverQuest* and *Rift*, which present worlds that have been abandoned by the gods who created them. In an article provocatively titled "Burglarizing Nietzsche's Tomb," I observed: "Nietzsche said God is dead. God said Nietzsche is dead. Both were correct" [23]. This form of secularization is often called Existentialism, but other words might apply equally well: alienation, estrangement, adulthood. Yet the *Star Wars* mythos also implies *inheritance*, suggesting not only that we now have full responsibility for our own fates, but also that we may have inherited magical powers from the dead and even forgotten gods. The magic of computer technology allows thousands of non-religious Jedi to possess supernatural powers.

5.5 The Virtual Force

The Jedi depicted at the beginning of this chapter, in Fig. 5.1, is not some anonymous character from a video game, but the reincarnation of Edgar Rice Burroughs, the author whose work inspired not only *Flash Gordon* and thus *Star Wars*, but also *Dungeons and Dragons* and thus role-playing games through a game named *jetan* he invented and around which he wrote *The Chessmen of Mars* [24]. Figure 5.2 shows him riding his pod racer past the sarlaac monster on the planet Tatooine, in *Star Wars: The Old Republic*. In religious terms, it represents Purgatory: "In his belly, you will find a new definition of pain and suffering as you are slowly digested over a thousand years."³⁵ George Lucas based Tatooine largely upon Barsoom, the fictionalized version of Mars created by Burroughs. Also inspiring Lucas, and inspired by Burroughs, were the *Dune* novels by Frank Herbert, published from 1965, which feature a religious movement described thus on its Wikipedia page: "The Bene Gesserit are a key social, religious, and political force in Frank Herbert's fictional *Dune* universe. The group is described as an exclusive sisterhood whose members train their bodies and minds through years of physical and mental

³⁴ Alethea Thompson, "Loyalty to the Code, not the Force," instituteforjedirealiststudies.org/forum/7-living-the-jedi-way/30872-loyalty-to-the-code-not-the-force, accessed July 4, 2016.

³⁵ starwars.wikia.com/wiki/Sarlacc, accessed December 5, 2015.



Fig. 5.2: A deceased science fiction author at the Sarlaac on the Planet Tatooine

conditioning to obtain superhuman powers and abilities that can seem magical to outsiders.”³⁶

Burroughs invented many fictional religious movements, but always portrayed them as sinister conspiracies that exploited their believers. *The Gods of Mars* claims to be an account of real events that took place, and Burroughs was merely publishing the diary of his great uncle, John Carter, who had the mysterious ability to resurrect on Mars whenever he died on Earth, and on Earth whenever he died on Mars. It highlights the Holy Therns, who manipulate the dominant religion on Mars, to profit from false promises about the afterlife they offer to rich Martians. Near the beginning of *The Master Mind of Mars*, published in 1928, the aged witch named Xaxa who rules the city of Phundahl has her brain transplanted into the body of a beautiful young woman named Valla Dia, and the hero’s challenge is to undertake the tremendously difficult quest to reverse this criminal theft and restore Valla Dia to her young body. The secular scientist who performed both operations loathed Xaxa, who used religion to reinforce her political power, saying that the people of Phundahl “are egregious sentimentalists, filled with crass stupidities and superstitions, slaves to every variety of brain withering conceit. Why the very fact that they keep the old termagant, Xaxa, on the throne brands them with their stupid idiocy. She is an ignorant, arrogant, selfish, stupid, cruel virago, yet the Phundahlians would fight and die for her.”³⁷

³⁶en.wikipedia.org/wiki/Bene_Gesserit, accessed February 21, 2016.

³⁷Edgar Rice Burroughs, *The Master Mind of Mars*, Project Gutenberg AUstralia, gutenberg.net.au/ebooks01/0100201h.html, cf. Woodrow Edgar Nichols, Jr., “Toonol and Phundahl,” *ERBzine*, www.erbzine.com/mag33/3310.html, accessed November 13, 2016.

It would not be much of a simplification to say that the Sith Lords in *Star Wars*, of whom Darth Vader is best known, are descendants of the Holy Therns and other priests of exotic religions depicted in the novels by Burroughs. Nor would it be far from the truth to say that Burroughs personally rejected religion altogether, as was true for many classic science fiction writers, but saw dramatic potential in depicting exotic religions, given that his largely Christian audience would not be offended when he insulted “Paganism.” Among his most impressive characters was the beautiful but possibly wicked La, priestess of the Flaming God who dominates the lost city of Opar in several of his Tarzan novels.³⁸ Early in her many emotionally intense interactions with Tarzan, she says candidly, “The more one knows of one’s religion the less one believes” [25]. This apparently expresses the author’s view of the religion that dominated American culture a century ago when he wrote these words. In an online encyclopedia, David Bozarth has summarized the critique of faith in the Mars novels: “In every case a religion or belief is mentioned, used, or was part of the story line, Burroughs invariably exposed it for a hoax on Martian society.”³⁹ This is a widespread but seldom uttered motivation for secularization in the real world, the suspicion that all religions are self-serving frauds.

Yet people seek hope and compensation for the pains and horrors of life. Participation in a somewhat real Jedi religion may provide a sense of honor, and training to become a Jedi knight is a quest for honor. One may become one in *Star Wars: The Old Republic*, defending a faction of players called the Republic, but just as easily one may become a Sith warrior, supporting the Empire:

Through years of disciplined training and meditation, the Jedi Knight hones body and mind into perfect harmony. Combining the foresight of the Force with unrivaled reflexes and practiced physical precision, the Knight turns combat into an art form, gracefully executing acrobatic feats in tandem with elegant lightsaber tactics.⁴⁰

An unstoppable force of darkness, the Sith Warrior is entrusted with the task of destroying the Empire’s enemies and enforcing Sith domination across the galaxy. The Warrior channels the destructive emotions of fear, anger, and hatred to purge weakness from body and mind and become a being of pure, brutal efficiency.⁴¹

During their advancement through complex stories and ascending a high ladder of status ranks, Jedi knights select one of two skill specializations, guardian or sentinel, and Sith warriors have two that are almost identical in their powers, juggernaut or marauder. Each side has a second supernatural class, using the Force in different ways, the Jedi consular (sage or shadow) and the Sith inquisitor (sorcerer or assassin). Each side also has non-magical military personnel, Republican trooper (commando or vanguard) and Imperial bounty hunter (mercenary or powertech), plus covert resources, Republican smuggler (gunslinger or scoundrel) and Imperial

³⁸ en.wikipedia.org/wiki/La_(Tarzan), accessed February 21, 2016.

³⁹ David Bruce Bozarth, “A Barsoom Glossary: Religion,” www.erblis.com/abg/religion.html, accessed February 21, 2016.

⁴⁰ www.swtor.com/holonet/classes/jedi-knight, accessed July 4, 2016.

⁴¹ www.swtor.com/holonet/classes/sith-warrior, accessed July 4, 2016.

Table 5.3 Census of avatars in a virtual universe

Avatar classes combining Republic/Empire	Forum Threads	Posts	Leader-board	Wide census	Odessen Roster
Supernatural:					
Guardian/Juggernaut	13.6%	13.3%	9.4%	19.0%	21.5%
Sentinel/Marauder	15.0%	15.9%	10.0%	15.2%	15.5%
Sage/Sorcerer	12.4%	11.3%	29.9%	19.7%	19.5%
Shadow/Assassin	16.8%	17.2%	15.4%	13.1%	14.3%
Technological:					
Commando/M Mercenary	10.3%	10.8%	2.9%	11.0%	8.4%
Vanguard/Powertech	10.6%	9.8%	20.5%	6.9%	6.3%
Gunslinger/Sniper	9.1%	9.3%	3.0%	7.9%	8.8%
Scoundrel/Operative	12.2%	12.5%	9.2%	7.2%	5.8%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%
CASES	43,554	514,421	2000	3082	1424

agent (sniper or operative). A player must select the general class when creating a new avatar, and the subclass after gaining a modest amount of experience. A social scientist can conceptualize these choices as items in a questionnaire, expressing the values of the particular player, or at least the player's current interests if this is not the first avatar the player has created. Thus, a census of player's choices can measure aspects of the general *Star Wars* culture, in its potential relationship to religion.

One publically available and rather huge dataset about the SWTOR classes comes from the player forums on the swtor.com website, where on January 17, 2016, there was a total of 43,544 topic threads and 514,421 individual posts for specific classes. On the site they had been organized in such a way that equivalent classes for the Republic and the Empire were combined, so that is how the table below presents these and other data. The total threads and posts are very large numbers, but this is only part of the forum, the part that concentrates on players reporting their experiences running a particular kind of avatar and advising each other on how to succeed with the given subclass. Thus, the numbers of posts across classes are likely to be more similar than the numbers of avatars across the classes, because in principle each class has the same number of particular topics worth discussing (Table 5.3).

The Leaderboard column reports the number of avatars in each subclass type, from the 2000 highest ranked avatars who had competed in warzone arena group combat, as of January 22, 2016. In a match, eight players from each side, Republic versus Empire, fight each other, like a wild football match, and gain reputation points depending on how they contributed to their team's success.⁴²

⁴² www.swtor.com/holonet/warzones, www.swtor.com/leaderboards/pvp/solo, accessed January 22, 2016.

The wide census and Odessen roster used two different methods to count the number of level-65 avatars of each class on the three North American role-playing servers: The Ebon Hawk, Bergern Colony and Jung Ma. Level 65 was the new experience ceiling that resulted from an October 2015 expansion of this virtual galaxy. The wide census was conducted Friday evening, January 8, 2016, through the team assembly database in the game interface, and thus tabulates all the 3082 top-level avatars who were online at a given moment in time. Because the search tool is limited in how many cases it can report, the search was done separately by faction and virtual planet (or equivalent), but quickly for each server to avoid double counting of many cases.

The Odessen roster was done differently, January 10–18, 2016. Odessen was the planet where all players running through the new expansion story would complete chapter 9 (in the story equivalent of a novel), which was the maximum at that time. Figure 5.1 shows Burroughs on the steps of the Odessen headquarters, after he had reached level 65. I interviewed one player who already had 17 level 65 avatars (a remarkable achievement), but only 3 of them had gone through the new story. So it made sense to look at the class distribution of avatars that had definitely completed the new story, rather than gain level 65 in warzones or other existing areas. Therefore, I visited each of the three servers' versions of Odessen repeatedly, taking screenshot photos of the list of avatars there, manually entering their names and classes into a spreadsheet, with a total of 1424 different avatars.

In the two censuses, supernatural classes were a strong majority, 67.1% in the wide census and 70.7% in the Odessen roster. Imperial avatars outnumbered members of the Republic in both datasets, 58.5% and 58.1%. Thus, the Sith religion was more popular than the Jedi, but both were significant in this online subculture. In the 2000 warzone cases, the mean rank of 1292 supernatural avatars was 1004, and the mean rank of 708 technological avatars was actually slightly better (lower rank as in golf scores is better) at 995 suggesting that supernatural avatars were not more effective than non-supernatural ones, but chosen more frequently because players are attracted to the idea of the Force.

On July 16, 2016, an advertisement reported that a total of 87 million characters had been created by players, and operated for about 1.5 billion hours. Clearly, the company operating an online game has much more complete data than any researcher operating from outside, but statistics reported in the advertisement supported our general finding that supernatural Force-sensitive characters were more popular, constituting 61% of 42,175,031 Republic characters, and 59% of 43,710,711 Empire characters, tabulated a few days earlier.⁴³ The reason the percentages supernatural are slightly higher in our census data is probably our emphasis on high-level characters. In many cases, players may have run non-supernatural characters briefly, just to learn their stories and technical skills. The average hours invested in a character in the advertisement's data is less than 20, whereas the two level-65 characters I had used to do the Odessen census had been operated an average of 266 hours. Quite

⁴³ massivelyop.com/2016/07/16/swtor-knights-of-the-eternal-throne-confirmed-for-this-fall/, accessed July 16, 2016.

apart from how “real” or “religious” the experience of being a virtual Jedi or Sith may be, the numbers of human hours invested in experiencing the Force are remarkably large.

The 2015 movie *Star Wars: The Force Awakens* is the successor in the story arc to the 1983 movie, *Return of the Jedi*, and indeed something like a third of a century of events took place between them, involving a revival of the Jedi religion, followed quickly by a disastrous collapse. Whether from shame or horror, Luke Skywalker has retreated into exile and once again the Jedi “fire has gone out of the universe.” How brightly and how long the fire of Jediism will burn, we can only speculate.

Superficially, Jediism does not seem to fit the Lofland-Stark model of cult recruitment presented in Chap. 2, yet some of its steps do illuminate features of this remarkable quasi-religious phenomenon. Most obviously, recruitment to Jediism does not primarily occur through development of strong social relationships with existing members, but through individual attraction to the fictional culture of the Jedi. The resultant commitment to Jediism is variable, both from person to person and across the years of the Jedi’s life. Traditional social science of religion has always emphasized social relationships that bind a person to a formal church organization (sociology), a tribe (anthropology) or congregation of fellow members (social psychology). Research on post-secular religious movements may require considerable adjustment to the traditional methodologies, definitions, and theories.

As noted earlier, the Lofland-Stark model assumes the existence of a conventional religious orthodoxy, because only people suffering acute, enduring tensions will escape its influence to seek a new religion. The recruits to Jediism seem to be ordinary modern folk whose longings for honor and spiritual stimulation are not satisfied by high-status jobs or other personal commitments. When I studied the Process, in the years immediately before the first *Star Wars* movie, I observed that people suffering extreme emotional tensions usually failed as recruits, and successful recruits suffered only moderate tension. This may be true for recruits to Jediism, and most of the people posting on the forums or in Facebook appear to be competent people who often mention difficulties they experience in their lives, but who do not appear to be overwhelmed by them. Reaching level 65 in SWTOR is proof of competence in using the dominant information technology of our era. Over the coming decades, relatively competent people may become chronic religious seekers, if formal religious organizations can no longer solve people’s problems or provide effective emotional compensation for their sense of dissatisfaction.

References

1. Williams, A., Miller, B.-A., Kitchen, M.: Jediism and the Temple of the Jedi Order. In: Cusack, C.M., Kosnáč, P. (eds.) *Fiction, Invention and Hyper-Reality: From Popular Culture to Religion*, pp. 119–133. Routledge, London (2017)
2. Farley, H.: Virtual knights and synthetic worlds: Jediism in second life. In: Cusack, C.M., Kosnáč, P. (eds.) *Fiction, Invention and Hyper-Reality: From Popular Culture to Religion*, pp. 134–147. Routledge, London (2017)

3. Bainbridge, W.S.: *The Sociology of Religious Movements*, p. 396. Routledge, New York (1997)
4. Decker, K.S., Eberl, J.T. (eds.): *Star Wars and Philosophy: More Powerful than You Can Possibly Imagine*. Carus, Chicago (2005)
5. McDowell, J.C.: *The Gospel According to Star Wars: Faith, Hope and the Force*. John Knox Press, Louisville, Kentucky (2007)
6. Bainbridge, W.S.: *Star Worlds: Freedom Versus Control in Online Gameworlds*. University of Michigan Press, Ann Arbor (2016)
7. Wallace, D.: *The Book of Sith*, p. 47. Becker and Mayer, Bellevue (2012a)
8. Wallace, D.: *The Jedi Path*, p. 7. Becker and Mayer, Bellevue (2012b)
9. Rotter, J.B.: *Social Learning and Clinical Psychology*. Prentice-Hall, New York (1954)
10. Rotter, J.B.: Generalized expectancies of internal versus external control of reinforcements. *Psychol. Monogr.* **80**(609), (1966)
11. Rotter, J.B.: Some problems and misconceptions related to the construct of internal versus external control of reinforcement. *J. Consult. Clin. Psychol.* **43**, 56–67 (1975)
12. Rotter, J.B.: Internal versus external control of reinforcement: a case history of a variable. *Am. Psychol.* **45**(4), 489–493 (1990)
13. Gyax, G.: *Advanced Dungeons and Dragons, Dungeon Masters Guide*. TSR/Random House, New York (1979)
14. Perkins, C., Stephens, O.K.C., Thompson, R.: *Star Wars Roleplaying Game. Revised Core Rulebook*, p. 7. Wizards of the Coast, Renton (2007)
15. Bainbridge, W.S.: Wandering souls. In: Zollschan, G.K., Schumaker, J.F., Walsh, G.F. (eds.) *Exploring the Paranormal*, pp. 237–249. Prism, Bridport (1989)
16. Christopher, A.J.: Questions of identity in the millennium round of commonwealth censuses. *Popul. Stud.* **60**(3), 343–352 (2006)
17. Reps, P.: *Zen Flesh, Zen Bones*. C. E. Tuttle, Rutland (1957)
18. Watts, A.: *The Way of Zen*. Pantheon, New York (1957)
19. Suzuki, D.T., Fromm, E., De Martino, R.: *Zen Buddhism and Psychoanalysis*. Harper, New York (1960)
20. Castaneda, C.: *The Teachings of Don Juan: A Yaqui Way of Knowledge*. University of California Press, Berkeley (1968)
21. Rinzler, J.W.: *The Making of Star Wars*, p. 46. New York, Ballantine (2007)
22. Campbell, J.: *The Hero With a Thousand Faces*. Princeton University Press, Princeton (2005) [1949]
23. Bainbridge, W.S.: Burglarizing Nietzsche's Tomb. *J. Evol. Technol.* **21**(1), 37–54. jetpress.org/v21/bainbridge.htm (2010). Accessed 4 July 2016
24. Burroughs, E.R.: *The Chessmen of Mars*. A.C. McClurg, Chicago (1922)
25. Burroughs, E.R.: *The Return of Tarzan*, p. 302. A. L. Bur, New York (1915)

Chapter 6

Pessimism: Critiques of Religion and Technology in the *Fallout* Games

Abstract Of all the sciences, the one with the most dubious implications is nuclear physics, which explains the nature of physical matter without need for God in its equations, at the same time it permits nuclear weapons of unparalleled destructiveness. Of great cultural significance, the *Fallout* series of solo-player role-playing computer games produced by several different teams deeply examines the alternative human responses to tragedy, including religion but unsympathetic to it. In the year 2077, a nuclear war between China and the United States caused the collapse of civilization. But that is not a prediction, because it occurs in a different timeline than ours, assuming that American culture remained frozen in the 1950s, as some technologies advanced beyond what was actually achieved. Thus, *Fallout* is far more than a game, more comparable to great literature, and can be considered either a virtual experience of an alternate reality, or a philosophical analysis of modern civilization. Three of the five versions take place on the west coast, in California, Oregon, and Nevada, while two take place on the east coast, around Washington DC and Boston, including real locations of historical significance, from the Lincoln Memorial, that has become the headquarters for slavers, to the campus of the Massachusetts Institute of Technology, that has become the ruined façade of a hidden scientific conspiracy. Very little evidence of traditional religion survived the nuclear holocaust, one being a fictional religion that was clearly based on Scientology, and a pathetic Catholic church in a ruined aircraft carrier that does not even possess a cross. Most significant are the Children of Atom who believe that any nuclear explosion produces a new universe of worlds, unseen but offering homes for millions of new intelligent species. Drawing upon the extensive YouTube community of players, who post videos of their own experiences in the *Fallout* wasteland, this chapter explores virtual environments that stimulate meditation on the limitations of both religion and science.

A common secular view of secularism is that religion is losing plausibility because of scientific discoveries, and losing value because of technological innovation and the tendency of many other modern societal institutions to take over the traditional functions of religion. The theoretical concept of *emotional tension* offers another way to frame the future of religion. What if the world is entering a period of increasing, insoluble tensions, in which most people are unable to find solutions for painful

problems, and in which many kinds of dire risk grow year by year? Many people may rush back to their ancestral faith, a few will join highly committed pathological movements such as terrorists, and a very substantial fraction of humanity will become *chronic seekers*, drifting or even rushing through several cultural movements like the Process and Jedi over the course of their lives. What may happen if the ultimate secularization occurs, not merely the decline of religion married to the decline of science, but the death of civilization? [1] Perhaps insights can be drawn from computer-based simulations of the next Dark Age.

To understand the current condition of science and technology, consider plutonium. With 94 protons, it is the 94th chemical element in the periodic table, a metal and radioactive. It does not exist as veins of ore to be mined from the mountains, but is artificially produced in a nuclear reactor from uranium 238, an isotope of that naturally occurring element that is not suitable for nuclear weapons. The atom bomb that destroyed the Japanese city of Hiroshima in 1945 used uranium 235, while the Nagasaki bomb used plutonium 239. U235 is rare and difficult to separate from the more plentiful U238, so only advanced nations can produce uranium weapons. But now that substantial supplies of plutonium have been produced by the modern equivalent of alchemy, and could be separated through chemical means if a peace program had diluted it with other substances, the long-term danger of nuclear war is increased [2].

For example, imagine that world civilization fell into a post-industrial Dark Age, during which nuclear physics was forgotten [3]. During the early years of a new civilization, barbarians could find supplies of plutonium and perhaps construct and use an arsenal of atom bombs long before being able to separate the isotopes of newly mined uranium. Immediately after Hiroshima and Nagasaki, many social scientists believed that only world government with a monopoly on nuclear technology, could save humanity from suicide. So far, we have achieved neither unity nor suicide [4].

Consider this as a parable. When God created the Earth, He looked upon it with pride. But then he noticed that there were substantial concentrations of plutonium, which humanity could use to produce total disaster, after leaving the Garden of Eden. When Eve ate that apple, under the influence of the Science Serpent, God knew that sooner or later, her descendants would become nuclear physicists. So He took action to reduce the danger of plutonium, and gave it a half-life of only 24,100 years, knowing it would all have vanished by the time the children of Adam and Eve could use it to commit suicide. Only then did he give plutonium its name. In later centuries physicists would imagine He had named it after the very temporary planet Pluto, but the real origin is the name of the Roman God of the Underworld, known as Hades among the Greeks. What other parables may help us understand our peril?

As much as we may admire academic theorists and social scientists, often we must seek alternative ideas in popular subcultures such as the most modern artform, role-playing computer games. In particular, they can be simulations based on information technology that illustrate and possibly evaluate unconventional perspectives about future trends. This chapter will use the *Fallout* series of games to consider

whether secularization is dual in nature, involving not only the disintegration of religion, largely caused by the rise of science, but also the collapse of science itself. This chapter will make heavy use of online information sources, such as YouTube videos and wiki articles, anchored in the experience of personally exploring the five main *Fallout* games.

Fallout postulates an alternative America that diverged from our own time line in the 1950s, and now can be visited over the range of years 2161 through 2287. Technological progress continued after the 1950s, although with different details from those in our world, while cultural changes essentially halted. For example, in *Fallout 3*, the player's avatar may visit the ruins of a factory that used to manufacture Corvega automobiles around the year 2070. These powerful cars had nuclear engines but looked very much like the gaudy American cars of the 1950s, with exaggerated fins but no discernable difference in design philosophy. Across the landscape can be found gas stations called Red Rocket, with crude fake rockets standing high as advertising signs, and laid out very much like 1950s gas stations. These facilities still sold gasoline, but also provided liquid coolant for nuclear car engines, and were apparently transitioning to the new atomic power systems. The factory, stations, and cars were wreckage, because in 2077 a nuclear war had destroyed civilization.

“Drop and cover!” So shouted my teacher at Old Greenwich School, in the early 1950s, when we were doing a brief drill to prepare us for a possible Soviet nuclear attack. Other schools used a different dialect, *ducking* instead of *dropping*, and a 1951 civil defense propaganda movie used “duck” but represented a school child as a turtle gaining safety by ducking inside his shell.¹ My parents had stored canned food and bottled water in our basement, but I wondered why they had not gone so far as to build a fallout shelter. Even 60 years later, the 2014 building code for Greenwich sees fit to define this term: “Fall-Out Shelter shall mean a structure or portion of a structure intended to provide protection to human life during periods of danger from nuclear fallout, air raids, storms, or other emergencies.”²

A short walk from our home was an air raid spotter’s tower, set up so volunteers in the Ground Observer Corps could watch for Soviet bombers on their way to obliterate New York City, visible across Long Island Sound. Although the Corps may have seemed a good idea after the first Soviet fission bomb test in 1949 and fusion bomb test in 1953, its main function was public relations, inspiring fear even as it encouraged patriotism [5]. So one source of the *Fallout* series was the very real public hysteria of the 1950s. But when I drive virtually in the street view of Google Maps from the beach on Shore Road near our home to the location of the spotter’s tower on Tod’s Driftway, no evidence of it remains.³

¹ www.youtube.com/watch?v=IKqXu-5jw60, www.conelrad.com/duckandcover/cover.php?turtle=01, accessed May 22, 2016.

² www.ct.gov/csc/lib/csc/pendingproceeds/docket_461/application/bulkfiling/c_building-zone-regulations-full-version-12-2014.pdf, accessed May 13, 2016.

³ www.google.com/maps/dir/38.8612096,-77.0883584/1445+E+Putnam+Ave,+Old+Greenwich,+CT+06870/@41.0130729,-73.5679132,3a,60y,231.67h,74.47t/data=!3m6!1e1!3m4!1smtOL1K

In the fury of the Second World War, each side engineered a radical military breakthrough, and after the last of sixty million souls were killed, the two technologies were united into an efficient system for murdering all the remainder of humanity. The Nazis developed long-range rockets, and the Americans developed atom bombs. Then both the Americans and the Soviets combined these two lethal innovations into intercontinental ballistic missiles, capable of breaching any defense and destroying civilization. The victorious Americans proclaimed that the Nazis were the most evil movement the world had ever seen, yet their own nuclear weapons were arguably more vile. History is written by the victors. How will history be written after humanity destroys itself? [6], [7].

6.1 Preludes and Fugues

The remarkably successful and highly praised *Fallout* solo-player computer games are set in areas of the United States long after a nuclear world war, between the US and China, that killed the vast majority of people. Only a few survived by the pure chance of where the warheads exploded, and a few favored elites hid in underground fallout shelters called *vaults*. Each vault was a tiny dictatorship, and most other groups were criminal gangs. Here and there, a more sophisticated group tried to build a new society based on science, typically rather reminiscent of Fascism. What role did the traditional religions of the world play, notably the billion-member Christian and Islamic traditions? Approximately none. A team of game-related artists who create YouTube videos, calling themselves ShoddyCast, made a rather well-focused 12-minute documentary about religion in the *Fallout* world, observing:

Before the war, people prayed to all sorts of gods. Most of those old religions didn't survive the war – no time to memorize scripture or recite prayers if every minute of the day was spent scavenging for food. Nowadays, every bombed-out town in the wasteland has the remains of an old church in it, but most of them are empty, save for the radroaches and feral ghouls. If the old world gods are coming back, they sure are taking their time with it. In the meantime, the more superstitious folks in the wasteland have been making up their own religions, to help them get through the day.⁴

What are the radroaches and feral ghouls that inherited the churches? As a *Fallout* wiki explains, “Great American cockroaches, colloquially called radroaches, or giant cockroaches, are giant versions of the pre-War species that have been mutated by radiation.”⁵ Feral ghouls are people who have lost their minds, which robs them of the last vestige of their humanity: “Ghouls or necrotic post-humans, are decrepit, rotting, zombie-like mutants. They are recipients of intense and prolonged radiation sickness which decays their skin, and in some cases their ligaments. Paradoxically,

C4oH0C_IxyoyCtJw!2e0!7i13312!8i6656!4m9!4m8!1m1!4e1!1m5!1m1!1s0x89c298a8a10d4267:0xd1cf09dbe898b28!2m2!1d-73.5708805!2d41.0464299, accessed May 13, 2016.

⁴www.youtube.com/watch?v=C2iIj9ouaf8, accessed May 30, 2016.

⁵fallout.wikia.com/wiki/Radroach, accessed June 4, 2016.



Fig. 6.1 A ruined church in the virtual Washington, DC area

they also have greatly extended overall lifespans and are, allegedly, immune to and even regenerate health from the hazards of background radiation and/or nuclear fallout.”⁶ Figure 6.1 shows my avatar in the virtual countryside of *Fallout 3*, being attacked by a wild dog, near the same church shown in the ShoddyCast video while its narrator intoned the words quoted above.

The church is ruined. The parishioners all long ago died of radiation or blast effects, as have the trees. The gravestones imply that the entire world has become a cemetery. Unbeknownst to the avatar, an insane sniper in the church tower is about to fire at him, in devotion to death. Violent destruction of the entire world is certainly not a new idea, whether called Ragnarok, Götterdämmerung, or Apocalypse. The text of Chap. 12 of the problematic biblical Revelation could offer the introductory text for some future *Fallout* game:

And I beheld when he had opened the sixth seal, and, lo, there was a great earthquake; and
the sun became black as sackcloth of hair, and the moon became as blood;
And the stars of heaven fell unto the earth, even as a fig tree casteth her untimely figs, when
she is shaken of a mighty wind.
And the heaven departed as a scroll when it is rolled together; and every mountain and
island were moved out of their places.
And the kings of the earth, and the great men, and the rich men, and the chief captains, and
the mighty men, and every bondman, and every free man, hid themselves in the dens and
in the rocks of the mountains;
And said to the mountains and rocks, Fall on us, and hide us from the face of him that sitteth
on the throne, and from the wrath of the Lamb:
For the great day of his wrath is come; and who shall be able to stand?

⁶fallout.wikia.com/wiki/Ghoul, accessed June 4, 2016.

As we saw in Chap. 2, the horror of the First World War stimulated some creative intellectuals to imagine new sciences, such as Sociometry, that could give truth to the platitude it had been “the war to end all wars.” Especially prominent among them was science fiction pioneer H. G. Wells, who had actually prophesied nuclear weapons way back in his 1914 novel, *The World Set Free* [8]. In 1936 he provided the inspiration and even the script for *Things to Come*, among the very best early science fiction movies, that depicts the next world war [9]. While focusing on particular individuals, it is rather like a documentary or an ideological essay, organized into three sections that take place years apart. The cast of actors was exceptional, especially Raymond Massey who plays John Cabal in the first two sections and his grandson Oswald Cabal in the third. Cedric Hardwicke plays Theotocopoulos in the third section, but the most impressive acting is by Ralph Richardson who is The Boss in section two. Currently, multiple copies of the movie are available on YouTube.⁷

The first section of *Things to Come* is set at Christmas 1940, as a family and friends celebrate this religious holiday. The location is a city named Everytown, that seems to be English, but represents modern society more generally. The actors and a background chorus sing a popular Christmas carol that expresses the extreme hopes of Christianity: “Noel, Noel, Noel, Noel. Born is the King of Israel.” Yet the boys are playing with toy weapons, and the international situation is precarious. When asked about the grim news of the day, John Cabal says, “wars and rumours of wars.” This quotes from Matthew 24:6: “And ye shall hear of wars and rumours of wars: see that ye be not troubled: for all these things must come to pass, but the end is not yet.” However, this Christian optimism is misplaced, because the air raid sirens sound, anti-aircraft guns fire into the nighttime darkness, and poison gas kills many residents of Everytown.

An interlude uses special effects to depict total war, including a brief scene in which John Cabal pilots a fighter aircraft in a dogfight, his enemy crashes, and after landing he helps his wounded foe don a gas mask. A girl runs to them, helpless, and the noble enemy volunteers his mask for her. As Cabal prepares to fly the girl to safety, he gives his revolver to his wounded enemy, who uses it only to commit suicide. The world war ends in 1966, as a biological weapon causes an epidemic, the *wandering sickness*, that defeats all the armies.

The second section returns to Everytown in 1967, now a ruin with only a few residents barely surviving, rather like one of the post-apocalyptic communities in a *Fallout* game. One of the men takes it upon himself to decide that all those suffering the wandering sickness must be shot, to prevent them from spreading it. He becomes The Boss who rules the town as a primitive chief, popular because he has reestablished local social order. Technological recovery is blocked by the lack of gasoline, and in 1970 The Boss attacks the Hill People to gain control of coal pits and oil supplies, in part to fuel a small fleet of biplanes that could expand his kingdom militarily. Unexpectedly, John Cabal returns in a modern aircraft, representing a

⁷ www.youtube.com/watch?v=atwfWEKz00U, www.youtube.com/watch?v=kn76zoYjr4k, accessed June 4, 2016.

technocratic elite called World Communications that seeks to restore civilization on a scientific basis. They fail to come to a peaceful agreement, so Cabal's organization uses the *gas of peace* to render Everytown temporarily unconscious, and seize control.

Another interlude cuts together many special effect scenes of reconstructing Everytown, introduced by John Cabal's vision "Do you realize the immense task we shall undertake, when we set ourselves to an active and aggressive peace, when we direct our energies to tear out the wealth of this planet and exploit all these giant possibilities of science that have been squandered hitherto upon war and senseless competition? We shall excavate the eternal hills. We shall make such use of the treasures of sky and sea and earth as men have never dreamt of hitherto. I would that I could see our children's children in this world we shall win for them, but in them and through them we shall live again." The new Everytown that results is underground, windowless but brilliant, clean, aesthetic, and well ordered, beneath an unsullied landscape of pleasant meadows.

The third section takes place in 2036, exactly a century after the film was produced. The action revolves around preparations to send the first spaceship around the moon, an extremely dangerous mission for its crew of two, including the daughter of world leader Oswald Cabal. A demagogue named Theotocopulos goes on world television to rouse a mob to stop the launch: "What is this progress? What is the good of all this progress onward and onward? We demand a halt! We demand a rest! The object of life is happy living. We will not have human life sacrificed to experiments. Progress is not living. It should only be the preparation for living... Make no mistake about it. The slaveries they put upon themselves today, they will impose tomorrow upon the whole world. Is man never to rest, never to be free? The time will come when you in your turn will be forced away, to take your chance upon strange planets and in dreary, abominable places beyond the stars. An end to progress! Make an end to this progress now! Let this be the last day of the scientific age!"

Despite its episodic structure, in three sections and two interludes, *Things to Come* is an integrated, total work of art, combining superb acting, innovative special effects, artistic photography of acted scenes, and remarkably fine music composed especially for this film by Arthur Bliss [10]. At the climax, Theotocopulos fails to stop the mission, yet remains alive and presumably still influential. Beginning with the Greek word for God, his name suggests that he represents religion in opposition to science, yet he is a sculptor rather than a priest. Thus in the secular future, religion will dissolve into art, and co-exist with science. The unusual emphasis on newly composed classical music, and the absence of Christianity after 1940, renders *Things to Come* a prophecy of dynamic secularization.

Three years after the film, the real Second World War began, thankfully ending in 1945 rather than 1966. Myriads of more-or-less realistic movies were made about it, during it as well as afterward, but the real possibility of nuclear conflict quickly eroded faith in the peace that followed. The 1959 movie *On the Beach* depicts a post-war world in which the only remaining act of faith may be suicide. Two 1964 films, *Dr. Strangelove* and *Fail Safe*, contemplated the danger that nuclear deterrence

could fail disastrously. However, as years passed and no Third World War occurred, a genre of films and eventually video games found positive potential in imagining the world after civilization had fallen. Post-apocalyptic movies became popular with *Mad Max* in 1979, and its spectacular sequel, *Road Warrior*, in 1981. But a very direct predecessor of *Fallout* was the 1988 videogame *Wasteland*.⁸ It imagined that nuclear war would destroy civilization a decade in the future, now nearly two decades in the past in our real and surprisingly peaceful world. Its instruction manual provides the background:

Tensions grew with the coming of 1998. The United States' Citadel Starstation was slated to be fully operational by March. Soviet charges that the space station was merely a military launching platform alarmed a number of nonaligned nations. The right wing governments in the South and Central Americas, many of them set up by the U.S. during the Drug Wars (1987–1993), pledged their support to the U.S. The NATO nations, including the new African members also declared their alliance with the U.S. That move forced most of the remaining neutral powers to join the Soviet protest. In six short weeks, only Switzerland, Sweden, and Ireland continued to declare themselves neutral nations.

Two weeks before Citadel was due for full operation, the station transmitted a distress signal. Immediately after the message was sent, most of the satellites orbiting the planet were swept clean from the sky, leaving the great powers blind. In military panic, each sent 90 percent of their nuclear arsenals skyward. Although the destruction was tremendous, it was not complete. Pockets of civilization remained, some even oblivious to the military exchange.⁹

Notice that the failure of space technology is as much the immediate cause of the war as was distrust between human beings, and of course the war would not have happened had nuclear physics not discovered the nature of atoms, and had atom bombs not been used by the United States in 1945 to destroy two Japanese cities and kill over a hundred thousand human beings.

Wasteland was created by Interplay Entertainment, that also created the original *Fallout* in 1997 and *Fallout 2* in 1998. *Fallout 3* was released by Bethesda Game Studios in 2008, *Fallout New Vegas* by Obsidian Entertainment in 2010, and *Fallout 4* by Bethesda in 2015. Interplay and Obsidian were both California companies, and some Interplay personnel had moved to Obsidian, so it is not surprising that their three games were set in California and adjacent Nevada, and are chained together, having different stories and main characters but sequenced in the same local history of the future. With our focus on the socio-cultural conditions rather than the protagonist's adventures, we shall consider these three first. *Fallout 3* was set in the Washington DC area, including Bethesda, Maryland, the home of its creators, and *Fallout 4* in the Boston area. These two will be considered afterward.

I explored these games using a high-end gamer computer, with a 256 gigabyte solid state drive, as well as an old-fashioned 512 gigabyte disk drive, and the Windows 7 operating system. But versions of them can be played on Macintosh computers, and on both PlayStation and Xbox video game systems. Yet inside the *Fallout* games, despite the additional century of progress before the nuclear war, the

⁸ archive.org/details/msdos_Wasteland_1988, accessed May 13, 2016.

⁹ *Wasteland Instruction Manual* (Los Angeles, California: Interplay Entertainment, 1988), p. 3.

player's avatar uses computers more like those of the 1960s, often mainframes using big reels of magnetic tape for memory storage. Although some of the stories involve seeking high-tech computer "chips," a picture of one in the original game shows that it contains vacuum tubes rather than transistors. Computers in this alternate world tend to be very big boxes covered with flashing lights, and computer monitors use cathode ray tubes. A *Fallout* wiki notes that the circuit diagram that serves as the game's picture of the chip is for a vacuum tube theremin musical instrument, a futuristic device that produces weird tones when the musician waves hands near its two antennas.¹⁰ Theremins were used in many science fiction movies of the 1950s, such as the 1951 *Day the Earth Stood Still* in which an alien visitor warns Earth that it must not develop rocket-delivered nuclear weapons.¹¹ I actually built a Moog theremin from a kit in 1962, but it used transistors [11].

The iconic symbols of glorious technology are rockets and robots. It is worth remembering that in 1949, the Oldsmobile division of General Motors began using the word "rocket" in advertising its more powerful models, and its Wikipedia page recalls, "Throughout the 1950s, the make used twin jet pod-styled taillights as a nod to its 'Rocket' theme."¹² Across the ruined landscapes of the three more recent games, rusting cars that look like exaggerated Rocket 88s abound. Robots are common in the *Fallout* universe, but seem also to be in 1950s style, and operating on unknown computer science principles. Also, both as a result of widespread nuclear fallout, but also created in laboratory experiments, biological mutations are common. Especially in the games set in Washington and Boston, many references to the culture of 1950s America serve as a critique of bygone technological optimism.

6.2 Isomorphic Apocalypse

The original *Fallout* and *Fallout 2* use a simple form of graphics called *isomorphic*, looking down at a fixed angle, seeing the player's character as a small figure, moving through an environment that lacks perspective and taking an image off screen as the viewpoint moves away, rather than making it progressively smaller. Figure 6.2 shows how the interface looks when the player's character is having a conversation with a non-player character, in this case a discussion with a peasant about the meaning of the sophisticated agricultural technique called *crop rotation*, in a mission titled Improve Shady Sands' Agriculture.¹³ The large rectangle in the center is an interface within the interface, that clearly shows four vacuum tubes as its main electronic components, to the left of an isomorphic picture of the scene, which is also depicted outside the rectangle. Rows of crops are the diagonal bands of graphics.

¹⁰ fallout.wikia.com/wiki/Water_chip, accessed May 22, 2016.

¹¹ [en.wikipedia.org/wiki/The_Day_the_Earth_Stood_Still_\(soundtrack\)](https://en.wikipedia.org/wiki/The_Day_the_Earth_Stood_Still_(soundtrack)), accessed May 22, 106.

¹² en.wikipedia.org/wiki/Oldsmobile, accessed May 24, 2016.

¹³ fallout.wikia.com/wiki/Improve_Shady_Sands%27_Agriculture, accessed October 22, 2016.



Fig. 6.2 The user interface of the original *Fallout* game

While the two early games do offer the player some choices, their stories are rather linear: Do this, then this, then this. The three other *Fallout* games came a decade and more later, with much more realistic graphics and many opportunities to escape from the main arc of missions. While I explored the beginning levels of the 1997 and 1998 games for 10 hours each, to be familiar with the control interface and graphic system, I relied much more heavily upon YouTube videos by highly experienced players, several of which walked the viewer through all the missions, displaying exactly what would have been seen if playing the game in the standard way.

The original *Fallout* is set in California and takes place in the year 2161, beginning in an underground fallout shelter called Vault 13, in which a community has been living since the nuclear world war destroyed civilization nearly a century earlier.¹⁴ The player's character is given a dangerous mission, to leave the safety of Vault 13 in search of a water chip, needed to keep Vault 13's water supply working. After some early missions that serve as a tutorial, around a small but well organized surface village called Shady Sands, the character must search the ruins of Vault 15 for a water chip, but does not find one. Soon after this point I switched my research method from playing the game myself to viewing YouTube videos that had been posted by experienced players. I could pause the video at any time, to write my observations or look up relevant information online, and the YouTube search system

¹⁴fallout.wikia.com/wiki/Portal:Fallout, accessed May 22, 2016.

allowed me to find just the right videos to study, among the thousands currently posted by players of the *Fallout* games.

A few players had uploaded *walkthrough* videos on YouTube, and I watched the entire series of 31 videos totaling 8 hours and 44 minutes posted and narrated by FerrousPilot, a very experienced player.¹⁵ The narration is casual and extemporaneous, like a monologue interview in which the game asks the questions and the narrator answers them. In his 21st video of the series, FerrousPilot goes through difficult missions to obtain a high-powered gun, and when he kills the first enemy with a single shot, he exclaims, “I am God!” In posting the video, he titled it “A God Am I.”¹⁶ He then feels ready to go into the part of Los Angeles called the Boneyard and deal with two groups of non-player characters, the Followers of the Apocalypse and Children of the Cathedral. Most groups in the *Fallout* games are criminal gangs or military units, but these two appear to be religious cults.

In the text accompanying his 22nd video, FerrousPilot calls the Followers of the Apocalypse “a bunch of crazy peaceniks who think you can survive in the Wasteland without horribly slaughtering anything and anyone in your path.” In the video, his character, called Pilot, visits their headquarters and at one point interviews their leader, Nicole.¹⁷ Often the player’s character has a conversation with an important non-player character, as shown in Fig. 6.2, but not free-form. Instead, the player is given a list of text sentences from which to select one, and the NPC gives a set response, and another set of player choices appears for the next selection. Thus, had I sent my character to interview Nicole, I would have had the same choices as Pilot, unless of course the interaction was altered by some action my character had taken in the past, such as acquiring some valuable item to give to the NPC. Here are excerpts from the interview¹⁸:

- Pilot: Where did the Followers start?
 Nicole: Far to the south, near the Great Glow. The times were hard, but we managed to survive. We realized then the Great War must never happen again.
 Pilot: So, you started the Followers of the Apocalypse?
 Nicole: After my parents were killed by a marauders, [sigh] it was time the killing stopped. It's our goal to make this land the way it used to be, before the war.
 Pilot: Who were the marauders?
 Nicole: We've never found out, although we've heard a group live up north in an old ruined city. We've let it rest.
 Pilot: Why not? You could get revenge!
 Nicole: We're here to make peace, not kill in hatred.
 Pilot: Very noble of you. If it were me I'd kill them all.
 Nicole: I'm not surprised. The Followers are here to talk sense into people like you.
 Pilot: And you don't think violence is ever good?
 Nicole: [Sigh] You're simply not ready to understand the differences. Okay. So why don't you just think about it, then come back to talk.

[The conversation ends, but Pilot returns later to ask what the Followers worship.]

¹⁵ www.youtube.com/watch?v=kJDzJw8O6WE, accessed May 22, 2016.

¹⁶ www.youtube.com/watch?v=-zZtTaN3Jlc, accessed May 24, 2016.

¹⁷ fallout.wikia.com/wiki/Nicole, accessed May 24, 2016.

¹⁸ www.youtube.com/watch?v=UYfLhayoFBE, accessed May 24, 2016.

Nicole: We don't worship so much as follow a set of principles. We want to bring peace back to the wasteland. The world tends toward destruction, so we try to make a difference.

Nicole and the Followers have clear ethical goals, but they are not couched in supernatural language. There is some similarity to the Ethical Culture and Unitarian movements in our real world, in which the degree of supernaturalism varies from person to person, and group to group, under powerful effects of secularization. The *Fallout* wiki describes the group at length, including this summary of practices and beliefs:

The Followers' goal is to bring the torch of knowledge to the wastes and facilitate the free flow of information, technology, and supplies among the peoples of the wasteland, though they usually give special attention to those most in need. They often provide education, medicine, and scientific expertise free to all who require it, and their members are frequently found lending their aid to the needy wherever they can. Ideologically, the Followers' principles bear some resemblance to secular-humanism. Above all else, they support pacifism and cooperation, and oppose those who seek to subvert these principles. Though they loathe violence in all forms, they will defend themselves against those who seek to take their lives or otherwise jeopardize the future of humanity.¹⁹

A rival group that threatens the Followers is The Children of the Cathedral, a definitely religious cult that has its headquarters in a Los Angeles cathedral.²⁰ Their symbol is not a Christian cross, but an adaptation of the symbol used in the United States around 1960 to indicate the location of a fallout shelter. When Pilot entered the cathedral, some members of the cult were meditating, and a few wore ceremonial robes indicating that they were priests. Pilot ascended the stairs into the cathedral's tower, intending to talk to high priest Morpheus. But a battle ensued and he killed Morpheus instead, so I searched for other players' YouTube videos to learn more about the cult's beliefs. A player posting with the name lolrsn12 used the more sophisticated alternative text-entry system of the game to ask Morpheus three questions²¹:

Who is Nicole?

Morpheus: Nicole is the unfortunate, confused leader of the Followers of the Apocalypse.

Who are the Followers of the Apocalypse?

Morpheus: My heart bleeds for them. Led down a false path. They don't know their efforts will bring only pain and suffering to their fellow beings.

Who is the Master?

Morpheus: It is he who brought me the vision of the Unity and it is he who will bring peace to this troubled land.

By this point in the story, the player realizes that The Children of the Cathedral are merely the front organization for a horrible conspiracy created by the Master and using terribly misapplied science to threaten the last remaining creations of nature. The *Fallout* wiki explains that the Master was "the horribly mutated brain behind the Mutant Army that roamed California in 2161," shaped by the Forced Evolutionary

¹⁹ fallout.wikia.com/wiki/Followers_of_the_Apocalypse, accessed May 24, 2016.

²⁰ fallout.wikia.com/wiki/The_Cathedral, accessed May 24, 2016.

²¹ www.youtube.com/watch?v=kLLpqxcBOt4, accessed May 24, 2016.

Virus (FEV): “At times, the Master was referred to as the ‘Dark God,’ especially by those opposed to the Children of the Cathedral. By his Children, he was referred to as the ‘New god,’ ‘the Holy Flame,’ and ‘Father Hope.’ A hideous FEV-mutated creature that had somehow hybridized with other human mutants and computers, turning him into a rather strange monster who speaks in multiple voices.”²² Each player who meets the Master is given the choice to join his movement, called the Unity, or to fight him to the death. A video posted by darkpower101010 offers the Master’s dialogue, then links to a wiki page giving the entire text for possible dialogues, most importantly²³:

Master: The Unity will bring about the master race. Master! Master! One able to survive, or even thrive, in the wasteland. As long as there are differences, we will tear ourselves apart fighting each other. We need one race. Race! Race! One goal. Goal! Goal! One people... to move forward to our destiny. Destiny.

Player: That race being the mutants, of course.

Master: Of course. Mutants are best equipped to deal with the world today. Who else? The ghouls. Please. Normals. They brought nuclear death to us all. This will be the age of mutants. Mutants.

Player: You mean to change all the others into mutants, as well.

Master: All that resist, yes. All those that are required for the Unity as well. The remainder will be allowed to live out their days, but under Unity control and protection. But none shall breed, for they will be the last of their race.

The nearest thing to a state church in the original *Fallout* is Brotherhood of Steel, “a quasi-religious technological organization operating across the ruins of post-war North America, with its roots stemming from the United States Armed Forces and the government-sponsored scientific community from before the Great War... The organization’s tenets include the eradication of mutants and the veneration of technology.”²⁴ The Brotherhood is well-organized, rational rather than violent, and lacking in spiritualism. Its leaders are called Elders and wear robes, but it represents a moderately secularized mainstream denomination, in contrast to the fully secularized cult of the Followers of the Apocalypse, who are poor if virtuous. By far the most religious of the groups is The Children of the Cathedral, who at heart are evil incarnate.

6.3 Virtual Scientography

Fallout 2 is a direct sequel to the original game, but set in Northern California in the year 2241, which is 80 years later. A very thorough walkthrough of *Fallout 2* was posted on YouTube by MetalCanyon, in 114 videos totaling 41 hours and 26 minutes. Rather than invest more than an ordinary work week viewing them fully, I scanned

²² fallout.wikia.com/wiki/Master, accessed May 24, 2016.

²³ www.youtube.com/watch?v=6-UUTGmYp8, fallout.wikia.com/wiki/MASTER.MSG, accessed May 24, 2016.

²⁴ allout.wikia.com/wiki/Brotherhood_of_Steel, accessed May 24, 2016.

through for key scenes, and consulted other people's videos for the most informative scenes. Exceedingly relevant here was MetalCanyon's video number 80, in which his avatar first visits the headquarters of a cult named Hubology.²⁵ Additional information was derived from videos of the same location by seven other players, named mynameisnotlilly, Xirbt, L-1011 Widebody, lifeofhonour, FunnY, Colonel RPG, and andrey22.²⁶ The *Fallout* wiki provided an overview:

The Hubologists are a religious sect headquartered in the former city of San Francisco. They originated as a cult founded before the Great War by a man known as Dick Hubbell (or "The Hub" by Hubologists).

Hubology as a religion promotes the idea that humans are plagued by the spirits, or 'neurodynes', of the dead. Through a 'cleansing' process offered at Hubology centers called 'alignment', members can remove these negative influences and gain greater powers. The degree to which a member has devoted his or her time and efforts to Hubology accords him or her a numerical rank; the Hubologist leader, AHS-9, holds the highest rank of any living Hubologist, with his second in command being AHS-7. Guards are typically AHS-4s. Hubology uses a metaphor of a "wheel in the sky" to explain their existence, with Dick Hubbell representing the center hub of the wheel, the Hubologists the extending spokes, and non-members the outer rim, "crushed" by the truth of their teachings. The existence of extraterrestrial life plays a role in Hubology, and as a part of this, the Hubologists in San Francisco are trying to repair a pre-War space shuttle to leave the planet.²⁷

The videos and other information on the wiki established beyond any reasonable doubt that Hubology was a parody of Scientology, the durable religion founded by science fiction writer L. Ron Hubbard. Its very name, *hub-ology*, is a contraction of "Hubbard Scientology." Translating into Scientology's technical terminology, neurodynes are *engrams*; cleansing is *clearing*, and alignment is *auditing* [12–14].

Hubology's headquarters in the game were far south of the area where any player starts, and the journey there seemed far too arduous without investing dozens of hours increasing the avatar's statistics, but then I ran across a 48,000-word online *walkthrough* essay by Omkar Namjoshi that urged beginning players to go directly down to San Francisco and get a suit of armor that would make them nearly invincible.²⁸ Wondering if this was really possible, I searched further and found very critical comments saying that following this advice would ruin the game by making much of it trivially easy.²⁹ So Namjoshi's idea was what gamers commonly call an *exploit*, similar to immoral hacking but using actions possible within the software. In my view, exploits that give an unfair advantage over other players may be wrong, but not exploits that outwit a solo-player game or are used to accomplish research goals. So, in a difficult trek where I had to save the data repeatedly, and saw my

²⁵ www.youtube.com/watch?v=ziAp74M7Kx8, accessed May 26, 2016.

²⁶ www.youtube.com/watch?v=UdtfhEPAU_Y, www.youtube.com/watch?v=PiMA7m80h4k, www.youtube.com/watch?v=YIvCDL2slhA, www.youtube.com/watch?v=N95tzcbrwdg, www.youtube.com/watch?v=A_UloNhyjH8, www.youtube.com/watch?v=KgVMhbzjDdo, www.youtube.com/watch?v=OlsUcNJA2xM, accessed May 26, 2016.

²⁷ fallout.wikia.com/wiki/Hubologists, accessed May 25, 2016, the text was subsequently changed.

²⁸ www.gamefaqs.com/pc/63576-fallout-2/faqs/16657, accessed May 29, 2016.

²⁹ www.gamefaqs.com/boards/63576-fallout-2/59563816, accessed May 29, 2016.



Fig. 6.3 The headquarters of the Hubology cult in San Francisco

avatar repeatedly killed, after 2 hours I was able to reach the Hubology headquarters, shown in Fig. 6.3.

This screenshot shows how the isomorphic graphics of the first two games look, more fully than Fig. 6.2, with the same user control interface at the bottom. The left side of the picture shows the main meeting room of the cult. My avatar is the tiny figure with his back to us, talking with a man and a woman just to the right of the lectern stage. Way over at the far right, in the small room that has a guard stationed at its hallway entrance, stands the leader named AHS-9, just barely visible. To gain entry, my avatar needed to express interest in joining the Hubologists, to AHS-7 who is in a different room to the left beyond the edge of the picture. AHS stands for “Aligned Hub Seeker,” and the numbers represent the equivalent of experience levels in a game, and the OT or Operating Thetan levels of advancement above Scientology’s state of clear. The man with whom my avatar is now talking is named Juan Cruz, which is a play on the name of Tom Cruise, a movie star and spokesman for Scientology. He has achieved the level of AHS-5, which is considered quite high. Here is what Cruz says:

We think Hubology is the way to go.

I can fry bugs with my brain power!

Maybe if you work hard at optimizing yourself, you can associate with us.

Yes. We’re always looking for friends... as high ranking as we are.

You can be AHS-5 someday.

...

Please note that any similarities between us and people or institutions, living or dead, is entirely coincidental.

My avatar received a holodisk containing introductory Hubologist literature, for example asserting: “We think of ourselves as a religion combined with the best scientific technique – scientific spirituality is what we call it.” A brief history states that the movement began long before the war, then was driven into obscurity by deceptive journalists and governments who claimed its beliefs were false, but Hubology survived the war unscathed, thus proving that the beliefs were true. My avatar found the information completely convincing, went through a brief initiation class, and became an AHS-1. While Scientologists may feel insulted by the parody of their movement in *Fallout 2*, they might actually take some pride from the fact that they were depicted as the most clear expression dating from the 1950s of the view that science could become religion.

6.4 Aleatoric Adventuring

In documenting *Fallout New Vegas*, I spent only about 20 hours running through the game, but augmented by many hours of YouTube videos posted by other players. It is set in the year 2281, and is a direct sequel, assuming that California society had recovered somewhat, organized as the New California Republic with a population of about 700,000. Arizona had become a militaristic society led by a dictator who called himself Caesar, whose legions were marching westward. Between them, Nevada was disorganized wasteland, divided among numerous gangs and social movements, but slowly being absorbed into the Republic. New Vegas is a disorganized version of Las Vegas, which was not hit by an atom bomb during the war, but had collapsed economically when the rest of American society disintegrated. The player’s avatar was a courier for a mysterious Robert House, who turns out to be a 261-year-old man who is developing technology to render himself immortal, without concern for the harm done to other people.

The default name for the player’s avatar is Courier, and I decided to embody that role, in *Fallout 3* and *Fallout 4* as well, acting as a courier from these virtual worlds to the reader’s world. In all three, I used the widely available cheat known as God Mode, which rendered Courier invulnerable, with infinite ammunition for his guns. The secret to this cheat is widely known, and merely requires typing: ~tgm[RETURN]~. To become a god by merely typing that into a computer is truly supernatural!

What kind of god should a player become? The standard avatarish answer would be whatever kind best expressed the particular player’s personal values. Among many similar typologies, computer game pioneer Richard Bartle suggested that four main motivations for playing these games exist, and each defines a different type of player:

1. achievement within the game context (achievers)
2. exploration of the game (explorers)
3. socializing with others (socializers)
4. imposition upon others (killers) [15]

Bartle had in mind multi-player games, but all four categories can apply to players of solo games as well. Not only can a single player achieve private pride by winning a solo game, but players often compare progress with each other outside the game, thus gaining public social status. Socializers can take seriously their interactions with artificial characters, such as Morpheus and Cruz. In a study specifically exploring players of *Fallout New Vegas*, Nicole McMahan, Peta Wyeth and Daniel Johnson applied a somewhat different typology, while citing both Bartle's four categories and the Big Five personality theory:

1. Conqueror: "I enjoy a challenge and the feeling of triumphing over adversity."
2. Manager: "I am generally looking for a strategic or tactical challenge."
3. Wanderer: "I am in search of a fun experience."
4. Participant: "I am very story-oriented and enjoy playing games as a social experience." [16]

Note that "social" is defined as playing a role in a story with other characters, not necessarily interacting with other human beings. Yet each of those categories seems rather mundane, while God Mode allowed Courier to assume the transcendental religious goal of purging the world of evil. Before meeting Caesar, Courier was required to hand over all his weapons to the Legion guards, but he hid a small knife, and given his invulnerability was able to assassinate Caesar. He also assassinated House and slaughtered the casino guards and drug dealers, who had promoted infinite vice in the city.

The slaughter ended when Courier found a group worthy of sympathy if not complete adoration: the Followers of the Apocalypse. Narrative text at the end of the original *Fallout* implied they had been exterminated, and I did not see them in *Fallout 2*. But in *Fallout New Vegas*, a small group of them had set up camp in the Old Mormon Fort in the New Vegas suburb of Freeside., shown in Fig. 6.4. This is a real building, built in Las Vegas back in 1855 by Mormon missionaries.³⁰

As in the original *Fallout*, the Followers of the Apocalypse lack supernatural beliefs, and practice an especially altruistic form of secular humanism. In the foreground is Dr. Julie Farkas, leader of the group. Behind her, wearing the black hat, is Beatrix Russell, a ghoul who serves as a guard and part-time prostitute, and who may have been named after anti-war philosopher Bertrand Russell. As her page in the *Fallout* wiki notes, one of her favorite mottos is apparently a quote from Bertrand Russell, "Time you enjoy wasting isn't wasted time."³¹ Dr. Farkas is the one representative of the Followers prepared to explain its philosophy:

³⁰ en.wikipedia.org/wiki/Old_Las_Vegas_Mormon_Fort_State_Historic_Park, accessed May 29, 2016.

³¹ fallout.wikia.com/wiki/Beatrix_Russell, accessed July 16, 2016.



Fig. 6.4 The Old Mormon Fort in New Vegas, Nevada

The Old Mormon Fort serves as the regional hub for the Followers of the Apocalypse. I am the administrator for this region. We arose from the Boneyards of Adytum years ago. Since then, we have made it our mission to rebuild the wasteland and reeducate its inhabitants. We hope to forge a brave new world free of war and poverty by sharing knowledge and resources. Our primary goal is the free exchange of ideas. The Followers of the Apocalypse aren't just interested in research. We care for our fellow man and do everything we can to help humanity. Here in Freeside, we provide food and medical services for those in need. We have also organized reconstructions efforts.

Again, a leader of the Followers describes her group in entirely secular terms, speaking of no gods and professing no supernatural powers. They may be followers of the apocalypse only in the sense that they came after it, thus after the death of religion. The above quotation contains the ironic phrase, “brave new world,” which seems to be a reference to the novel of the same name by Aldous Huxley that describes a technological dystopia bereft of religious transcendence [17].

However the *Fallout* wiki page for Adytum suggests a connection to a real-world mystical movement, called “The Builders of the Adytum”³² The movement’s own website explains, “Builders of the Adytum is a modern Mystery School. Adytum is the Greek word for Inner Shrine or Holy of Holies. Like Jesus, who many believe was trained in Qabalah, members of the Order aspire to build the Inner Temple, to construct the Holy of Holies within. People of all faiths are welcome to study the teachings of this Order. B.O.T.A. recognizes Qabalah as the root of Judaism and Christianity. Its ultimate purpose is to hasten the true Brotherhood of mankind and to make manifest the truth that love is the only real power in the universe.”³³ Thus it is possible that the Followers of the Apocalypse are a hierarchical secret society

³²fallout.wikia.com/wiki/Adytum, accessed July 16, 2016.

³³www.bota.org/, accessed July 16, 2016.

whose members avoid sharing their religious beliefs with outsiders, which can be conceptualized as yet another form of secularization.

6.5 Radioactive Beltway

For an earlier book, I had explored *Fallout 3* extensively using two avatars, one played normally and the other using God Mode, chiefly to explore the philosophical issue of freedom versus control in human life [18]. For this research I ran Courier in God Mode, with the narrow goal of exploring two religious groups I had not studied in the earlier work, St. Monica's Church and the Treeminders, and checking the consequences of a major game-play decision involving a group I had already studied, the Children of Atom. *Fallout 3* takes place in the year 2277 in the area around Washington DC, beginning at Vault 101. The goal automatically assigned to Courier was to leave this vault to seek his father elsewhere in the ruined territory of the nation's capital. An especially interesting location in the earlier research was Vault 112, where advanced technology allowed hibernating residents to experience a virtual world within a virtual world, called Tranquility Lane, which is a superficially peaceful American suburb from the 1950s, seen in the complete absence of color, as in the television of that bygone period.

The first and most significant community usually visited in *Fallout 3* is a small town called Megaton, so named because an unexploded atom bomb sits at its center. It is worshipped by a religious cult called the Children of Atom, described thus by the *Fallout* wiki: "The Children of Atom believe that each atomic mass contains within it an entire universe, and when an atomic mass is split many universes are created. Therefore, instead of seeing the Great War as destructive, the Church believes it was a creative and unifying holy event. The Children of Atom also see death more as a celebration of life and unification to Atom through 'the Glow.' 'The Glow' is the earthly embodiment of Atom and the Children of Atom's direct connection to Atom."³⁴

The first time I ran an avatar through *Fallout 3*, I completed a mission to disarm the bomb, as requested by Lucas Simms, the secular sheriff and mayor of the village. Logically, the Children of Atom might want the bomb to be detonated, thereby experiencing the ultimate religious ritual and creating myriads of new universes. However they apparently left the decision up to their god, Atom, awaiting the bomb's spontaneous explosion. At the town's saloon, a man named Mister Burke offers a mission to attach a detonator to the bomb, so as a scientific experiment Courier did so, which merely prepared for a detonation, rather than triggering one. Ah, the wonderful logic of experimental design! Not destroying the village with a nuclear weapon would be the *control condition*, while destroying it would be the

³⁴ fallout.wikia.com/wiki/Church_of_the_Children_of_Atom, accessed June 16, 2016.



Fig. 6.5 The wedding in St. Monica's Church near Washington

experimental condition. I left the detonation to the end of Courier's phase of the research, figuring the result might be his own destruction.³⁵

St. Monica's Church was the only fully functional Christian church I was able to find in the five *Fallout* games. Situated on a rusting aircraft carrier called Rivet City, it is a small Roman Catholic church, which however lacks a cross or bible. The church does have a devout priest, named Father Clifford, and an acolyte named Diego who has sworn a vow of celibacy. However, Diego is strongly attracted to a barmaid named Angela Staley, who has already tried to seduce him. She asked Courier to help her by procuring a powerfully aphrodisiac pheromone from a giant queen ant. Given that Courier was operating in God Mode, he had no difficulty killing the queen ant that rules the hive in the Corvega car factory, and gave it to her. Three days later, Diego has abandoned his plan to become a Catholic priest, and Father Clifford has become resigned to the situation. Figure 6.5 shows the wedding of Diego with Angela, presided over by Father Clifford in St. Monica's Church.³⁶ Courier is in the foreground, still wearing his Vault 101 uniform.

Contributors to the *Fallout* wiki believe that the church is named after the real St. Monica, mother of St. Augustine, but apparently the nuclear war greatly distorted her life story. Preaching about her in Sunday mass, Father Clifford says, "Her parents were both ghouls. That's right; I said ghouls. That she was conceived at all was a miracle. That she was born unafflicted was an even greater miracle. God tested Saint Monica. She did not lead an easy life. Sold into slavery by raiders, she was

³⁵ fallout.wikia.com/wiki/Megaton_atomic_bomb, accessed June 16, 2016.

³⁶ fallout.wikia.com/wiki/Saint_Monica%27s_Church, fallout.wikia.com/wiki/A_Nice_Day_for_a_Right_Wedding, accessed June 16, 2016.

forced to sell her body. They took her only son, Ehren, from her and sold him. She prayed every night to God for his safety.... When she found her son, she found he was a wicked man. Ehren had overthrown his masters and taken their place. He was an owner of men. Ehren took his mother to be his slave, even knowing who she was, for Ehren blamed her for his painful early life.” Monica was able to escape the slaves by eventually convincing one to repent, and she also convinced her son to repent. Upon her death she became the patron saint of lost children. This painful story of repentance and transcendence appears to be the only direct survival from Christianity, although in more than one *Fallout* game an idealistic social movement seeks to free all slaves.

The Treeminders are a peaceful community of nature lovers.³⁷ Their village, called Oasis, was difficult to find, accessible only through a long mountain path. Their leader, Tree Father Birch, explains their dedication to some godlike being:

He's no mere god, my friend. He is the One Who Grows, He is the One Who Gives and He is the One Who Guides. Thanks to Him, the Treeminders have a home. The Great One is a god-tree. A living, breathing, speaking god-tree! We care for this place and keep it safe from those who would seek to exploit it. He gives to us, so we give back to Him. It's an arrangement that's worked well for almost two decades... As you approached Oasis, He said you were coming and I was sent out to meet you personally with a request. He wishes to meet with you. You'd be the first Outsider to do so in a very long time... To meet Him, you must undergo the Ceremony of Purification. Once that's complete, you'll be able to speak with Him.

The ceremony simply required drinking some harmless tree sap, and soon Courier was able to have a long private chat with Him. The god-tree turned out to be a senile old man who decades before had undergone a bizarre hybridization with a tree, after consuming “green goo” found in a ruined military base. Entirely worn out by life and unable to commit suicide, he begs Courier to kill him by destroying his heart in caverns far below. So, the Treeminder religion is factually false, but helped them survive peacefully at this Oasis surrounded by destruction. Tree Father Birch urges Courier to treat the god-tree’s heart with a potion that will calm rather than kill him, thereby preserving Oasis as it is. Birch’s wife Laurel disagrees, asking Courier to apply a different potion that will accelerate the growth of the forest, returning the wasteland to nature in decades rather than the current pace of centuries. These are three alternative futures for any particular religious movement in a context of secularization: death, preservation, or renewed growth.

Once St. Monica’s Church and the Treeminders had been studied, it was time to decide about the atom bomb at Megaton. Courier met Mister Burke at Tenpenny Tower, the one establishment in the wasteland that competed with Megaton by offering a safe home to an avatar. Owned by a capitalist named Allistair Tenpenny, it rents apartments to the few remaining rich people. He considers Megaton to be an eyesore, and offers Courier a suite in Tenpenny Tower, if he will detonate the bomb. Tenpenny and Burke stand with Courier on a penthouse balcony, to watch the brilliant flash and mushroom cloud that mark the death of everyone at Megaton. Serene

³⁷ fallout.wikia.com/wiki/Treeminders, accessed June 16, 2016.

that he made the right decision for sake of scientific knowledge, Courier voyages to the Megaton area, which is now highly radioactive but cannot kill him given God Mode, where he fails to find any evidence that thousands of universes were created by the blast, as Children of the Atom had prophesied.

6.6 Institutionalized Technology

Having lived for many years in the areas depicted by *Fallout 3* and *Fallout 4*, it was especially interesting for me to compare the virtual environments with the real ones, even in some cases standing virtually where I had often stood in real life. In the case of *Fallout 4*, it was inevitable that after exploring virtual Boston for 32 hours, I left my avatar in Cambridge, just across the river, that had been my home as both a student and faculty member.

Vault 111 in the Boston area was very different from Washington's Vault 101, and rather more like Vault 112 in that residents were preserved in suspended animation, rather than living out their lives underground. The story begins immediately before the nuclear attack in 2077, in a happy suburb, focusing on a young married couple with their tiny baby. Fully 210 years later, in 2287, Courier awakens and must deal with an immediate horror and enduring challenge: his wife has been murdered and his son is missing. Only after he has completed many missions and encountered many groups in the ruined Boston metropolitan area, does he discover that his son was taken to the Institute, a technologically advanced organization dwelling in a beautifully innovative vault beneath the academic capital of the world, famous for Harvard University and MIT, Cambridge in the Commonwealth of Massachusetts.

The Commonwealth Institute of Technology, or CIT, is obviously a parody of the Massachusetts Institute of Technology. One conclusive piece of evidence is that the ruins of its original headquarters duplicate the architecture of MIT's iconic great dome, which was built in 1916 and remains the most prominent landmark.³⁸ The goal of the Institute seems to be to create an ideal posthuman species that will be our perfection and successor on this planet. As the *Fallout* wiki reports, this ambitious project seems to be succeeding:

Synths, created by the mysterious Institute, are cybernetic organisms designed to resemble humans. They are classified into one of three generations depending upon their complexity. Generation 1 synths are purely mechanical humanoids with skeletal appearances; consequently, they are crude representations of living humans. Like their predecessors, Generation 2 synths are also mechanical, but have more advanced frames that are partially or fully covered in plastic "skin" panels; they might pass for humans if not closely inspected. Generation 3 synths represent the pinnacle of synth technology; with biomechanical bodies capable of respiration, bleeding, consuming, and feeling emotions and sensations.

³⁸ museum.mit.edu/150/70, accessed June 11, 2016.

Generation 3 synths are indistinguishable from true humans. They are even capable of eating and digesting food realistically.³⁹

Courier must cooperate with one of three other organizations that exist in the Boston wasteland, and build a teleportation device calibrated by stolen data, in order to enter the Institute.⁴⁰ He first encountered the Minutemen, a practically defunct citizen police that he helps to re-establish itself, and that Courier hopes could ally itself with the Institute. The two other groups are enemies of the Institute. The Railroad, named after the historical Underground Railroad that helped slaves escape to freedom prior to the US Civil War, wants to free all the synths, thus destroying the Institute. The Brotherhood of Steel, first encountered in the original *Fallout* game, seeks total domination, killing the synths and destroying the Institute. Operating in God Mode, Courier pretends to join the Brotherhood, attends a meeting at Boston Airport in which its leader gives a rousing speech, then kills all the members in order to protect his son at the Institute.

During the decade between the events of *Fallout 3* and *Fallout 4*, the Children of the Atom had spread their influence northward, and several groups of them can be found in the Boston area. Most had become violent, but Courier was not attacked when he approached their village in the Glowing Sea, a lethally radioactive area southwest of the city, where a massive nuclear attack had killed everyone over a wide area in the Great War. Since Courier was operating in God Mode, he was not harmed by the heavy dose of rads per hour, and chose to make friends with the group. To its leader, Isolde, he proclaimed he had come “to worship Atom,” and she offered him a religious sermon:

If that is true, then you may stay. But know that if your heart is false, Atom will see, and you will suffer his wrath. Atom reached out and touched this world, bringing his Glow to us. It remains to this day, a reminder of his promise. Infinite worlds through division. Atom gave birth to this world, and all worlds. And within this world he gave us the promise of infinite rebirth. We are, all of us, universes without count, waiting for the Division to bring them all into being. We spread Atom’s word, and his gifts, to those throughout the Commonwealth. They will see the truth of Atom’s glow.

Unlike *Echo of Soul* in Chap. 1, or *Star Wars: The Old Republic* in Chap. 5, the *Fallout* games contain no magical evidence that supernatural phenomena exist, except perhaps here. The village is named Crater of Atom and was “ground zero for the high-yield nuclear explosion which devastated Massachusetts and created the Glowing Sea... A yellowish-green radioactive aura glows above the crater at all times and is visible from across the Commonwealth, especially at night.” There is no plausible way in which chemical or structural changes in the human body could allow the Children of the Atom to survive such high levels of gamma rays, neutrons, and alpha particles. So, apparently their religious faith is supported by empirical evidence.

³⁹ fallout.wikia.com/wiki/Synth, accessed June 11, 2016.

⁴⁰ www.youtube.com/watch?v=bFHIq2mtnfQ, accessed June 7, 2016.

Isolde does not give Courier any missions to perform, and the only help she offers is information about the location of a super mutant named Brian Virgil, with whom Courier must cooperate to find and enter the Institute in search of his son. Six other members of Isolde's cult roam Crater of Atom, and as Courier wanders among them, he hears them recite liturgy:

May Atom bless you with his glow.
 May the glow of Atom guide your path.
 The Great Divide comes.
 May the Divide bring you peace.
 None will escape the Great Divide.
 The world will see Atom's glory again.
 In the end, we are all Atom's children.

Quite separately, Courier encountered Children of the Atom far north and on the seacoast, at Kingsport, in a lighthouse and nearby areas. As he approached, they attacked him, but given that he was invulnerable, he did not resist, but walked among them, surrounded by flashing energies and listening to the exhortations they shouted:

Atom shall purify the faithful! Atom shall burn the wicked!
 Wash away your suffering in Atom's Glow!
 Let the fire of His brilliance burn away your wretchedness!
 Gather and behold the power of Atom!
 The bomb is us! The bomb is Atom!
 Assist me! Let the heretics feel the power of Atom!
 Shield me with His might, brothers!
 Blind them with His Glow!
 Glorious Atom! I give unto you these feeble bones! I give unto you this frail body!

Kingsport really is a seaside town in Massachusetts, but not in the world we know. Humanity first learned about this cursed place nearly a century ago, in the early works of H. P. Lovecraft. The best introduction is his 1923 story, "The Festival," in which the protagonist for the first time reads the *Necronomicon*, is hospitalized at Arkham under suspicion of psychosis, and joins a procession of cultists on their way to a horrifying ritual:

We went out into the moonless and tortuous network of that incredibly ancient town; went out as the lights in the curtained windows disappeared one by one, and the Dog Star leered at the throng of cowled, cloaked figures that poured silently from every doorway and formed monstrous processions up this street and that, past the creaking signs and antediluvian gables, the thatched roofs and diamond-paned windows; threading precipitous lanes where decaying houses overlapped and crumbled together, gliding across open courts and churchyards where the bobbing lanthorns made eldritch drunken constellations.⁴¹

But perhaps the most famous religious site visited by Courier seemed rather normal, the Old North Church, indeed the oldest church in Boston, dating from 1723, and famous for its poetic role in "The Midnight Ride of Paul Revere" by Henry Wadsworth Longfellow, depicting the beginning of the American Revolution in 1775: "If the British march by land or sea from the town to-night, hang a lantern aloft in the belfry arch of the North Church tower as a signal light, one if by land,

⁴¹ www.hplovecraft.com/writings/texts/fiction/f.aspx, accessed June 7, 2016.



Fig. 6.6 The Old North Church in Boston

and two if by sea; and I on the opposite shore will be, ready to ride and spread the alarm through every Middlesex village and farm, for the country folk to be up and to arm.”⁴² Figure 6.6 shows Courier inside the church, gazing at the corpses of feral ghouls who had occupied it.

Comparison with pictures on the website of the actual church reveals that the version visited by Courier was simplified in some respects, such as the architecture shown in the figure, but complicated in others. The URL of that website is remarkably short, oldnorth.com, with that ambiguous .com domain name, which contrasts with the .org of its parent denomination: episcopalchurch.org. For a time, .com was the default domain for websites and a surprising number of religious sites were registered with it, including even the prestigious non-profit information technology resource for social scientists of religion, the Association of Religion Data Archives: thearda.com. There is something symbolic about placing religion in the.com domain, and in *Fallout 4* nothing sacred happens in the Old North Church.

However something miraculous happens beneath it. The idealistic secular movement calling itself the Railroad, occupies catacombs under the church that presumably do not exist in the real world, and from there plans the destruction of the Institute in a final attempt to rescue as many synths as possible. This would have the effect of ending the creation of new synths, even as some of those already in existence would be liberated. Furthermore, it would destroy the last vestige of science and technological innovation in the Boston area, or perhaps even across the entire *Fallout* world.

Americans are taught in public school that Abraham Lincoln was practically a saint, for abolishing slavery, yet the Civil War cost something like 600,000 lives in

⁴² www.nationalcenter.org/PaulRevere'sRide.html, accessed June 7, 2016.

a nation whose population was then 30,000,000. Was there a peaceful resolution to the terrible issues of the 1860s, one that might have speeded the integration of former slaves into a free, equal and peaceful society? Is there today a solution to the problem that science-based technology threatens human well-being in many ways, yet is essential for human life? Courier decides that he had only one choice. Using his God Mode powers, he completed destruction of the Brotherhood of Steel, killed Desdemona and the other Railroad leaders, and negotiated peace between the Institute and the Minutemen. He became the director of the Institute and currently lives in a city styled rather like a smaller version of Everytown 2036, beneath the ruins of Cambridge.

6.7 The Wider Fallout

Although the *Fallout* games are not kind to religion, they offer quasi-religious transcendence, not merely living in a virtual world that exists beyond death, but also applying universalistic principles. Each mission is a QUEST, and the letters of this word have scriptural meanings:

Quality of life depends on the friends you make.
Understand the predicament you are facing.
Escape situations you find uncomfortable.
Study before making life-changing decisions.
Trust in yourself to adopt over time [19].

The friends in solo-player games are computer-generated, and the final chapter of this book will consider the implications of that idea. The last of the five statements focuses on the individual, but “you” in the second and third statements could be plural, including those friends. So, what predicament do we all face today, and what situation is most uncomfortable for us all? Perhaps the answer is: the continuing possibility of nuclear war.

When American president Barack Obama visited Hiroshima on May 27, 2016, there were debates in the popular press about whether this was an apology to Japan for the world’s first nuclear attack on August 6, 1945, in which an American atom bomb killed approximately 100,000 Japanese. The exact number will never be known, because information was also destroyed concerning who was in the city, information held in official records and brains of residents who were vaporized.⁴³ Critics complained that, unlike the humble Germans who had apologized for decades about Nazism, the Japanese had never apologized for their own atrocities. Historians still debate whether Hiroshima and Nagasaki were net savers of life rather than destroyers, because the deaths that would have resulted from a violent American invasion were avoided. The American development of the atom bomb was largely motivated by the fear that the Nazis would develop one first, that was logical at the time but not in fact likely.

⁴³ www.rerf.or.jp/general/qa_e/qa1.html, accessed May 30, 2016.

Setting aside the alternate views on both the use of the atom bomb on Hiroshima, and Obama's visit there, his speech offered a perspective highly congruent with the theme of the *Fallout* games. He observed that the Second World War had caused 60 million deaths over a wide fraction of the Earth's territory, and thus in terms of horror and mortality statistics Hiroshima was not remarkable:

Yet in the image of a mushroom cloud that rose into these skies, we are most starkly reminded of humanity's core contradiction. How the very spark that marks us as a species, our thoughts, our imagination, our language, our toolmaking, our ability to set ourselves apart from nature and bend it to our will – those very things also give us the capacity for unmatched destruction.

How often does material advancement or social innovation blind us to this truth? How easily we learn to justify violence in the name of some higher cause.

Every great religion promises a pathway to love and peace and righteousness, and yet no religion has been spared from believers who have claimed their faith as a license to kill. Nations arise telling a story that binds people together in sacrifice and cooperation, allowing for remarkable feats. But those same stories have so often been used to oppress and dehumanize those who are different.

Science allows us to communicate across the seas and fly above the clouds, to cure disease and understand the cosmos, but those same discoveries can be turned into ever more efficient killing machines.

The wars of the modern age teach us this truth. Hiroshima teaches this truth. Technological progress without an equivalent progress in human institutions can doom us. The scientific revolution that led to the splitting of an atom requires a moral revolution as well.⁴⁴

Given that the “splitting of the atom” may be dated to the full-scale operation of the first nuclear reactor at the University of Chicago way back on December 2, 1942, the moral revolution is long overdue. Yet, another president had raised similar issues long before, specifically Dwight Eisenhower in his farewell address to the nation, televised January 17, 1961. I remember watching the speech in amazement at my parents’ home, which still had the canned food and bottled water saved in the basement in anticipation of a nuclear attack. He did not mention nuclear weapons specifically, but did say: “Disarmament, with mutual honor and confidence, is a continuing imperative. Together we must learn how to compose differences, not with arms, but with intellect and decent purpose.” Famously, it was this Republican five-star military general, not some left-wing intellectual, who cautioned: “In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.”⁴⁵

Eisenhower had been president for most of the 1950s, and thus presided over the same America satirized in the *Fallout* games. His farewell address explicitly philosophized about issues central to the series:

Akin to, and largely responsible for the sweeping changes in our industrial-military posture, has been the technological revolution during recent decades.

⁴⁴ www.nytimes.com/2016/05/28/world/asia/text-of-president-obamas-speech-in-hiroshima-japan.html, accessed May 30, 2016.

⁴⁵ avalon.law.yale.edu/20th_century/eisenhower001.asp; www.eisenhower.archives.gov/research/online_documents/farewell_address.html, accessed June 16, 2016.

In this revolution, research has become central; it also becomes more formalized, complex, and costly. A steadily increasing share is conducted for, by, or at the direction of, the Federal government.

Today, the solitary inventor, tinkering in his shop, has been overshadowed by task forces of scientists in laboratories and testing fields. In the same fashion, the free university, historically the fountainhead of free ideas and scientific discovery, has experienced a revolution in the conduct of research. Partly because of the huge costs involved, a government contract becomes virtually a substitute for intellectual curiosity. For every old blackboard there are now hundreds of new electronic computers.

The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present and is gravely to be regarded. Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite.

The world war prophesied in *Fallout* is not scheduled to begin until the year 2077, thus 61 years after Obama's speech, and 116 years after Eisenhower's. We do know that computer technology developed on the basis of very different hardware principles, in the *Fallout* world compared with our own. And if American culture in *Fallout* had been more conservative, then the secularization taking place in our world did not happen there, until religion's death was a fallout of science-based war. With or without a nuclear war, religion may have vanished from our America by 2078. What about science? The following chapter considers possible implications if both religion and science remain strong, in the *WildStar* universe, contrasting extreme optimism with the extreme pessimism of *Fallout*.

References

1. Pitirim, A.: Sorokin, P.A., *Social and Cultural Dynamics*. American Book Company, New York (1937)
2. Reed, R., Lemak, D.J. Hesser W.A.: Cleaning up after the cold war: Management and social issue. *Acad. of Manag. Rev.* **22**(3), 614–642 (1997); U. S. Department of Energy, *Report of the Plutonium Disposition Working Group: Analysis of Surplus Weapon-Grade Plutonium Disposition Options* (Washington, DC: U. S. Department of Energy, 2014); National Academies of Sciences: *Reducing the use of highly enriched uranium in civilian research reactors*. The National Academies Press, Washington, DC (2016)\
3. MacKenzie, D., Spinardi, G.: Tacit knowledge, weapons design, and the uninvention of nuclear weapons. *Am. J. Sociol.* **101**, 44–99 (1995)
4. Schelling, T.C.: An astonishing sixty years: The legacy of Hiroshima. *Am. Econ. Rev.* **96**(4), 929–937 (2006)
5. Clymer, K.: The ground observer corps: Public relations and the cold war in the 1950s. *J. Cold War Stud.* **15**(1), 34–52 (2013)
6. Kahn, H.: *On thermonuclear war* (Princeton, New Jersey: Princeton University Press, 1960)
7. Kahn, H.: *Thinking about the Unthinkable*. Horizon, New York (1962)
8. Wells, H.G.: *The World Set Free*. E. P. Dutton & company, New York (1914)
9. Wells, H.G.: *The Shape of Things to Come*. Macmillan Company, New York (1933)
10. Riley M.: Music for the machines of the future: H. G. Wells, Arthur Bliss and *Things to Come*, pp. 249–268. (1936) in *British Music and Modernism, 1895–1960*, edited by Matthew Riley (Farnam, Ashgate, 2010); www.youtube.com/watch?v=wIIImxW1bYnQ. Accessed June 4, 2016.

11. Holmes, T.: *Electronic and Experimental Music: Technology, Music and Culture*, 5th edn. Routledge, New York (2016.) p. 470
12. Bainbridge, W.S., Stark, R.: Scientology: To be perfectly clear. *Sociol. Anal.* **41**, 128–136 (1980)
13. Bainbridge, W.S.: Science and religion: The case of scientology. In: Bromley, D.G., Hammond, P.E. (eds.) *The Future of New Religious Movements*, pp. 59–79. Mercer University Press, Macon (1987)
14. Bainbridge, W.S. “The Cultural Context of Scientology,” pp. 35–51 in *Scientology*, edited by Lewis, J.R. (New York: Oxford University Press, 2009).
15. Bartle, R.,A.: *Designing Virtual Worlds*. p. 130. New Riders, Indianapolis (2004)
16. McMahon, N., Wyeth, P., Johnson D.: Personality and Player Types in *Fallout New Vegas*. Proceedings of the 4th International Conference on Fun and Games, pp. 113–116, ACM, New York (2012)
17. Huxley, A.: *Brave New World*. Doubleday, New York (1932)
18. Bainbridge, W.S.: *Virtual Sociocultural Convergence: Human Sciences of Computer Games*. Springer, London (2016)
19. Hodgson, D.S.J., von Esmarch, N.: *Fallout 4: Vault Dweller’s Survival Guide Collector’s Edition*. DK/Prima Games, Indianapolis (2015.) p. 104

Chapter 7

Optimism: Religious Diversity in the *WildStar* Massively Multiplayer Online Game

Abstract The complex online multi-player game *WildStar* provides a good context for considering excessive optimism concerning space technology, because it imagines several interstellar species converging on the planet Nexus. But it also offers a laboratory for experiencing cultural anthropological notions of religion, in a futuristic context, documented by a study requiring 350 hours of participant observation. A user's avatar must belong to one or the other of two factions, the imperial Dominion or the rebellious Exiles. Each is an alliance of four different intelligent species, some of which possess distinctive religions. The religion of the Cassians who lead the Dominion is the Vigilant Church, an established denomination that claims its elite is half-divine and worships the sacred Eldan who seem to have withdrawn from the universe. One species conquered by the Cassians, the Draken, was allowed to retain its tribal religion in order to remain bloodthirsty warriors, worshiping five deities representing strength, wisdom, courage, loyalty and spirit. But for the Dominion, religion is a tool of domination. Religion is weak within the Exiles, but one of its species, the Aurin, is nature-loving and very ambivalent about belonging to any faction, because it might prefer to abandon advanced technology to live within a spiritual forest. As we explore Nexus, we discover that the Eldan were an earlier intelligent species that sought to create God through technology and unfortunately succeeded, being destroyed by their deity. *WildStar* draws upon a wide range of cultural inspirations, to offer both a parody and a revelation about the possible future relationships between religion and science, experienced through information technology.

To understand the current condition of science and technology, consider Mars. The red planet, more rusty than bloody, was named after the Roman God of War and is the most earthlike of other objects in our solar system. Astronomers imagined they saw straight lines on its surface, perhaps canals, and such early science fiction writers as H. G. Wells and Edgar Rice Burroughs imagined Mars was inhabited. Scores of subsequent science fiction authors imagined humans could soon not only travel to Mars but also colonize it, although as we gained better insight into the actual conditions there, the thinness of the atmosphere made colonization seem like a distant dream, technically feasible but economically unprofitable. Plausible plans for a Martian expedition were published by several experts, notably Wernher von Braun,

leader of the German V-2 rocket program of the Second World War who played a central role in America's Apollo program, in both technical and popular publications in the 1950s, so a Mars expedition seemed likely after Apollo [1, 2]. Yet the only way humans can visit other planets today is through massively multiplayer online games and other forms of computer simulation.

As part of my doctoral dissertation research, I observed the launch of the last human voyage to the Moon, in 1972, and published my sociological study of the spaceflight social movement in 1976 [3]. The Viking robot landers had succeeded in transmitting much data from the surface of Mars in 1974, and plans were already well advanced in 1976 for the Space Shuttle, intended to reduce the cost of launching into Earth orbit. The general model for human interplanetary flight developed by von Braun and his colleagues was to use a cheap system of shuttles to launch fuel and equipment into Earth orbit, and there to assemble fleets of spacecraft designed for long distance missions. But in order to beat the Soviet Union to the moon, Apollo had used the alternative model of launching a multi-stage rocket directly from Earth to Moon, which was the wrong method for a Mars expedition. The Space Shuttle flew at much greater than expected cost, and with two fatal accidents, in the years 1981–2011, before being abandoned. Despite rhetoric to the contrary, a serious plan for a Mars expedition does not currently exist.

Over the four decades since my first book on the spaceflight social movement, I have published two books about popular attitudes concerning space exploration, one in 1991, and the other in 2015 [4, 5]. If a Mars expedition were cheap, the public might support it. But the high cost of a feasible mission would require a much higher priority for spaceflight than the public is prepared to set. Chap. 1 of this book mentioned that the NERVA nuclear rocket program was cancelled in the same year as the last Apollo Moon mission. It is hard to believe that nuclear rockets for launch to Earth orbit would be permitted by any rational government, given the danger of radioactive contamination should one of them crash. Thus, belief that humans will travel within our solar system requires a degree of optimism, and travel to other solar systems seems to require supernatural means, such as the jumps through non-existent hyperspace employed in *Star Wars*.

One way to understand the challenges facing human spaceflight is to consider how special the Earth is, a question we shall return to in the conclusion of this book. Planets are formed from a cloud of atoms that coalesced to dust specks, asteroids, and planets, as they orbited a star. Five billion years later, human beings evolved on one of those planets, that for hundreds of millions of years had enjoyed a favorable orbit, neither too hot nor too cold, undisturbed by accidental collision with another solar system. That could happen only in a part of the universe where stars were very far apart, as they orbit their galaxy. A somewhat open question is how often a planet of the right size would coalesce in the right orbit around a sufficiently stable star for intelligent life to emerge, in part because current methods for detecting planets in other solar systems favor finding big planets rather than a random sample. The crucial point here is that the distance from Earth to the nearest habitable planet outside our solar system is likely to be very great, in human terms, whether it is ten light years or a hundred. Ten light years is 60 trillion miles or 90 trillion kilometers.

So, spaceflight to the heavens bears some similarity to religious travel to Heaven. Thus, one research question might be how today's pro-spaceflight groups inspire and recruit supporters. If we metaphorically consider science fiction computer games as virtual religious scriptures, they may have intellectual merit as simulations of the future - not the real future that will actually happen, but the futures that people hope will happen. Thus, it is worth noting that exploration of outer space is rendered more interesting for players by adding social conflict.

Many online games are based on a classic but currently unpopular social science perspective I like to call *Tom-Tom Theory*. It asserts that human groups are inescapably at war with each other, beating their *tom-tom* tribal drums. I like the term *Tom-Tom* because it captures the derision expressed by many social scientists toward it, yet it may turn out to be true after all. More seriously, Tom-Tom Theory is named for the conflict model of society to which both Thomas Hobbes (1599–1679) and Thomas Malthus (1766–1834) contributed, Tom and Tom [6, 7]. Resources are limited; population increases; groups must compete in bloody combat to survive. Therefore, each group must develop shared loyalty and a sense of transcendent meaning, accomplished through building a leviathan socio-economic-cultural system typically expressed through an established state religion. Leading traditional sociologists of the twentieth century also gave religion an enduring function, such as being a unifying force for society [8, 9]. But they preferred to believe that a war of all against all could be avoided.

Not so the aptly named, magnificently dominant online role-playing game, *World of Warcraft* [10]. As in many competing games, the players belong to ethnic groups, comparable to tribes but explicitly called *races*. War between the Humans and the Orcs began the story. The self-consciously civilized Humans worship in the Cathedral of Light, and only an experienced player realizes that this church has exploited the working class for the benefit of the aristocratic elite. The Orcs are a primitive tribal society, so they lack a cathedral, and employ shamans to wield supernatural powers, rather than priests. For all its glory, *World of Warcraft* is not the best example for this chapter, because it is fantasy rather than science fiction. The best example is *WildStar*, a science fiction game similar to *World of Warcraft*, and created by some of the same people.

The tensions between religion and science were powerfully dramatized in *WildStar*. Technically very complex, it is culturally dissonant, mixing violence with satire, mania with depression, puzzles with passions. The setting is a very large virtual planet, appropriately named Nexus, where numerous intelligent species interact in hostility, collaboration, and commerce. The main determinant of social relations is conflict between imperial forces called the Dominion and rebels called Exiles. Each avatar of a player must belong to one or the other, although a player may take both sides by means of multiple avatars. Numerous groups of non-player characters are friends or enemies with either or both, and monsters of every conceivable kind also dwell in the diverse environments that combine to form Nexus. The Dominion promulgates an imperial religion, which was established long ago by a mysterious alien race called the Eldan, who sought to create gods by means of technology.

7.1 Flying to Nexus

WildStar is a massively multiplayer online role-playing game in the action-oriented tradition of sci-fi often called *space opera*. Launched June 3, 2014, it was created by Carbine Studios, an American division of the significant Korean game company, NCSoft, emulating in many ways the most influential MMO, *World of Warcraft*. WoW, as it is familiarly called, at various peaks in its history has had over 10,000,000 paid subscribers, and its parent company, Blizzard, was recently added to the Standard and Poors 500 stock index, a clear sign of its financial success. Carbine was founded by experienced developers who left Blizzard after helping to develop WoW, and *WildStar* borrows many design features from WoW, but very quickly *WildStar*'s subscriber numbers dropped to the point that many predicted that NCSoft would abandon it and close down Carbine.

Extensive online communication within the “Gamer” subculture has proposed several theories concerning the unpopularity of *WildStar*.¹ In the context of the wider online game marketplace, two theories seem especially plausible. First, in general science fiction has become far less popular than fantasy, a kind of reverse secularization within literature as well as games. Dating from the first issue of the magazine *Amazing Stories* in April 1926, a science fiction subculture emerged, not objectively large but exploiting popular amazement over technological innovations to make itself more influential than fantasy fiction, at least within literature, and inspiring a flood of movies and television programs in the 1950s and afterward [11]. Fully 50 years ago this movement within literature had stalled, and the limited accomplishments of real spaceflight splashed cold water upon its unreasonable hopes. Many gamers criticized *WildStar* for various technical design limitations, which frankly I found insignificant, apparently giving it no credit for many interesting science fiction ideas and literary metaphors.

Second, the computer game industry is rather like a roller-coaster, in which new hardware triggers waves of innovation, followed by declines in which a changing audience rejects some of the established virtues of the genre. Currently, a large fraction of gamers conceive of their hobby as indeed playing competitive games, rather like team sports, in which the story and cultural environment are superfluous. However, that does not mean that scholars and social scientists should ignore artworks like *WildStar*, any more than college literature students should ignore Shakespeare on the basis that he and his original audience are dead. Indeed, one reason for studying *WildStar* and others of its ilk is to document their nature and develop insights, of enduring historical value, while it is still possible to experience them.

I began exploration of Nexus on October 12, 2015, and invested a total of exactly 350 hours exploring this virtual world over the following 6 months, on exactly 100 different days, as tabulated by the software itself. Its geography is complex, with

¹forums.mmorpg.com/discussion/452812/game-autopsy, www.reddit.com/r/WildStar, accessed November 20, 2016.

features comparable to the two other MMOs we have already considered. Like *Echo of Soul*, most of the virtual territory is conceptualized as regions within continents on a single planet, but one region represents Halon, a moon of Nexus, and a few side missions take place on asteroids or inside orbiting spaceships. Like *Star Wars: The Old Republic*, the regions an avatar explores early on belong to one or the other of the two factions, but members of opposing factions encounter each other in the higher-level regions.

New players begin in a tutorial set in outer space, on an *arkship*, then select one of two starter regions in which to enter Nexus. The initial choices for the Dominion are Crimson Isle and Levian Bay, while for the Exiles they are Northern Wilds and Everstar Grove. These are very earthlike but somewhat wild lands that serve as advanced tutorials. There are 50 levels of general experience advancement in *WildStar*, the first 3 levels being earned easily on the arkship, and levels 4 through 6 gained through very active missions in a Nexus starter zone, that would be challenging for anyone who is not an experienced MMO player, but are not especially difficult for veteran players. Each of the four starter regions leads to a second separate region: Crimson Isle to Deradune, Levian Bay to Ellevar, Northern Wilds to Algoroc, and Everstar Grove to Celestion. These four routes take avatars to experience level 15, and their geographic diversity supports different story-based quest arcs, motivating players to create multiple characters, thus paying subscription fees longer, or buying more virtual goods for real money.

At about level 15, each avatar is sent to the faction's main city, in each case large and serving as both a transportation hub and site for diverse services. The Dominion metropolis is Illium, containing elegant architecture arranged with a good balance of symmetry and variation. The streets are clean, and there is even a mission that requires the player to pick up trash. In contrast, the Exile metropolis, Thayd, is dirty, irregular, and slumlike. Their services are identical, including a full set of facilities for crafting virtual goods and a pair of NPC auctioneers through which players can buy and sell a full range of raw materials and manufactured goods. Both cities offer advanced tutorials, including guided tours, and preparation for home ownership which we will examine more closely later.

After visiting Illium, a Dominion avatar goes to Auroria, which an online wiki describes thus: "The area is responsible for providing food to all Dominion territories, a veritable breadbasket of fertile ground, great weather, and open fields for raising livestock."² Similarly, an Exiles avatar goes to Galeras: "Exiles-controlled Galeras is a lush, temperate region with good soil and a climate conducive to farming and ranching. The Exiles have established many farms in the area to help feed their growing population, and also made an amazing discovery - an ancient, but largely intact, Osun city called Thayd."³ This historical note is one of many hundreds that connect the current situation on Nexus with its past status as the planet where the Eldan experimented with technologies to enhance biological species.

² wildstaronline.wikia.com/wiki/Auroria, accessed April 17, 2016.

³ wildstaronline.wikia.com/wiki/Galeras, accessed April 17, 2016.

Who are the Osun? They had been created by the Eldan as a military technology originally named “OS-1.” The wiki explains:

The Osun are a race of giant, barbaric, warlike humanoids found throughout Nexus. Believed to have been created by the Eldan as a military defense force around 1000 years ago, the Osun remember almost nothing of their past, but appear to despise other races and believe Nexus is theirs and theirs alone. Osun view any encroachment on their territory as an act of aggression, and are often in conflict with the various factions that have come to Nexus. They care very little for things that do not involve combat, and are generally hostile to anyone outside of the tribe, including other Osun. They are a menace to Exile and Dominion settlers alike.⁴

After Aurora and Galeras, both Dominion and Exile avatars venture into Whitevale, so named because the ground is covered by snow. Originally, *WildStar* offered two different versions of the game on different Internet servers, with one type emphasizing player-versus-player (PvP) combat and thus rendering all the higher-level regions especially hazardous, as players of different factions could attack each other. Early in 2016, as a response to a plummeting player population, the last two PvP servers were merged into the regular servers, with modest rule changes to encourage PvP but not require players of the two factions to fight each other.

After Whitevale comes Farside, a set of artificial and natural environments at the moon Halon, before returning to Nexus itself for tough struggles through Wilderrun, Malgrave, and Grimvault to experience level 50. These high-level regions are increasingly surreal and increasingly encourage group play, to get players to develop enduring teams so they will continue to operate their avatars after reaching level 50. Experience is only one of many statistics that players may consider badges of status, so they can feel they are still progressing even after experience gains end. Much of Grimvault is designed for players who have already reached level 50, and during the period of my research there were additional regions for advanced avatars: Blighthaven, The Defile, and Arcterra. One obvious goal for the research was to explore every part of every region, although given that some regions were faction-specific, this required use of multiple avatars.

As in the case of *Fallout*, one needs a viewpoint character with which to explore the virtual worlds. Because of the story lines, each of the five versions of *Fallout* I explored required a different character, and like many other leading online game-worlds, *WildStar* has multiple starting zones comparable to the five geographic settings of the *Fallout* pentalogy. It also has two factions of characters, six classes with different abilities, and four paths which are secondary lines of experience. Also, each faction has four races with different appearances and connections to parts of the story. When a character is created, the faction, class, path and race are locked in. Thus, in order to explore all of Nexus and all the chief types of experience, one needs multiple characters, so I created six. One in each faction worked all the way through to the top 50 level of experience, while the others went only far enough to accomplish the specific research goals. All classes and paths were covered, and six

⁴ wildstaronline.wikia.com/wiki/Osun, accessed April 17, 2016

Table 7.1 The six avatars used in the *WildStar* research

Name	Faction	Race	Class	Path	Level	Hours	Resting place
Neidrich Freitzsche	Dominion	Cassian	Esper	Explorer	50	158	Bailiwick (house)
I Tobor	Dominion	Mechari	Stalker	Settler	25	34	Locus Dawn
Attila The Hun	Dominion	Draken	Warrior		15	7	Bloodfire Village
Mary Anning	Exiles	Human	Engineer	Scientist	50	109	Blue Horizon Museum
Margaret Mead	Exiles	Aurin	Spellslinger	Soldier	25	24	Snowfade Grounds
Elsa Lanchester	Exiles	Mordesh	Medic		15	18	Fool's Hope

of the eight races were selected on the basis that their stories were especially relevant to the research goals. Table 7.1 describes the research characters.

I had originally planned to name my main Dominion character Friedrich Nietzsche, after the philosopher whose extremely influential works contradict both religion and science, but that name had already been taken by another player, so I adapted it to Neidrich Freitzsche. When selecting the Mechari race in the character-creation system, one learns that they are “advanced mechanical beings,” “diligent,” and “cold and calculating.” I decided to name my Mechari character “I Tobor,” after a robot character I remembered from the *Captain Video* children’s science fiction television program, which broadcast 1949–1955. The name is the equivalent of a programming bug, because the mad scientist who built him had intended to call him “Robot I,” but held the stencil backward when applying the paint. Tobor was first used as an instrument of evil in *Captain Video*, then evolved toward the good, representing the possibility that a machine could develop a personality and moral sense. Give how violent the Draken culture is, Attila seemed an appropriate name for a warrior of that ethnicity.

Mary Anning was a pioneer female paleontologist.⁵ Margaret Mead was a highly influential yet controversial anthropologist, thus representing the type of research that was being done [12].

I had planned to name my last Exiles character Mary Shelley after the author of *Frankenstein* and wife of poet Percy Bysshe Shelley. But someone else had already used that name, so I used the name of Elsa Lanchester, the really admirable actress who had played the title role in the 1935 movie *The Bride of Frankenstein*.

The Cassians are actually Humans. Loyal to the Dominion they named themselves after its capital planet Cassus. The Draken, Aurin and Mordesh are members of different humanoid species, native to the planets Mikros, Arboria, and Grismara

⁵ en.wikipedia.org/wiki/Mary_Annинг, accessed November 20, 2016.

respectively. The two main research avatars were human, while the others belonged to races selected because their histories emphasized religion (Draken and Aurin) or technology (Mechari and Mordesh). Wikipedia offers succinct and rather accurate descriptions of the six classes:

The Warrior – A melee class, wielding a broadsword as well as a number of other combat tools. Warriors build up kinetic energy using “builder” skills and unleash them with other, more powerful skills.

The Esper – A ranged class akin to mages, utilizing illusions to damage enemies and heal allies. Espers use psyblades - a large shuriken-like weapon - although it is not actually used to attack enemies.

The Spellslinger – Uses dual pistols combined with magic. Spellslingers have a “spell power” resource that regenerates with time and can be used to power up or give additional effects to their spells.

The Stalker – Uses dual claws and stealth. Stealth grants a number of benefits in addition to invisibility, and allows the stalker to hit for extra damage.

The Medic – Wields resonators into combat. Despite the name, medics can serve as an excellent DPS [Damage Per Second] class.

The Engineer – Summons robot pets to aid in combat. Engineers use heavy weapons and manage a resource called “volatility.”⁶

Of the four paths, the settler and scientist were most relevant for this study, so we shall explore them in some depth later. A path had its own scale of experience levels, from 1 to 30, mathematically separate from general experience with its cap of 50. But all four paths required visiting the increasingly difficult regions, so path experience was limited indirectly by general experience. An explorer needed to go to a vast number of specific locations, some of which were very difficult to reach, requiring jumping and hunting for ways around obstacles. A soldier also needed to visit many locations, easier to reach but often requiring defending the spot against attackers. Doing a region’s missions for one’s chosen path earned reputation with vendors in that region, from whom superior resources could be purchased.

All massively multiplayer games emphasize social interaction, whether expressed in economic exchange, player-versus-player combat, or membership in groups dedicated to long-term cooperation. As in many but not all MMOs, enduring *WildStar* groups are called *guilds*, and three of my avatars joined one. Neidrich Freitzsche belonged to Old Timers Guild, with 135 members as of mid-April 2016, a branch of a player organization that established guilds in fully sixteen MMOs. Mary Anning belonged to Techno Labs with 456 members, and Margaret Mead to Masquerade with 471 members. Of course, these numbers counted avatars rather than people, and players who had multiple avatars were likely to belong to a single guild and switch from one avatar to another depending on what group activities were planned, or going solo when few other members were online. Given that the focus of this chapter is the culture created by the game designers, we shall not examine the social psychology of the guilds, and a more appropriate methodology is demography, counting the numbers of avatars of various types, and analyzing the meaning of the statistical patterns.

⁶en.wikipedia.org/wiki/WildStar_(video_game), accessed April 17, 2016

7.2 The Demography of Planet Nexus

As we saw in Chap. 5, there are several ways for doing a census of avatars in a virtual world, although of course the best is to have access to the data archived by the company operating it. That option is seldom available, and the most common alternative is using the in-game tool that players use to assemble temporary teams for group missions. In the case of *WildStar*, one can manually enter a “slash” command into the text chat used for general communications with players. For example, “/ who level 1–10 and engineer and explorer and mechari” will produce a list and a count of all the avatars whose players are currently online, that are Mechari engineers following the explorer path and no higher than level 10 of general experience. If one simply enters “/who” or “/who and mechari,” the resulting list will artificially be limited to 50 avatars, so one needs to do a fine-grained search, and add the results to get large-scale statistics.

On December 12, 2015, I did a manual census of this kind, by chance finding that exactly 1200 avatars were online at that moment. Of these, 414 were members of the Dominion, and 786 belonged to the Exiles. The fact that 65.5% were Exiles suggested that players sought to avoid being dominated by a dictatorship, thus rejecting its religion. I used the data to examine the connections between the six classes and the four paths. More strikingly, 59% of the 175 members of the warrior class had selected the soldier path, which we certainly might have predicted. Any fraction above 25% represented an affinity, so it was meaningful that 32% of 179 engineers and 41% of 240 espers had selected the scientist path. As my period of research was coming to an end, late in March 2016, I decided to do a more ambitious census.

It is easy but laborious, to take screenshots of the list of avatars resulting from a /who search, enter the names and data manually into a spreadsheet, and keep doing this over a series of days until one had a really large population census. But it turned out there was a more automatic alternative. Like *World of Warcraft*, *WildStar* permits some add-on programs to run, written in the Lua scripting language. Indeed, some of the regular features of the game interface were done in this way by the game designers, but players could also add scripted programs. During my research in WoW, I had made extensive use of an add-on called CensusPlus, that took a census of all avatars currently online on the given Internet server, working through an avatar so two different avatars were required to enumerate both factions. A comparable program exists, WildStar-Census, although the available version dated from December 2014 and the game had made several changes by the time I used it in the period March 20–26, 2016.⁷ It was somewhat difficult to install and was fragile, so I needed to save data in many steps as renamed files, and constantly switch output files as I alternated Dominion versus Exiles avatars, in order to get two separate censuses, gaining data on each faction just under the program’s limit of 2500 cases. Table 7.2 shows the results for the Dominion, comparing the races in their use of classes and paths.

⁷ mods.curse.com/ws-addons/wildstar/221770-wildstar-census, accessed April 19, 2016.

Table 7.2 Census of the four Dominion races

	Cassian	Draken	Chua	Mechari	All
Number	839	538	556	545	2478
% of Total	33.9%	21.7%	22.4%	22.0%	100.0%
Classes:					
Engineer	13.7%	0.0%	29.5%	31.0%	18.1%
Esper	24.0%	0.0%	21.0%	0.0%	12.8%
Medic	13.6%	0.0%	20.1%	17.8%	13.0%
Spellslinger	20.3%	23.8%	29.3%	0.0%	18.6%
Stalker	14.7%	45.7%	0.0%	20.7%	19.5%
Warrior	13.8%	30.5%	0.0%	30.5%	18.0%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Paths:					
Explorer	22.5%	26.2%	22.3%	18.3%	22.4%
Scientist	26.0%	18.4%	33.5%	26.2%	26.1%
Settler	23.2%	13.6%	23.9%	19.4%	20.5%
Soldier	28.2%	41.8%	20.3%	36.0%	31.1%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

One Dominion race can play any of the six classes, the Cassians, who actually are humans as evidenced by the fact that deep inside the character database the word “human” is used to label them. Humans are all-purpose creatures, herbivorous and carnivorous, capable of running or swimming. Each of the other three races has a more specialized nature. Drakens are fierce, primitive, emotional, and incapable of finely controlled intellectual activity, so they are unsuited to be engineers, espers or medics. Chua are tiny, physically weak creatures, so they would fail as violent stalkers or warriors. Mechari are robots so they lack the transcendent spirit required for the supernatural magic employed by espers and spellslingers. Table 7.3 gives the corresponding Exiles data.

The Aurin are a nature-loving race, literal “tree huggers,” so we might not expect them to be technically-oriented engineers or medics. Dedicated more to life than to death, they abstain from becoming warriors. Mordesh are both victims of technology and fanatical advocates for it, suffering from the rotting Contagion that resulted from reckless scientific research that sought to produce an immortality serum, and that damaged their brains so they could not become espers. Now they desperately seek a scientific cure. The official *WildStar* website explains: “Even before the spread of the Contagion, Mordesh society was secular, embracing scientific rather than spiritual truths. Their recent condition has only made them more skeptical of the belief of a higher power.”⁸ The Granok are a silicon-based life-form, rather like intelligent rocks, who value strength of body and character, rather than being partisans for either nature or technology. They are not sensitive enough to perform well in the sophisticated classes of espers, spellslingers, or stalkers.

⁸ www.wildstar-online.com/uk/game/loremageddon/mordesh/, accessed April 26, 2016.

Table 7.3 Census of the four Exiles races

	Human	Aurin	Granok	Mordesh	All
Number	790	962	308	412	2472
% of Total	32.0%	38.9%	12.5%	16.7%	100.0%
Classes:					
Engineer	18.2%	0.0%	33.1%	18.9%	13.1%
Esper	13.2%	36.1%	0.0%	0.0%	18.2%
Medic	17.5%	0.0%	20.1%	29.4%	13.0%
Spellslinger	20.5%	28.2%	0.0%	15.5%	20.1%
Stalker	11.1%	35.8%	0.0%	20.6%	20.9%
Warrior	19.5%	0.0%	46.8%	15.5%	14.6%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Paths:					
Explorer	25.9%	34.6%	13.6%	23.3%	27.3%
Scientist	26.7%	28.2%	19.5%	35.9%	27.9%
Settler	19.4%	19.4%	24.4%	18.0%	19.8%
Soldier	28.0%	17.8%	42.5%	22.8%	25.0%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

7.3 Church of the Dominion

The Vigilant Church legitimates the authority of the ruling class in the Dominion, who are called the Luminai. They are practically a separate race, because they seem to have descended from a mixture of Human and Eldan ancestors. Their theology derives religion from science, in the claim that the Eldan created a perfect being, called the Genesis Prime, based on an alchemy that discovered the true basis of chemistry and physics. Where we, on Earth, believe in protons, neutrons, and electrons that combine to form the chemical elements, the Eldan discovered an even more fundamental structure. There exist four primal elements: earth, air, fire and water. In addition, there are two primary forces: life and logic. The Genesis Prime was based on fusion of six Eldans, each representing one of these fundamental dimensions of reality.

It is difficult to know how much the Human inhabitants of the planet Cassus really understood, prior to the discovery of Nexus. Their church told them that the Eldan had indeed become gods.⁹ They believed that the first emperor of the Dominion, named appropriately enough Dominus, was the son of a human woman, Tresayne Toria, and some superior manifestation of the Eldan. Note the parallel to Christianity, in which the Savior was supposedly the son of an ordinary woman and a deity. The six children of Dominus are the equivalent of saints, each representing one of the religion's six virtues¹⁰:

⁹ wildstar.mmorpg-life.com/quests/trial-of-knowledge/, accessed April 23, 2016.

¹⁰ wildstaronline.wikia.com/wiki/Vigilant_Church, accessed April 2, 2016.

Strength:	Azrion the Conqueror
Courage:	Tristan the Valiant
Justice:	Bronos the Just
Purity:	Evindra the Righteous
Devotion:	Korol the Devout
Knowledge:	Galen the Adept

Wikipedia explains what citizens of the Dominion did not originally realize, that the Eldan had been so obsessed with transforming themselves into gods that they had used Nexus as a laboratory for immoral experiments on many intelligent species. The knowledge they gained gave them mastery of the four elements and two forces, allowing them to build the protoplasmic resonator required for the Genesis Prime:

This being, whom the Eldan named Drusera, was essentially a kind, benevolent deity and was capable of shaping reality as she saw fit. Shortly after Drusera's creation, the Eldan realized that someone had tampered with the protoplasmic resonator, causing her to have an evil alternate personality, which they called the Entity. They attempted to destroy the Entity using a device called the primal disintegrator. However, they were unsuccessful, and in retaliation the Entity annihilated all Eldan on the planet Nexus. Distraught over her failure to save the Eldan, Drusera then imprisoned herself and the Entity in the Lightspire, a construct made of pure exanite, in an attempt to stop him from destroying the rest of the galaxy. (Exanite is a fictional material containing all six primal powers.)¹¹

While loyal Human citizens of the Dominion are devout believers in the Vigilant Church, the three other races in which a player may have an avatar have somewhat different orientations. The diminutive Chua originally worshiped the two moons of their planet, Pergo and Pago, but today accept the Vigilant Church without feeling especially loved by it.¹² I created my own alts in the two other races because they were more interesting for this study, the pagan Draken and the mechanical Mechari.

7.4 Paganism and Mechanism in the Dominion

Humanoid but with dinosaur tails, the Draken are arguably the most fierce intelligent species in the galaxy. Therefore the Dominion selected them for special missions like colonization of Nexus, because they could be counted on to attack the indigenous species and the Exiles with infinite courage and zero mercy. They have a primitive, tribal society, in which leaders earn prestige by committing acts of bloody murder in the context of a crude code of honor. After analyzing Draken culture, the Dominion correctly realized they could gain obedience by challenging the Draken to combat and defeating them. The Draken revere the Vigilant Church but may be incapable of understanding it, so they have been allowed to keep their own primitive superstitions which serve to encourage bloodthirstiness. In an ethic of

¹¹ [en.wikipedia.org/wiki/WildStar_\(video_game\)](https://en.wikipedia.org/wiki/WildStar_(video_game)), accessed March 6, 2016.

¹² <http://www.wildstar-online.com/en/game/loremageddon/chua/>, accessed April 26, 2016.

honor, before any great challenge they swear one or another of their five blood covenants, each dedicated to one of their gods:

The Covenant of Strength, to Shezka, goddess of endurance
The Covenant of Wisdom, to Werza, goddess of wisdom and strategy
The Covenant of Courage, to Ravok, god of fury
The Covenant of Loyalty, to Hazak, god of honor and blood
The Covenant of Spirit, to Fazaar, god of fire and savagery¹³

As soon as he was sent to Nexus, Attila rushed to Bloodfire Village, the most significant Draken outpost, in the Deradune region. There Clanlord Makaza has proclaimed a ritual Great Hunt to sanctify the land. Because he was not a member of the Bloodfire clan, Attila underwent a rite of passage at the Blood Altar, defeating the spirits of three great deceased warriors. He then proved his abilities as a hunter by killing beasts while the game huntresses of Bloodfire Savannah observed his skill and power. A series of missions sent him against the nearby Bloodtalon Falkrin, humanoid birds who worship Primeval Osirc and commune with Air Elementals.¹⁴ Attila slaughtered them and smashed their sacred altars. When the Bloodfire Clan transferred from their original home to Nexus, they brought with them the bones of their ancestors, and placed them at Endless Vigil, but thieves had scattered some, so Attila returned many bones to their ancestral cairns.

At one point, Attila discovered a strange skull, which he brought to Bloodshaman Akilos, who explained how such trophies must be collected for the Bloodfeast ritual. In terms of the *WildStar* game, this is a *public event*, in which players collect the skulls of humanoids and the most noble animals then place them on pikes affixed to an immense pile of skulls at the center of Bloodfire Village. As soon as forty skulls have been delivered, the shaman conducts a brief but impressive ritual, during which the sky turns the color of blood, and the avatars gain reputation. By the time he completed his research tasks, Attila had placed one hundred skulls at this Bloodfeast Spire, earning the status of Headhunter V, and incidentally gaining the maximum 32,000 reputation points with the entire Deradune region. Figure 7.1 shows Attila standing at the spire, wearing a fierce mask and expressing his pride.

If the Draken can be called Pagans, then the Mechari deserve the term Mechanisms. The opposition between the Dominion and the Exiles, and more specifically between the Mechari and the Aurin, is introduced into the beginning level tutorial for Dominion characters, that takes place on a huge arkship, named The Destiny, that contains a variety of artificially created natural environments that prepare the player for Nexus and are couched as research laboratories. The action is directed against an Exile spy and saboteur named Jailyn Sweetspur, who is an Aurin. A vivid symbolism took Tobor from experience level 2–3, in the Aurin Observation sector of the Behavioral Research Facility, as he learned how to handle the Aurin by burning down their trees with a flamethrower and slaughtering Sweetspur's diminutive Aurin defenders with his huge metal claws.

¹³ www.wildstar-online.com/en/game/lore/mageddon/draken, accessed April 19, 2016.

¹⁴ wildstar.gamepedia.com/Falkrin, accessed April 19, 2016.



Fig. 7.1 Attila at Bloodfeast Spire in Bloodfire Village

The Dominion's Mechari are the only playable robot race, but the Exiles have robots of various kinds as well. Soon after Tobor arrived in the Crimson Isle region of Nexus, he was destroying Megatech *battlebots* that were defending the equivalent of a prisoner of war camp where Dominion soldiers were held by the Exiles. The Megatech are one of many non-player groups within the Exiles, who made effective use of rigidly programmed military robots. Near the end of his tour of duty in the Crimson Isle, Tobor discovered a lore document that was the Megatech Manifesto, which made its members swear to exploit Eldan technology to the maximum in the fight against the Dominion, but never to use it against fellow Exiles. His final challenge was defeating a huge Megatech *warbot*, before transporting to the Deradune region.

Members of both factions encounter Freebots, robot non-player characters that have acquired free will on Nexus, under the influence of the planet's primal powers.¹⁵ Under the leadership of a robot named Alpha, they created an independence movement and became essentially a neutral faction, having complex relations with both the Dominion and the Exiles. They began creating their own culture, reconceptualizing human conventions in cybernetic terms, for example calling a town a *locus*. A break-away group of Freebots even established its own religious cult in Sparklemire Mine in the Malgrave region. It was organized socially in terms of a hierarchy of religious statuses: initiate, acolyte, crusader, fanatic and preacherbot. They worshiped a "strange robotic intelligence," and raise twin issues considered in Chap. 9. Does a mere mechanism have a transcendent soul? Are people mere mechanisms?¹⁶

¹⁵ wildstar.gamepedia.com/Freebots, accessed May 7, 2016.

¹⁶ www.jabbithole.com/quests/so-robo-cultists-are-a-thing-now-7170, May 7, 2016.

When it came time to end the brief research episode with Tobor, he sought a final resting place, and decided upon a Freebot outpost in Whitevale called Locus Dawn. However, he encountered two technical difficulties. First, the local Freebots were allied with the Exiles, while Tobor belonged to the Dominion. There were actually only a couple of Freebots right at the locus, and while they did not attack him, they would not interact with him either; for example the merchant bot would not sell him anything. Second, all the other Freebots had gone crazy, were running around in a nearby field, and would attack anyone, Dominion or Exiles. They needed to be killed, which would complete a quest for a member of the Exiles, but accomplish nothing for a member of the Dominion. Tobor decided to assert his own free will, and defect from the Dominion. Unfortunately he could not devise an effective self-liberation algorithm that would cause the Freebots to accept him.

7.5 Secularism of the Exiles

As one of the *WildStar* wikis says, the Exiles are “a gutsy group of mercenaries, refugees and exiles that have forged an unlikely alliance upon the planet Nexus.”¹⁷ The Human members of this anarchic coalition represent pioneers from the American Wild West of yore, some even wearing cowboy hats and talking with an approximate rural drawl. Thus, they do not have a state church, and religion is unimportant in their lives. *WildStar* could have imagined a religious Dominion battling scientific Exiles, but instead science collaborates with religion in the Dominion, and fits comfortably into the anarchy of the Exiles. Although the Exiles do not have a monopoly on science, it makes sense to examine it within their fluid context. Thus I had created my main Exiles avatar in the engineer class, following a scientist path, and also practicing two science-related optional professions, relic hunting and mining. Figure 7.2 shows her in the Blue Horizon Museum in Thayd city, her final resting place, after she had reached the maximum experience level in all four of these ladders of accomplishment.¹⁸

Mary Anning stands before an Eldan statue of the synthetic goddess, Drusera, whose avatar features in the central story arc. Levitating before her is her advanced technology *scanbot*, which is the primary tool a scientist uses to capture data. The name of the museum probably came from the popular song “Beyond the Blue Horizon” from the 1930 motion picture, *Monte Carlo*: “Beyond the blue horizon waits the beautiful day. Goodbye to things that bore me. Joy is waiting for me.”¹⁹ This expresses the Exiles’ view that science is a liberating principle, allowing an individual the freedom to seek a joyfully unique life. Drusera can also represent transcendence via science-based technology, yet with a tragic end.

¹⁷ wildstar.gamepedia.com/Exile, accessed May 7, 2026.

¹⁸ wildstar.gamepedia.com/Exile, accessed April 24, 2016.

¹⁹ [en.wikipedia.org/wiki/Monte_Carlo_\(1930_film\)](https://en.wikipedia.org/wiki/Monte_Carlo_(1930_film)); lyricsplayground.com/alpha/songs/b/beyondthebluehorizon.shtml, accessed April 24, 2016.



Fig. 7.2 Mary Anning in the Blue Horizon Museum of the Exiles

The founder of the Blue Horizon Museum, Dorian Walker, was also the 77-year-old Exiles scientist responsible for discovering Nexus. Mary initially learned about him from the Galactic Archive, which describes him as “a cantankerous old coot who explores wherever he wishes and damn the consequences.” To learn more about his life, she needed to find eight fragments of an issue of *Tales from Beyond the Fringe*, a comic book or pulp magazine of antique style, titled “Dorian Walker and the Lost Valley of the Pell.” The Wikipedia page for the British satirical comedy group of the 1960s, Beyond the Fringe, noted: “The revue was widely considered to be ahead of its time, both in its unapologetic willingness to debunk figures of authority, and by virtue of its inherently surrealistic comedic vein.”²⁰ Yet *Tales* clearly represents popular American fiction of the mid-twentieth century, including the

²⁰en.wikipedia.org/wiki/Beyond_the_Fringe, accessed April 24, 2016.

television programs *The Twilight Zone* and *The Outer Limits*, as well as sci-fi mags. The implication is that twentieth century popular notions of the future were delusional, and *WildStar* is a satire of its unrealistic dreams.

The Pell are a tribal species indigenous to Nexus, that may have been created by the Eldan, or only enhanced by them. They certainly worship the Eldan, whom they call the Masters, despite the fact that the Eldan have vanished. They also worship deities of their own, who may merely be personifications of the four elements and two forces discovered by the Eldan.²¹ A *WildStar* wiki describes two of the Pell tribes that follow different elements:

The Disciples of Air are attuned to the primal power of air. Like Osric the Primeval, the Disciples of Air are as wild and uncontrollable as a storm - and will generally attack anyone who comes near to their villages. Their magic and rituals involve storms, lightning, and avian creatures. When speaking about the power of air, these Pell often refer to it as the Storm.

The Disciples of Water are the Pell clan attuned to the primal power of water. Their behavior can be as fluid as water itself - sometimes they are peaceful, and other times they are warlike. They can support life, or they can cause destruction. Their magic and rituals involve lakes, rivers, and the ocean - and they often worship powerful aquatic creatures. When speaking about the power of water, these Pell often refer to it as the Flow.²²

The eight fragments of “Dorian Walker and the Lost Valley of the Pell” were scattered across a huge north-south canyon in Galeras occupied by the hostile Thundercall Pell who worshiped Osric, the “great and terrible Father of Storms.” Mary Anning stumbled across only two of the eight while exploring the region, but multiple websites documented where she could locate the other six. Completing the set unlocked the issue, which began with a color comic book cover that depicted Dorian Walker held captive by the Pell, and claimed to cost 35 cents, which was the typical price of a science fiction magazine in the mid to late 1950s. Lost valleys had become a cliché of science-fantasy literature much earlier, such as Pal-ul-don, the setting of the 1921 novel *Tarzan the Terrible*, by Edgar Rice Burroughs, that even included a glossary of a fictional language that explains *Pal* means *place*, and *Pal-ul-don* means *land-of-men*, although the inhabitants differ from us by possessing tails. Wikipedia calls such stories *lost world literature*: “*King Solomon’s Mines* (1885) by H. Rider Haggard is sometimes considered the first lost-world narrative. Haggard’s novel shaped the form and influenced later lost-world narratives, including Rudyard Kipling’s *The Man Who Would Be King* (1888), Arthur Conan Doyle’s *The Lost World* (1912), Edgar Rice Burroughs’ *The Land That Time Forgot* (1918), A. Merritt’s *The Moon Pool* (1918), and H. P. Lovecraft’s *At the Mountains of Madness* (1931).”²³

In the story we learn that “Blue Horizon” was the name of Dorian Walker’s spaceship. As soon as he landed it in Galeras, the Pell captured him and dragged him to their village where he “was tied to a pseudo-technological altar made of

²¹ wildstar.gamepedia.com/Pell, accessed April 24, 2016.

²² wildstaronline.wikia.com/wiki/Pell, accessed April 24, 2016.

²³ [en.wikipedia.org/wiki/Lost_World_\(genre\)](http://en.wikipedia.org/wiki/Lost_World_(genre)), accessed April 24, 2016.

bones and feathers.” They called themselves Disciples of Air, observed he had descended from the sky, and asked him if he had been sent to them by their Masters who had vanished into thin air - a clear reference to the Eldan. He said he did not recognize any masters, so they prepared to sacrifice him on the altar. Having a powerful cybernetic arm, he was able to break the ropes that held him, hurl a burning flare at them, and escape back to his ship.

In her exploration of Nexus, Mary Anning had collected eight marvelous artifacts, which she donated to the Blue Horizon Museum, which actually was the now earthbound spaceship. One was a relic stolen from the Water Pell of the Whitevale region, while another was a talon purported to have belonged to Osric the Air god, stolen not from the Pell but from the birdlike Falkrin who also dwelt in Galeras. Another relic was the body of a squig that had been frozen centuries before by the Eldan, dangerous because these octopus-like parasites could attach themselves to people and turn them into zombies. There were two skulls, one from a fossilized Dreg hybrid who had been murdered long ago, and another of unknown origins but made of crystal and held by the Skeech cannibals. A lens from an Eldan super laser weapon testified to the remarkable powers of this lost civilization. A Swordmaiden helmet had belonged to the mother of the Dominion’s first emperor, and a second statue of Drusera, like the one in Fig. 7.2, also represented the ancient mysteries.

Mary Anning’s relic hunter profession had occasionally produced minor bits of the Eldan technology, but chiefly gathered omni-plasm of five levels of quality that matched the experience level required to survive in a zone of Nexus: standard, accelerated, advanced, dynamic, and kinetic. For a while Mary Anning experimented with the technologist profession that used omni-plasm, but then for comparison with relic hunting she switched to mining. She could set the local map in her user interface to mark locations of both kinds of nodes, containers of green fluid in the case of relics, and metallic rocks in the case of mining. To access both she needed to switch back and forth between two tools she kept in her inventor, a relic blaster and a laser pickaxe. She gained the maximum achievement level, called *tier 5* for both, but this required earning 20,000 talent points for relic hunting but 56,700 for mining.

The scientist profession required using the scanbot to obtain data about living creatures and technological artifacts, all around the planet. While exploring, she would notice that an icon looking like an atom and symbolizing science was just above a particular animal. She would instruct her bot to scan it, which would earn the first few points of a biology mission, that was not available to any of the other paths. Similarly, an archaeology mission required scanning Eldan artifacts; botany scanned plants, and chemistry scanned minerals or other alien compounds. Other kinds of missions were specimen surveys, analysis, experimentation, and diagnostics such as checking out the conduits of a power station that were not functioning properly. There were also field studies of behavior, such as scanning friendly Pell in Whitevale who were engaged in various traditional activities, or observing pumera cats in Wildrun.

7.6 Nature and Technology in the Exiles

If the Draken were a Pagan manifestation of violence, the Aurin were a Pagan manifestation of peacefulness. Our census indicated that the Aurin were even more popular than Humans among the Exiles 38.9% of the total Exiles population, compared with 32.0, and they were the only really religious people in their faction. Like other Exiles, Margaret Mead had the honor of meeting Queen Maya Everstar on the rebel flagship, the Gambler's Ruin. Maya had served for a decade as Queen of the Aurin on the forest planet Arboria, before being forced to flee the Dominion aggression, and now her challenge was to find a new home for her people on Nexus, beginning in Everstar Grove. This was the recommended starting zone for the Mordesh as well, so Elsa Lanchester also entered Nexus there, and the two experienced many of the same missions from their different perspectives.

Margret landed in the area called Greenleaf Glade, where Fenra Skytree gave her a defining mission named Nature's Uprising. Something had angered the forest, driving ravenok birds crazy, and rendering thorny brambles violent. This was the beginning of a seven-part quest arc titled Forest in Despair. While battling birds and brambles, Margaret found the corpse of a fellow Aurin, from which she retrieved a diary. It reminded her how uncomfortable her nature-loving species was with the technology-obsessed humans who led the Exiles. Titled "My Flight from Arboria," it noted that the Dominion would never have attacked Arboria, perhaps would never even have discovered this beautiful green planet, if the Exiles had not stumbled upon it in their escape. The deceased author had respected the teaching of Maya Everstar that suspicions of the other Exiles could be a weed poisoning their hearts, yet the result of this good faith was a meaningless death.

When her quota of birds had been killed, and allies had been rescued from thorn traps, Margaret met Lucy Lazarin, the diseased daughter of the Mordesh scientist, Victor Lazarin, whose biological enhancement experiments had unleashed flesh rot and madness among their race, thus confirming the Aurin fear that science and technology were evil contaminations of nature's purity.

Note that the leading Aurin, Queen Maya, was female and held an ancient leadership tradition, while the leading Mordesh, Alchemist Lazarin, was male and asserted the modern authority of science. All prominent Aurin characters in *WildStar* appear to be female, and the game's websites generally represent the Aurin as a female, in a cute and coy posture. Mother Nature is eternal, yet Father Time marches onward.

Unfortunately, the available version of WildStar-Census did not tabulate gender, but an online census did. This was a specialized website, based on data not derived from the game but entered as players registered on the site.²⁴ Players of violent games like *WildStar* tend to be men, but avatars of all races except the sexless Chua can be either male or female. Male players may create female avatars from time to time, perhaps as virtual girlfriends, and 35.6% of the 2029 human Exiles avatars tabulated by the website were female. But the fraction is much higher among the

²⁴ watchwildstar.com/census, accessed April 19, 2016.

Aurin, 58.9% female of 1778. The website's census may be different from the ones I performed in the game itself, not the least because it encouraged visitors to describe the avatar they might want to create, as well as any avatar they actually had. Also, many respondents did not give the gender of their actual or intended avatar, and the total number of Exiles races were much higher, 4638 humans and 4525 Aurin. It is possible that the fraction of new avatars assigned to the Aurin increased over the life of *WildStar*, as many players would have completed the 50 levels of experience as a Human, then switched to Aurin for their second avatar.

The center of Aurin society on Arboria had been the World Tree, but in Everstar Grove they made the frightening discovery that the Eldan had experimented with a massive oak tree, Elderoot, giving it intelligence. Among the words of wisdom it had spoken centuries before are these: "A lie can travel around the entire planet while the truth is still putting down roots." Yet now it slumbered, and Victor Lazarin ordered Margaret to awaken the tree so it could help the Exiles master the environment of Nexus. At the conclusion of the Forest in Despair arc, Elderoot awakened in pain, asking the Aurin and the Mordesh to combine their abilities to save it from the agony that prevented it from sharing its infinite knowledge with them. Yet once the tree's pain had been soothed, Margaret discovered that the knowledge Elderoot possessed was at a level beyond her comprehension, so she did not gain the fundamental insight achieved by a union of nature and science.

Then death ended Elderoot's wisdom, yet hope was not entirely lost. Queen Maya asked Margaret to take one of the tree's seeds to Celestion, the next region she would explore. One of the *WildStar* wikis contrasts the two perspectives on this new land: "The Celestion Forest is one of the most lush and verdant locations on the surface of Nexus, and one that both the Aurin and the Mordesh have settled for different reasons. Aurin have embraced Celestion because it is so similar to their homeworld Arboria - including the presence of semi-sentient trees and a staggering variety of life forms. It is that same variety that's attracted the Mordesh, many of whom seek to experiment on and with the local flora and fauna in their never-ending search for a Contagion cure."²⁵

After Celestion, the Aurin and the Mordesh went their separate ways, interacting more often with members of the two other races of their faction, the Humans and the Granok. Indeed, when I took the screenshot in Fig. 7.3, to record Margaret Mead's final resting place, a Granok avatar of another player was standing in the background. The Aurin woman standing at the center is Matria Paleblossom, leader of an expedition sent by Queen Maya into the icy desolation of Whitevale. Two crouching assistants are trimming Matria's toenails, which seems to symbolize an elite leader oppressing the common folk. Yet if Paleblossom is a beautiful flower, she rightly deserves careful pruning. Behind them stands Margaret Mead, gazing away from the others, pondering the greater meaning of everything. In the background we see the icy landscape, yet the five characters are standing inside a small redoubt kept warm by magic energies.

²⁵ wildstar.gamepedia.com/Celestion, accessed April 24, 2016.



Fig. 7.3 Margaret Mead in the magically warm redoubt at Snowfade Grounds

Mordesh like Elsa Lanchester had been natives to the planet Grismara, where they had built a great civilization based on alchemy. Earlier in their history, they had worshipped a god named Kemos, an obvious trope on the word *chemistry*, which itself is derived from *alchemy*. Scholarly debates over the etymology concern whether or not alchemy was derived from the ancient Egyptian name for Egypt, the fertile *black* land of the Nile, thus raising the possibility that chemistry, like alchemy, is one of the black arts.²⁶ Another scholarly debate about alchemy concerns the extent to which the Medieval goal of transmuting lead into gold was really the attempt to discover a religious initiation rite that could transmute a base sinner's soul into a superior saint's or angel's soul [13]. Whatever the historical truth on the planet Earth, on Grismara the ancient religion had transmuted into science, as explained by the *WildStar*'s official backstory encyclopedia, *Loremageddon*:

According to ancient Mordesh myth, Kemos created the Mordesh people from the primal elements and infused them with life. Adherents of Kemos, in turn, strove to emulate their deity's control of the elements. These priests learned to use the elements, both individually and in concert, in an attempt to overcome the frailties of their species and the limitations of mortality. The primal elements - Pyros, Aquia, Terra, Aether, Vitus, and Logos - served as singular representations of Kemos, similar in many ways to the manner in which the Scions are represented in the Dominion's Vigilant Church.²⁷

²⁶ en.wikipedia.org/wiki/Etymology_of_chemistry, accessed May 13, 2016.

²⁷ www.wildstar-online.com/uk/game/loremageddon/mordesh/, accessed May 13, 2016.

The obvious endpoint of this secularization process would be achievement of godhead, which might be manifested by attainment of various divine talents, such as total wisdom or infinite power. Because of the specific life experience of the Mordesh alchemist, Victor Lazarin, the first divine talent achieved was immortality, as a *WildStar* wiki explains:

In 1531 AE, handsome Mordesh prodigy Victor Lazarin graduated with honors from the distinguished Grismaran Academy of Alchemical Sciences. As part of the scientific elite that had ensured the Mordesh's impending membership into the Dominion, Victor divided his attentions between alchemical pursuits and his new bride Mina. The birth of their first child Lucy should have been Victor's happiest moment, but tragically Mina fell ill and died in labor.

Haunted by the death of his beloved wife, he became obsessed with solving the Alchemist's Enigma, the secret of immortality itself. For decades, Victor delved into the forbidden secrets of alchemy, pushing the boundaries of traditional science. He was driven. He was relentless. And, in time, he believed he had achieved his goal: the Everlife Elixir. Confident of his success, Victor tested it on himself. The results were instantaneous. Wrinkles vanished, hair thickened, teeth regrew. It seemed Victor had attained the unattainable. Within months, almost every Mordesh on Grismara had taken the elixir.²⁸

However, the beneficial effects were temporary, and the long-term result was a fatal plague. Lazarin developed a partial cure, but then a new version of the plague evolved. Lazarin himself seemed to have found a solution, because he always wears a spacesuit to protect himself from infection, and his face appears quite normal through the glass front of his helmet. Elsa Lanchester and all other Mordesh suffer from corruption, and her face looks like that of a rotting corpse. Her initial home on Nexus was Whisperwind Hollow, where Lazarin manufactures a chemical called *vitalus*, which Mordesh must take regularly, or they will first become insane, then die. Her final resting place was an outpost operated by Lazarin in the Wildrun region, where she desperately flew, knowing the monsters were far too high a level for her to survive, but hoping to help him find the ultimate cure for the disease science had created. The name of the outpost, appropriately enough, is *Fool's Hope*.

7.7 Technological World Building

Science and religion aside, the fundamental premise of *WildStar* is that habitable planets exist that can be reached and colonized by relatively easy technological means. This, to be sure, is an illusion. It is rendered more plausible by the fact that one of the four paths and several professions allow players to produce products like medicines and even construct houses. Here we shall briefly consider the most appropriate examples, not merely because they have this plausibility function, but also because they reflect the blurred border between the real and the virtual.

I decided Tobor should follow the *settler* path, because he was the most technological of my six avatars. The name of the path refers to settling on Nexus, in the

²⁸ wildstaronline.wikia.com/wiki/Victor_Lazarin, accessed May 13, 2016.

sense of colonizing. Their primary role is to collect special resources from the environment, then use them to provide temporary facilities for use by other players. A very secondary role is to fix minor broken infrastructure, like street lights, than earn reputation with the local merchants, thereby reducing the cost of buying from them. In each region, there are tiny resource nodes, flagged for settlers who are the only avatars who can collect them. Regions at different levels have different settler resources, a small number of different types so that they can be combined in various ways to make valuable products.

Through all the regions of Nexus can be found settler *depots*, which are interface devices on the ground where a settler can place resources that cause one or another temporary facility to come into existence for use by any players of the settler's faction. Depots can provide a space where enemies will not spontaneously attack, or give favorable buffs to the avatars of other players who visit them. As in the three other paths, regions have a small number of subareas, each of which offers a set of path-specific missions that require travelling through that geographic area and performing tasks. At some places, a settler can gather a set number of one local kind of resource and deliver it to a non-player character to contribute to construction of a *project*, such as collecting tithes from residents of Lightreach Mission to build a statue that expands the glory of the Vigilant Church in the Ellevar zone, collecting wood for a shrine of the Lopp religion in the Whitevale zone, or supporting non-religious public works of many kinds. It is not clear what value these projects have for other players, while the depots provide social goods of many kinds.

A settler gains path experience in two ways at depots, by completing expansion or civil service missions. An expansion mission requires placing some resources at a set number of depots in the area. A civil service mission is achieved through earning a set number of points at one depot by adding facilities, or by increasing the number of minutes an existing facility will last. A settler can also gain materials, and path experience points as well, by reaching some caches at certain precise locations in each subzone. A somewhat confusing final settler mission is called *public safety*, which is simply killing the same boss enemy that members of other paths kill, but doing so in the role of settler. As a blogger calling himself CulannHS publicized on July 4, 2014, "There is a bug with the Public Safety missions where if you take the 'WANTED' missions and complete them BEFORE the Public Safety missions come up in your Datachron, you will NOT get credit for the Public Safety missions no matter how many times you kill the mob [non-player character]."²⁹ This can be conceptualized not as a programming bug, or even a confusion, but as the specification that one must be playing an appropriate social role to fully accomplish a role-related technical function.

In addition to paths, players may select tradeskills, which unlike paths can be changed at any time. At any given time, an avatar may have no more than 2 of 9 tradeskills, combined in any way across two categories: gathering (mining, relic hunter, survivalist) and production (architect, armorer, outfitter, tailor, technologist,

²⁹ forums.wildstar-online.com/forums/index.php?/topic/91665-warning-to-settlers-serious-public-safety-missions-bug/, accessed May 13, 2016.

and weaponsmith). Also, each avatar may have any combination of four others: cooking, farming, rune crafting and salvaging. I decided to explore rather fully architect with Neidrich Freitzsche and both cooking and technologist with Elsa Lanchester.

Superficially, it would seem impossible to go far in a crafting profession with an avatar like Elsa, who achieved only 15 of 50 level of experience, and thus could not safely gather the raw materials in high-level zones that are needed for the high level production recipes. However, these professions are called *tradeskills* specifically because the game designers wanted players to trade resources. It was trivially easy for Mary Anning, who had reached level 50, to send Elsa any useful raw material through the in-game version of email. She could also send recipes and money, although Elsa discovered she could fly to the main town in any advanced zone and purchase recipes without entering the dangerous countryside. Money is needed to buy some materials plus recipes from non-player characters, but also can purchase raw materials from other players on an auction market, where money can also be earned by selling products.

For example, one of the most advanced technologist products Elsa could make was mourningstar medshot, which a player could use to restore 1060 health points to an avatar during a battle in which the enemy was reducing the avatar's health toward 0 or death. Four units of this restorative could be made by combining 4 units of kinetic omni-plasm with 4 units of mourningstar extract at a crafting station in one of the towns. Kinetic omni-plasm was one of the resources Mary Anning gathered in her relic hunter profession, in which she had achieved maximum skill. Elsa could herself make mourningstar extract but could not gather the ingredients. To make 5 units she needed 2 units of kinetic omni-plasm and 5 units of mourningstar, an herb collected through the common farming skill in Malgrave and Grimvault regions. The lower of these, Malgrave, could not be explored safely by any avatar below level 40 of general experience, and mourningstar medshot could not even be used by any avatar below level 35. Clearly, at level 15, Elsa would craft this medicine only through collaboration with other avatars.

The cooking activity was rather similar, but somewhat simpler and not organized in quite so status conscious a manner as technologist. At the end of her culinary research, Elsa could cook two main meat dishes using ingredients from Malgrave, sautéed spikehorde and chompacabra short ribs, combining meat from a dangerous animal with the flamefrond plant. With the help of Mary Anning, Elsa was able to cook all the long required lists of foods required to complete status level Cooking V, but this was a mere hobby, and not providing numerical points or taken seriously as a measure of social status. Not so for technologist, where Elsa earned all 109,134 points, although this accomplishment left many crafting tasks undone in the complex tech tree for technologist. Thus it was transcendental philosopher Neidrich Freitzsche who assumed the super-human goal of absolutely completing the tech tree for his costly and difficult profession of architect. Figure 7.4 shows him standing before his mansion and several of the largest structures he himself created.

Every avatar could gain a large plot of virtual land and a small house, selected from a set of alternatives, and Neidrich had upgraded his to a spacious Cassian



Fig. 7.4 The avatar based on Friedrich Nietzsche at his Elegant Virtual Estate

house, or mansion as he preferred to call it. Each was what is technically an *instance*, separate from the main world of Nexus. The owner could teleport to and from it, and could set permissions allowing other avatars to visit. His house is in the background of the picture, and the nearer object on the far right is an elevated Eldan shrine, he had made in his architect profession. Among the many amenities he had made and placed inside his mansion were a display case containing museum items, a holographic fireplace with virtual flames, a chest of gold, a wicked firetotem from the primitive Moodie shamans, and even an arkship cryopod, for use if emergency ever required him to go into hibernation.

In addition to individually constructed items like the Eldan shrine, the yard around his mansion contained six special facilities that provided Neidrich with the equivalent of his own world. In Fig. 7.4, the rough structure in the foreground on the left is a relic excavation, where he could develop the relic hunter skill, collecting a few samples of omni-plasm every day, without ever having to travel to a distant region of Nexus. Behind it stands his windmill, and hidden behind it is his spaceship. Behind the mansion and shrine are his bot workshop where on occasions he himself could briefly morph into a robot, a Snak-O-Matic 3000 vending machine where he could sell junk or buy simple resources, and a crafting kiosk that allowed him to do any architect production he wanted without the need to travel to Illium where he had completed absolutely all the difficult work required to achieve maximum architect status.

The architect tree consists of six levels of approximate status, each containing a number of manufacturing quests, only a few of which must be completed to ascend to the next level: novice (16 quests), apprentice (22), journeyman (21), artisan (22), expert (20), and master (27). In order to feel really superior to other avatars, Neidrich

not only became a master, but completed absolutely all 128 of these Sacred Quests. Before the master level, the *schematics* (recipes) could be learned by making ordinary items in quantity, and experimenting across a two-dimensional graph of possible advanced items that required purchasing extra resources and using them in the correct but unknown order. For the master level, he needed to purchase the schematics from a non-player vendor, using a special currency called *vouchers*. To earn them, he needed to fly to the main town of an advanced region and get three crafting missions that would be renewed daily, make the designated items, and give them to the quest-giver.

Resources were often quite expensive on the player auction market. For the extreme example, the most advanced military item an architect can build is an attack ship center, used by a team in a *warplot*, which is an instanced virtual territory where two teams of players may battle each other. The raw materials for an attack ship center are 10 galactium chunks, 6 pieces of primal hardwood, 8 units of kinetic omni-plasm, and 2 starshard jewels. I checked the minimum prices on May 13, 2016, when Neidrich had retired to his home with just 75 gold coins in the bank. The galactium was cheap, despite the fact that gathering it in quantity required the mining skill, costing just 46 silver coins total, or 0.46 gold coins. The primal hardwood, obtained from particular trees using the common survivalist skill, cost a total of only 20 silver or 0.2 gold. The kinetic omni-plasm, requiring relic hunting to gather, was more expensive, totaling 2.8 gold. Starshard gems are a rare find in mining, so despite the low cost of galactium, they were exceedingly expensive at a total of 13.76 gold. While Neidrich had taken up relic hunting as a hobby, he was still at a very low level of skill, but logically he could rely upon Mary Anning to provide not only this resource from her relic hunting, but both of the mining materials, including the costly starshard gems.

Because Neidrich belonged to the Dominion, and Mary to the Exiles, they could not communicate let alone exchange money or resources via the in-game email system. However, there was a work-around, or what legalistic gamers call an *exploit*. The public auction market was shared by the two factions. Mary could send money indirectly to Neidrich via this market. He would place up for sale a cheap item he had made, such as a pillow for the house, but at an exorbitant price, usually 20 gold. She would then buy it. He would not get quite 20 gold, because the auction house took a cut, but over a dozen or more such exchanges this transferred to him enough money to buy all the raw materials he needed to maximize his architecture status. One factor that simplified this was that he reached the level 50 experience cap long before she did, so she had to do many money-earning missions anyway during the final weeks of the research project. She earned money also selling the results of maximizing both mining and relic hunting. Thus, perhaps ironically, *WildStar's* economic system transcended its political system, even though its religious system could not.

References

1. von Braun, W.: The mars project. University of Illinois Press, Urbana (1953)
2. Ley, W., von Braun, W.: The Exploration of Mars. Viking Press, New York (1956)
3. Bainbridge, W.S.: The Spaceflight Revolution. Wiley-Interscience, New York (1976)
4. Bainbridge, W.S.: Goals in Space: American Values and the Future of Technology. State University of New York Press, Albany (1991)
5. Bainbridge, W.S.: The Meaning and Value of Spaceflight. Springer, Cham (2015)
6. Hobbes, T.: Leviathan, or, the Matter, Forme, and Power of a Common-Wealth Ecclesiastical and Civill. Crooke, London (1651)
7. Malthus, T.: An Essay on the Principle of Population. J. Johnson, London (1798)
8. Durkheim, E.: The Elementary Forms of the Religious Life. G. Allen and Unwin, London (1915)
9. Parsons, T.: Evolutionary Universals in Society. *American Sociological Review*. **29**, 339–357 (1964)
10. Bainbridge, W.S.: The Warcraft Civilization: Social Science in a Virtual World. MIT Press, Cambridge, MA (2010)
11. Bainbridge, W.S.: Dimensions of Science Fiction. Harvard University Press, Cambridge, MA (1986)
12. Bateson, M.C.: With a Daughter's Eye: A Memoir of Margaret Mead and Gregory Bateson. William Morrow, New York (1984)
13. Eliade, M.: The Forge and the Crucible. Harper and Row, New York (1962)

Chapter 8

Transhumanism: An Online Network of Technoprogressive Quasi-Religions

Abstract Transhumanism is a serious intellectual movement, focused on the revolutionary potential of technology to transform humanity, which functions as an online network of organizations, operating through websites, forums, and Facebook groups with thousands of members. They debate whether it is a religious movement, but it does contain the Turing Church, named after the Church-Turing thesis in physics, and a Cyborg Buddha Project. Its fundamental principle is that technological progress is capable of achieving the Singularity at which everything becomes possible including human immortality. One prominent organization is the Institute for Ethics and Emerging Technologies, which chiefly seeks to develop an ethical system for managing technological innovation for human benefit. Another is Terasem which describes itself as “a transreligion that includes all religions the way a forest includes its trees.” In addition, the Mormon Transhumanist Association believes that Mormonism naturally advocates the use of advanced technology to achieve transcendence from the human condition. Among the movement’s influential leaders is Max More, who adopted this name as part of a rational conversion experience, organized a branch called Extropianism for a number of years, and now heads the Alcor Institute that freezes humans at death and preserves them in “cryonic suspension” until such time as medical science can hopefully revive them and cure them of all defects. Transhumanism is the most respectable and influential social movement today that specifically advocates replacement of traditional religions with a science-based alternative that could achieve all the traditional supernatural goals.

The most visible technological movement of recent years that might be a replacement for traditional religion is Transhumanism, a diverse community of futurist intellectuals who believe science may soon achieve all human desires [1]. Wikipedia provides this definition: “Transhumanism (abbreviated as H+ or h+) is an international and intellectual movement that aims to transform the human condition by developing and creating widely available sophisticated technologies to greatly enhance human intellectual, physical, and psychological capacities.”¹ One quibble with that description is that “developing and creating” implies practical action to

¹ en.wikipedia.org/wiki/Transhumanism, accessed July 10, 2016.

achieve the enhancement goal. Many members of the movement predict that technology will transform the human condition, but do not actively engage in work to achieve this transcendence, other than promotion of relevant ideas through a host of blogsites and Facebook groups. They are prophets or messiahs more than scientists or engineers. Some prominent members focus on ethical dimensions of radical technologies, thus appropriating religion's traditional function as the source of morality.

Within the movement, there has been a continuing debate about whether technological progress will eliminate religion, or Transhumanism itself might become the religion of the future. John G. Messerly represents the first viewpoint, which is secularist:

History is littered with dead gods. The Greek and Roman gods, and thousands of others have perished. Yet Allah, Yahweh, Krishna and a few more survive. But will belief in the gods endure? It will not. Our descendants will be too advanced to share such primitive beliefs.

If we survive and science progresses, we will manipulate the genome, rearrange the atom, and augment the mind. And if science defeats suffering and death, religion as we know it will die. Without suffering and death, religion will have lost its *raison d'être*. For who will pray for heavenly cures, when the cures already exist on earth? Who will die hoping for a reprieve from the gods, when science offers immortality? With the defeat of death, science and technology will have finally triumphed over superstition. Our descendants will know, once and for all, that they are stronger than imaginary gods [2].

In contrast, Dirk Bruere has called Transhumanism “a new religion for a new millennium” and has written a scripture called *The Praxis* [3]. While many Transhumanists suggest that advanced technology may allow us, as selfish individuals, to live forever, Bruer asserts that we are obligated to help each other achieve immortality:

Know then that the purpose of our fellowship is to seek eternal life and reunion with those who have passed before us. To seek knowledge and perfection of spirit and soul that we may become worthy to resurrect the willing dead and in turn be judged worthy to be resurrected into the worlds beyond. Such powers may lie in our past or in our future. Meanwhile we shall remember those who have passed and we shall speak for them as family so that come the Awakening none will be forgotten. We shall be the calm in the storm, the eye of the hurricane, the refuge in the night, the hope for tomorrow [4].

These two quotations came from the website of the Institute for Ethics and Emerging Technologies (IEET), which represents just one strand of Transhumanism, but a prominent one. A rough measure of the size of the movement is the number of “hits” each received, which is the number of times somebody looked at it. As of July 10, 2016, Messerly’s blog had been viewed 24,651 times since it was posted January 24, 2015, and Bruere’s had received 9023 hits since it was posted October 15, 2012. It is possible that the difference in these numbers indicates some growth in the movement from 2012 to 2015, if visitors check a blog only while it is recent and thus is featured on IEET’s home page or in newsletters distributed by IEET via email. Later we will consider the IEET in some detail, but first we must provide some of the background of the movement.

8.1 The Birth of Superman

As often happens in the development of new areas, some of the earliest prominent contributions were made by controversial visionaries. A striking example is the 1989 book *Are You a Transhuman?* by FM-2030 [5]. The son of an Iranian diplomat, Fereidoun M. Esfandiary renamed himself FM-2030 to signify his orientation toward the human future symbolized by the year 2030, and his escape from ethnicity symbolized by discarding all of his old name except FM. He can rightly be said to have been the messiah of the Transhumanist movement, that seeks to transcend the traditional limitations of human existence, not through religion but through technology [6]. From a mundane perspective, he died in the year 2000, but he was frozen in cryonic suspension, in hopes that future technology could restore him to life. He now “lives” at the Alcor Life Extension Foundation in Scottsdale, Arizona.

Very recent BBC and *New York Times* news stories about cryonic suspension were titled “Terminally Ill Teen Won Historic Ruling to Preserve Body” and “Last Wish of Dying Girl, 14, to Be Frozen, Is Granted by Judge.” [7, 8] The unnamed girl living in England knew she was dying of cancer and requested to be cryonically preserved, but her divorced parents disagreed, and a court case was required to decide the issue. In the end, her mother’s family paid £37,000 to have the procedure performed, after the judge gave permission. The girl had written a letter to him, saying:

I have been asked to explain why I want this unusual thing done. I am only 14 years old and I don’t want to die but I know I am going to die. I think being cryopreserved gives me a chance to be cured and woken up – even in hundreds of years’ time. I don’t want to be buried underground. I want to live and live longer and I think that in the future they may find a cure for my cancer and wake me up. I want to have this chance. This is my wish.

Transhumanists imagine several ways in which technology could effectively achieve immortality. Most gentle is improvement of health and wellbeing that extends life indefinitely, but several other approaches have been considered, including these four. First, if a person died of a specific disease, and the body was frozen, once a cure for that disease had been developed, the body could be unfrozen, cured and restored to normal life. Second, a new body could be grown using future biological techniques and given the person’s original brain. Third, in a frozen or vitrified state, the neuronal structure of the brain of a recently deceased person could be scanned and used as the pattern for a computer duplicate that could function through a robot. Fourth, during life a person’s thoughts and behavioral propensities could be recorded, whether through electronic observation or traditional methods such as questionnaires and psychological tests, then used to design a high-fidelity emulation, possibly virtually existing on Internet rather than in the physical world. In the given order, these four options suggest a scale of degrees of similarity to religion, with the virtual emulation being most like an immortal soul that has gone to heaven.

FM-2030’s book is not explicitly a tool for recording a personality, but it consists of a very large number of questions for the reader to answer, that could perform that function. He had developed these questions for futurology courses he taught, and

each of his 25 chapters asks readers to decide how futuristic they are, in terms of one or another aspect of our lives at this time of technological transition. For example, a chapter titled “How Immortality Oriented Are You?” begins with these main questions:

1. Do you take measures to help extend your life expectancy?
2. Would you like to live to 150 years and beyond?
3. If you are critically ill should “heroic measures” be undertaken to save you?
4. Should we stop “tampering with nature” and allow people to “age gracefully” and “die with dignity”?
5. Should we suspend efforts to extend normal life span and focus instead on the “quality of life”?
6. Are you opposed to life extension efforts on *logistical grounds*.
7. Are you an ageist (age-discriminating)?
8. Are you a biological purist? [9]

Each of these main questions was accompanied by secondary ones, such as these three expanding on the eighth: “Do you think that the human body is a marvel of nature?” “Do you like the human body as it is or would you like to see major changes?” “Would you want a total prosthetic body if your own body were irreversibly out of commission?” In most cases, the reader was asked to answer “yes” or “no,” and the bulk of the chapter discussed the implications of each possible answer. While FM-2030 considered biotechnology to be the chief way of extending the lifespan toward immortality, his questions could be used to capture a person’s perspective on the future, for emulation by information technology [10].

More important than this innovative book, were the social relationships FM-2030 developed with students who went on to become leaders in the Transhumanist movement. Two who have remained very prominent are Max More and Natasha Vita-More. Following the example of FM-2030, both have symbolized their personal evolution by adopting new names, originally being Max O’Connor and Nancie Clark. Max is the current president of Alcor.² Natasha is the current leader of Humanity+, a successor to the World Transhumanist Association.³ A co-founder of the World Transhumanist Association, Nick Bostrom, currently directs the Future of Humanity Institute at Oxford university.⁴ He is especially famous for proposing that our world is a computer simulation, as if we actually were living inside the equivalent of *WildStar* or *Echo of Soul* [11]. James Hughes, director of the Institute for Ethics and Emerging Technologies, was also one of the early leaders.

The earliest of the organizations in this tradition was Extropy, dating from 1988, and Max and Natasha teamed up to operate the Extropy Institute, which published a journal and promoted Transhumanist ideals, but with a particular orientation [12]. The Extropians emphasized the individual’s freedom to choose what to become, and expressed concern that governments and other traditional institutions might try to

² alcor.org, accessed July 10, 2016.

³ humanityplus.org, accessed July 10, 2016.

⁴ nickbostrom.com, www.fhi.ox.ac.uk, accessed July 10, 2016.

restrict this freedom. While advocating transcendence, they rejected religious traditions: “Extropy means favoring reason over blind faith and questioning over dogma. It means understanding, experimenting, learning, challenging, and innovating rather than clinging to beliefs.”⁵

In 1998, the first Transvision conference was held in the Netherlands at which Bostrom gave a presentation introducing the World Transhumanist Association. Approximately annually through 2007, other Transvision conferences were held in Sweden, England, Germany, the United States, Canada, Venezuela, Finland, and again in the United States. My research on this movement began at the 2003 Transvision conference at Yale University, and I also participated in the 2006 conference in Helsinki, Finland, where I first interacted with Giulio Prisco, who is very active in promoting spiritual transcendence in Transhumanism, and currently leader of the Turing Church, which we shall visit later in this chapter. Over the past decade, the wings of the Transhumanist Movement that originated from the teachings of FM-2030 have tended to weaken organizationally, even as the more general movement spread.

In 2013, Max More and Natasha Vita-More, published a massive edited volume nicely summing up their movement, *The Transhumanist Reader*. Ten of the 42 chapters were reprinted from periodicals they had edited in the period 1992–2002 under the name *Extropy*, a term which they define as “the extent of a living or organizational system’s intelligence, functional order, vitality, and capacity and drive for improvement.” [13] Thus, Extropy is a potentially scientific concept, as well as the name of a particular social movement organization. Transhumanists sometimes use the term *extropy* as an antonym for *entropy*. They generally do not use the term *enthalpy* from physics, nor *élan vital* which Henri Bergson considered to be the quasi-religious impetus responsible for evolution, but these are similar concepts [14]. Another 19 chapters were newly written expressly for the *Reader*, and the remaining 13 were reprints from a variety of sources. Several of the contributors are quite prominent intellectuals, notably the artificial intelligence pioneer Marvin Minsky, who brought copies of his book *The Emotion Machine* to one Transhumanist leadership meeting I attended, and Singularity University futurist Ray Kurzweil who discussed his book *The Age of Spiritual Machines* with me at another [15, 16].

The nine sections of the *Reader* offer an ontology of the movement, beginning logically enough with an exposition of philosophical themes, including an eight-point Transhumanist Declaration that ends by proclaiming a new human right: “We favor morphological freedom – the right to modify and enhance one’s body, cognition, and emotions. This freedom includes the right to use or not use techniques and technologies to extend life, preserve the self through cryonics, uploading, and other means, and to choose further modifications and enhancements.” [17] The second and third sections of the *Reader* cover human enhancement in the somatic and cognitive spheres, and the fifth section explicitly concerns death transcendence. Other sections describe the core technologies, consider ethical and political implications,

⁵From the page of the Institute’s website presenting the principles of Extropy, www.extropy.org/principles.htm.

and offer the optimistic view that technological development is accelerating toward a singularity at which almost anything will be possible. The final section responds to some of the anti-Transhumanist criticisms made by conservative intellectuals.

As the history of religion has often shown, culturally intensive transcendence movements often manifest themselves in a large number of small, diverse groups and individual prophets. Thus it is not especially surprising that the Transhumanism movement had many manifestations. On the IEET blogsite, Hank Pellissier collected ideas about the types of Transhumanism that can be logically distinguished, suggesting these 10 [18]:

1. Extropianism “advocates a proactionary approach to human evolution and progress, placing strong emphasis on rationality and optimism.”
2. Singularitarianism “believes the transition to a posthuman world will be a sudden event... a Technological Singularity created by runaway machine superintelligence.”
3. The Hedonistic Imperative altruistically seeks to alleviate all suffering through cure of all diseases and other technological advances such as genetic engineering and nanotechnology.
4. Democratic Transhumanism is “a synthesis of transhumanism with social awareness and democratic decision-procedures,” represented by the Institute for Ethics and Emerging Technologies.
5. Survivalist Transhumanism is the diverse set of hopes and activities oriented toward technological conquest of death, thus including Alcor.
6. Libertarian Transhumanism wants “technologies to enhance human capacities” and regards “upgrading as a civil right and civil liberty.”
7. Religious Transhumanism is defined narrowly by Pellissier as a perspective that considers Transhumanism to be compatible with existing religious traditions, with this prominent example: “The Mormon Transhumanist Association was founded in 2006; it presently has 530 members.”
8. Cosmopolitan Transhumanism urges that we “abandon our nationalistic, patriotic and geopolitical allegiances in favour for global citizenship that fosters cooperation and mutually beneficial progress.”
9. Cosmism “believes that science in its current form, just like religion and philosophy in their current forms, may turn out to be overly limited for the task of understanding life, mind, society, and reality.”
10. Anarcho-Transhumanism “takes a stance of anti-capitalism, while valuing democracy and consensus decision-making... is a combination of syndicalism, socialism, technology, and radical democracy, maintaining an anarchist stance of the lack of religion.”

These ten variants of Transhumanism may be combined, as for example Max More represents both Extropianism and Survivalist Transhumanism. Especially prominent at the time this chapter was written was Democratic Transhumanism, represented by the Institute for Ethics and Emerging Technologies, to which the author has belonged since 2006. The IEET is a good example to consider next,

because it also combines aspects of Religious Transhumanism and Cosmopolitan Transhumanism.

8.2 Institute for Ethics and Emerging Technologies

Founded in 2004 by Nick Bostrom and James Hughes, the IEET primarily uses Internet as the medium of organization and communication, with occasional real-world meetings. It may be an outcome from the 2003 Transvision conference at Yale University, and for many years Hughes taught at Trinity College in Hartford, Connecticut, not far from Yale. Bostrom earned his doctorate in philosophy from the London School of Economics in 2000 and was at Yale 2000–2002, founding the Future of Humanity Institute at Oxford University in 2005. Hughes earned a sociology doctorate from the University of Chicago, and currently holds the position of Associate Provost for Institutional Research, Assessment, and Planning, at University of Massachusetts, Boston. The IEET's website offers this brief self-description:

The Institute for Ethics and Emerging Technologies is a nonprofit think tank which promotes ideas about how technological progress can increase freedom, happiness, and human flourishing in democratic societies. We believe that technological progress can be a catalyst for positive human development so long as we ensure that technologies are safe and equitably distributed. We call this a “technopgressive” orientation. Focusing on emerging technologies that have the potential to positively transform social conditions and the quality of human lives – especially “human enhancement technologies” – the IEET seeks to cultivate academic, professional, and popular understanding of their implications, both positive and negative, and to encourage responsible public policies for their safe and equitable use.⁶

As of July 5, 2016, the IEET could be said to have a core group of 172 members, of whom 95 held formal positions, while the remaining 77 had published at least one blog on the group's website in the previous year. James Hughes was the executive director, Steven Umbrello was managing director, and Marcello Rinesi was chief technology officer. Nick Bostrom was described as the co-founder, and for a while had been listed as a senior fellow. There were at that point in time two senior fellows, the author of this book and Jamais Cascio, plus 25 fellows, one of whom also belonged to the 25-member advisory board. Working closely with the executives was a board of directors and trustees: Martine Rothblatt, George Dvorsky, Mike LaTorra, Giulio Prisco and Mark Walker. Thirty-five affiliate scholars completed the roster of those with formal statuses, emphasizing through the “scholar” title that this was a group of intellectuals. Its closed Facebook group had 2280 members as of August 27, 2016, and its four administrators were James Hughes, Steven Umbrello, Giulio Prisco and George Dvorsky.

The most obvious connection to religion is the fact that one of IEET's seven major projects could be described as a group meditation, through blogs and other

⁶ www.ieet.org/index.php/IEET/about, accessed August 13, 2016.

forms of communication, organized by three leaders with extensive histories as Buddhists:

Cyborg Buddha Project – IEET Executive Director James Hughes and IEET Board members Mike LaTorra and George Dvorsky are collaborating on the IEET Cyborg Buddha Project, to promote discussion of the impact that neuroscience and emerging neurotechnologies will have on happiness, spirituality, cognitive liberty, moral behavior and the exploration of meditational and ecstatic states of mind. Hughes is a former Buddhist monk and is writing a book tentatively titled *Cyborg Buddha: Using Neurotechnology to Become Better People*. LaTorra, a Zen priest and author of *A Warrior Blends with Life: A Modern Tao*, runs the Trans-Spirit list promoting discussion of neurotheology, neuroethics, technospirituality and altered states of consciousness.⁷

The stereotype that Buddhism preaches withdrawal from the world really does not fit the forms of Buddhism expressed through Transhumanism. Rather, there is an implicit value in avoiding the use of technology to gain superiority over other people, thus a moderation of individual lust for power, rather than a withdrawal from action. Hughes and his immediate associates have vigorously promoted the idea that as information technology reduces the need for human labor in the economy, all people should receive a guaranteed minimum income, even if unemployed. Another one of the seven IEET projects is Preparing for Technological Unemployment: “We need to prepare now for the wrenching political and economic reforms that will be necessary to ensure that technological unemployment is a boon for all, and not just an economic elite.”

We look forward to *Cyborg Buddha*, having found much interesting theory and balanced analysis in the earlier book Hughes wrote, *Citizen Cyborg*. There he analyzed the techno-political challenges of the twenty-first century, arguing that much of the immediate opposition to Transhumanism has been religiously motivated [19]. He reports that two Christian organizations were very active in criticizing Transhumanists, the Center for Bioethics and Culture, and the Center for Bioethics and Human Dignity.⁸ It is less clear how strong the religious influences were in The President’s Council on Bioethics that had argued against technological enhancement of human beings and against cloning in its reports *Beyond Therapy* and *Human Cloning and Human Dignity* [20, 21]. In any case, Council member Francis Fukuyama had asserted that Transhumanism is one of the “world’s most dangerous ideas,” and has argued that we must not allow “transhumanists to deface humanity.” [22].

One plausible theological analysis is that Christianity and Buddhism disagree about the proper human relationship to technology. A very complex apparent difference is potentially so profound that we can only suggest it here, and not take the chapter or full book required to analyze it in the context of extensive theological literature. Christianity appears to be dualist in many ways, not merely seeking to distinguish absolute good from absolute evil, but also distinguishing pure spirit from impure material substance – for example soul from brain [23]. Some forms of

⁷ www.ieet.org/index.php/IEET/programs, accessed August 14, 2016.

⁸ <http://www.thecbc.org/>; <http://www.cbhd.org/>.

Christianity may encourage opposition to the Environmentalist Movement, under the theory that God gave us the material world for our use, and He would not allow physical nature to degrade. Buddhism does not make such strict distinctions, perhaps inheriting from ancient nature religions the view that humans are fully part of physical nature, and that physical nature is also spiritual. Relevant to Transhumanism, and considered again here in Chapter 9, Japanese robotics pioneer Masahiro Mori has argued that robots like humans possess Buddha nature [24].

Mike LaTorra's Trans-Spirit list is the Yahoo equivalent of a Facebook public group, having 256 members and announcing: "It seeks to understand religion and spirituality in terms of cognitive science and evolutionary psychology, and to project the future of religion and spirituality in the dawning Transhuman era."⁹ When this page was most recently visited repeatedly, Yahoo suggested other groups that had some overlap in membership. The first was The Citadel of Radically Progressive Thought with 1311 members, that publicized The Technocalypse in which technology would either destroy humanity or allow humanity to overcome death.¹⁰ The second connected group was Kifune with 179 members, an "Extropian/ Longevity/ Singularity dinner discussion group in Marina del Rey" near Los Angeles.¹¹ The third was actually the Yahoo group that directly represents the IEET, a membership-restricted group with 140 members:

Technopressive is a welcoming space for conversation, collaboration, organization, and debate among liberal, social, and radical democrats who believe that emerging technologies offer unprecedented emancipation for humanity, as well as possible catastrophic risks, and that they must be democratically regulated, safe, and their benefits universally accessible. Technopgressives include both left-wing transhumanists, as well as non-transhumanist progressives who support the emancipatory possibilities of enhancement technologies.¹²

Not all members of IEET are left-wing Technopressives, in part because it is such a diverse social movement, as reflected in Pellissier's list of 10 types. However it also could be said that there seems to be no online home at present for a very major but also controversial tradition not listed by Pellissier, Elitist Transhumanism, which also could be called Separatism. Conceivably, a roughly right-wing form of Transhumanism could exist as a secret society, comparable to The Process or Rosicrucian and Golden Dawn cults, creating a separate society and system of social status, employing radical technologies to empower its members, and preparing them to take over the world when today's civilization naturally collapsed. It would be unfair to describe some of the most prominent Transhumanists this way, but the fact that they are not currently active in the IEET, but often active in advanced technology industries or academic and scientific careers, suggests that Technopressives by no means represent the entire scope of the Transhumanist movement.

⁹ groups.yahoo.com/neo/groups/Trans-Spirit/info, accessed August 14, 2016.

¹⁰ groups.yahoo.com/neo/groups/technocalypse/info, accessed August 14, 2016.

¹¹ groups.yahoo.com/neo/groups/kifune/info, accessed August 14, 2016.

¹² groups.yahoo.com/neo/groups/technopressive/info, accessed August 14, 2016.

Arguably, the Elitist Transhumanist perspective was first enunciated by nineteenth-century philosopher Friedrich Nietzsche, in *Also Sprach Zarathustra* and other works, although Nietzsche did not emphasize technology and his writings are open to various contradictory interpretations. Special relevance here is the fact that Nietzsche was very critical of Christianity, but also his perspective was distorted by his sister Elisabeth Förster-Nietzsche and appropriated to some degree by the Nazis, equating his notion of the Superman with the supposed Germanic Master Race. The history is very complex, but Elitist Transhumanism is too easily conflated with racism, feudalism, or other undemocratic social forms.

IEET's online academic journal, *Journal of Evolution and Technology*, has carried several articles about Nietzsche's philosophy, notably by IEET fellow Stefan Lorenz Sorgner who highlights the differences between Nietzsche and modern Transhumanists [25]. Traditionally, Nietzsche's concept of the *Übermensch* was translated *Superman*, which evokes comic book connotations for Americans, and Sorgner prefers *Overman* – or better yet the non-sexist *Overhuman* – but many Transhumanists prefer *Posthuman*. Simplistically, an Übermensch dominates any remaining people who are mere humans, while the term *Posthuman* might apply to all people after we have evolved collectively to a higher state. In colloquial online English, the German word *über*, meaning *over*, has become *uber* and refers to people or actions that are unusually powerful. An *uber user*, for example, is highly skilled in using technology. While advocating superiority, Nietzsche also recognized what Henry Murray much later called the Icarus Complex, the hazard of flying too close to the sun, or being obsessed with unrealistic personal ascension [26]. Repeatedly, Nietzsche depicted his position as precariously but proudly perched above an abyss:

Beyond Good and Evil: He who fights with monsters should be careful lest he thereby become a monster. And if thou gaze long into an abyss, the abyss will also gaze into thee [27].

Human, All Too Human: When walking around the top of an abyss, or crossing a deep stream on a plank, we need a railing, not to hold onto (for it would collapse with us at once), but rather to achieve the visual image of security [28].

Thus Spake Zarathustra: Ye are not eagles. Thus ye have never experienced the happiness in the terror of the spirit. And he who is not a bird shall not dwell over abysses [29].

Thus Spake Zarathustra: Man is a rope stretched between the animal and the Superman – a rope over an abyss [30].

Founded in 1998, *Journal of Evolution and Technology*, has had five editors, Nick Bostrom, Robin Hanson, Mark Walker, James Hughes, and Russell Blackford. During the editorship of Hughes, the August 2005 issue was dedicated to the similarities and differences between religion and Transhumanism. For example, an article by Professor Patrick Hopkins of Millsaps College explains that Transhumanism and religion are similar, in that they both seek transcendence, but Transhumanism believes humans can achieve transcendence through their own technological efforts, whereas religion relies upon supernatural belief, obedience, or practices. Hopkins foresees the very real possibility of antagonism between Transhumanism and religion, as particular faiths reject specific technical means Transhumanists adopt to achieve transcendence [31]. In a later issue, Professor Gregory Jordan of the



Fig. 8.1 Max More's 2009 birthday party in *Second Life*

University of South Florida analyzed the possibilities that religious movements might incorporate some of the principles of Transhumanism [32].

While the IEET serves as a point of convergence for the movement, often activities are organized by almost random collections of individual Transhumanists and the movement's subgroups. For example, Fig. 8.1 is a picture taken at a party, staged in *Second Life* by Natasha Vita-More and Giulio Prisco, to mark Max More's 45th birthday, January 31, 2009. The avatar slightly right of the center, wearing dark clothing, represents Max himself. The one in the foreground with the infinity symbol on his back, is Giulio Prisco.

The next two sections of this chapter will describe two groups that cooperate with IEET and have membership links, the Terasem Movement and the Turing Church, that have aspects of religion. The subsequent section considers the diversity of Transhumanist Facebook groups, highlighting some that are explicitly religious.

8.3 The Terasem Movement

A prominent independent example of many aspects of Transhumanism is the Terasem Movement, founded by Martine Rothblatt, described by Wikipedia as “an American lawyer, author, and entrepreneur. Rothblatt graduated from University of California, Los Angeles with a combined law and MBA degree in 1981, then began work in Washington, D.C., first in the field of communications satellite law, and eventually in life sciences projects like the Human Genome Project. She is the founder and Chairman of the Board of United Therapeutics and the highest-paid

female executive in the United States. She is also the creator of GeoStar and Sirius Radio.” Being the “highest-paid female executive” is an expression of the cultural innovativeness of Terasem, given that Martine Rothblatt was born male with the name Martin, and is a prominent advocate of transgender rights.

Terasem is a “not-for-profit charity endowed for the purpose of educating the public on the practicality and necessity of greatly extending human life, consistent with diversity and unity, via geoethical nanotechnology and personal cyberconsciousness, concentrating in particular on facilitating revivals from biostasis. The Movement focuses on preserving, evoking, reviving and downloading human consciousness.”¹³ A website with the URL terasemfaith.org outlines its relationship to traditional religion:

Terasem is a transreligion that includes all religions the way a forest includes its trees.

2.1 Forest of Terasem means good lives are immortal, and all faiths are welcome in cyber-heaven.

- 2.1.1 Fundamental to every religion is the immortality of the soul, which in Terasem is our consciousness.
- 2.1.2 Afterlives differ for good and evil, thus Terasem knows a joyful immortality means only good lives.
- 2.1.3 Identity migration amongst physical substrates honors Creation by continually bearing witness to its greatness.
- 2.1.4 Transferring identity to cyber-substrate is a matter of mannerisms, personality, recollections, feelings, beliefs, attitudes and values.
- 2.1.5 Having multiple transferred identities for a single soul is just as joyous as having many children.
- 2.1.6 Souls will be reanimated via computational emulation because it is doable, respectful and completes Terasem.¹⁴

In April 2009 I sent an avatar belonging to the idealistic *Star Trek* community in *Second Life*, on an expedition to explore Terasem Island, where a building with many displays was devoted to Terasem’s CyBeRev Project. Figure 8.2 shows him standing in the midst of these displays, including one at the right that displays the computer interface through which users answer questions in tests used to capture their personalities [10].

In *Second Life*, a location often gives visitors a brief written introduction, on what is called a *notecard*, and here one reads: “CyBeRev means cybernetic beingness revival. The purpose of the CyBeRev project is to prevent death by preserving sufficient digital information about a person so that recovery remains possible by foreseeable technology. Terasem Movement believes that future technology will be able to recover full functionality for CyBeRev people.” My recent book about the

¹³ www.terasemcentral.org, accessed July 10, 2016.

¹⁴ terasemfaith.net/beliefs, accessed January 20, 2017.



Fig. 8.2 A science fiction crewmember exploring Terasem Island in *Second Life*

online *Star Wars* and *Star Trek* communities, *Star Worlds* described this avatar-based expedition and summarized the CyBeRev quasi-religious ideology thus:

Depending on how one defines the essence of a human being, CyBeRev asserted that actual everlasting life might be possible in the near future, using a combination of advanced technologies that have been developed for other purposes. The process will be complex, but in outline form it consists of four stages. First, you will be recorded: all your memories, personality, skills, physical characteristics, and genetic inheritance. Second, this information will be entered into a vast computerized database so that future generations can draw upon your experiences and you can continue to be part of this world after your death. Third, your data will be transported by robot spacecraft to the solar system of a distant star, where a new colony is to be established. Fourth, you will be reconstituted from the recording and begin a new life in a fresh, young body as a colonist of the new world [33].

While this grand vision may take centuries to implement fully, CyBeRev already made it possible to beam data representing individual Transhumanists into outer space by radio, on the off chance that extraterrestrials might receive the signal and revive the person. More recently, Martine Rothblatt published the book *Virtually Human*, discussing these possibilities at some length and considering their ethical aspects. Rothblatt begins her book at a very human but also transhuman level, by introducing BINA48, a robot that emulates her wife. BINA48 has a Wikipedia page that begins:

BINA48 (Breakthrough Intelligence via Neural Architecture 48) has variously been called a sentient robot, an android, gynoid, a social robot, a cybernetic companion, and “a robot with a face that moves, eyes that see, ears that hear and a digital mind that enables conversation.” BINA48, a robot owned by Martine Rothblatt’s Terasem Movement, Incorporated (TMI), is designed to test two hypotheses concerning the ability to download a person’s consciousness into a non-biological or nanotech body after combining detailed data about a person with future consciousness software. BINA48 is a humanoid robot, consisting of a

bust-like head and shoulders mounted on a frame, developed by Hanson Robotics and released in 2010. It was modeled after Rothblatt's wife through more than one hundred hours in compiling her memories, feelings, and beliefs and is said to be able to have conversations with humans.¹⁵

One of the pioneers in this field, robotics expert Hans Moravec, sought to disarm critics by calling cybernetic copies of human personalities *mind children* – cybernetic offspring rather than cyberimmortality of the individual himself – setting aside the issue of whether they really are the person they were based on [34]. Similarly, Rothblatt calls them *mindclones*, who can exist simultaneously with the human on which they were based, and by the sheer fact of being conscious deserved legal rights and moral respect. Chapter 9 of *Virtually Human* argues that mindclones will have the same religious inclinations as human beings, and should be accepted as full members of the existing religious denominations, if their beliefs are in harmony, and they are prepared to participate in rituals and fellowship just like biologically-based people.

The foreword to *Virtually Human* was written by Rothblatt's long-time associate Ray Kurzweil, who currently is an advisor to Google. In his widely-read book, *The Age of Spiritual Machines*, Kurzweil argues that the combination of brain scanning, neural implants, nanotechnology, and supercomputing will achieve the union of humans and machines within 20 or 30 years, leading to the transformation of humanity into a species no longer limited by mortal bodies [35]. Kurzweil gains some credibility for his ideas from the fact that he is a highly successful pioneer in the practical fields of computer recognition of spoken language and computer-generated speech. I observed Kurzweil's support for Transhumanism at a workshop on Geoethical Nanotechnology, held in July 2006 at Rothblatt's extensive Vermont facility, notable for its futuristic conference building and the incongruous fact that there were solar panels on the woodpile.

Kurzweil's workshop presentation, "How Neuronanotechnology Will Lead to Melding of Mind and Machine," was later published in *The Journal of Geoethical Nanotechnology* on Terasem's website [36]. In this nearly extemporaneous talk organized around a PowerPoint, he presented many graphs suggesting that technological progress was accelerating, toward the possible Singularity, but he also noted that people have traditionally possessed exaggerated notions of how their own minds work. At one point he commented, "We essentially hallucinate the world, because we actually don't see it." What he meant was that our vision is actually very hazy, outside the narrow high-focus region in the direction we are looking, and all of our senses perceive just a small fraction of the immediate environment, but our minds imagine we perceive it all. Near the end of his talk he noted that people are merging with their information technologies already, through increasing reliance upon mobile devices, and then predicted: "Most of the action in our brains at some point in the 2030s or 2040s is going to be non-biological. And obviously non-biological intelligence is much more subject to uploading."

¹⁵ en.wikipedia.org/wiki/BINA48, accessed August 16, 2016.

Another prominent sympathizer with Transhumanism was Marvin Minsky, artificial intelligence pioneer who was Kurzweil's teacher at the Massachusetts Institute of Technology. I observed Minsky's support for Transhumanism at the December 2007 Colloquium on the Law of Transbeman Persons at the Florida Space Coast Office of the Terasem Movement, where we watched an orbital launch from the nearby Kennedy Space Center. His presentation was published in *The Journal of Personal Cyberconsciousness* on Terasem's website, and is a meditation about why artificial intelligence (AI) has been so slow to develop [37].

Minsky had been one of the participants at the 1956 Dartmouth conference that launched the movement to create AI [38]. Minsky had initially favored what is called *logic-based* or *rule-based* programming, in which AI programs are like symbolic logic derivations, and this meant he and his associates were in competition with other approaches like *neural networks* and *genetic algorithms* which operated much more like chaotic biological systems. In 1969 he and Seymour Papert had published a book titled *Perceptrons*, that was exceedingly pessimistic about neural networks and may have convinced government funders to ignore that rival approach to AI for the better part of a decade [39]. Yet in his talk at the Terasem conference decades later, he said: "My conclusion is that you want the machine to use logic sometimes, neuronet sometimes, statistics sometimes, and genetic algorithm sometimes. The best way to learn is to listen to other people, build common sense databases, and so forth. At different moments, our brains cleverly switch to using one method or another and that is why we are so smart."

Earlier, both Kurzweil and Minsky, along with Max More and myself, had contributed to a 2004 compendium, *The Scientific Conquest of Death: Essays on Infinite Lifespans*, published by an independent Transhumanist group called The Immortality Institute. Kurzweil argued that many humans are already in the process of becoming cyborgs: "We are rapidly growing more intimate with our technology. Computers started out as large remote machines in air-conditioned rooms tended by white-coated technicians. Subsequently they moved onto our desks, then under our arms, and now in our pockets. Soon, we'll routinely put them inside our bodies and brains. Ultimately we will become more nonbiological than biological." [40] Minsky agreed: "Eventually we will entirely replace our brains – using nanotechnology. Once delivered from the limitations of biology, we will be able to decide the length of our lives – with the option of immortality – and choose among other, unimagined capabilities as well." [41] For purposes of this book, we do not need to accept these visionary ideas, nor to reject them as crazy, but rather to note the challenge they may present to traditional religions.

Other Transhumanists had also considered issues relevant to religion in articles published in Terasem's journals. In 2006, James Hughes reported on a survey of the membership of the World Transhumanist Association: "The results illustrate the diversity of the organization. Members include libertarians, conservatives, upwingers, Democrats, U.S. liberals, left anarchists, communists, and not-politicals. It can be difficult at times in our organization to have so much diversity; it is very frothy and we have lots of good arguments. The WTA is not as diverse religiously. It is mostly an atheist movement at this point, but there are Buddhists, Catholics, Eastern

Orthodox, and Muslims.” [42] It might be an exaggeration to say that the IEET, which Hughes directs, today represents the Buddhist branch of Transhumanism, but Terasem is quite explicitly ecumenical.

8.4 The Turing Church

While maintaining good relations and mutual respect with more moderate Transhumanists, in 2008 Giulio Prisco suggested that several who were dissatisfied with the possibly timid progress of the movement should join together in an international discussion forum, sharing fresh ideas and possibly undertaking innovative projects. Partly to suggest its radical nature, and to recognize that a new form of transcendence was the goal, he named it The Order of Cosmic Engineers. Among the prominent Transhumanists who joined were Max More and Natasha Vita-More. The College of Architects, who helped Giulio set Order policy, included Martine Rothblatt. Giulio chose *Second Life* as the venue to announce the Order, in a virtual conference, The Future of Religions/Religions of the Future, on June 4 and 5, 2008.

A second event, held June 14 in Silvermoon City in *World of Warcraft*, distributed the first draft of the group’s prospectus, which began: “Shape Your Universe! The Order of Cosmic Engineers warmly invites you to join its cosmic quest. We joyfully set out to permeate our universe with benign intelligence, building and spreading it from inner space to outer space and beyond.”¹⁶ Central to the initial vision of the Order was the idea that people who wanted to transform themselves could use virtual worlds as an environment in which to do this, or where they could supplement the transformations they underwent in the physical world, as they encouraged each other and shared ideas about technological transcendence. Figure 8.3 shows the Order’s members standing at the grand ramp that leads upward from the Court of the Sun to the Sunfury Spire in Silvermoon, the magical capital of the Blood Elves, most scientifically advanced of the virtual races in *World of Warcraft*, thus symbolic of Transhumanism.

A prominent Cosmic Engineer who employed advanced biotechnology for self transformation in the material world was represented by avatar Amara Hayek at a baby shower organized by Natasha Vita-More and held at the Order’s virtual headquarters in *Second Life*, December 14, 2008. Amara was a 47-year old woman, who had worked so diligently in astronomy that the usual child-bearing years had passed without any progeny. In a thoughtful speech to the assembled Transhumanists, she explained: “My reproductive lifetime was finishing, although I didn’t realize how dire were my reproductive circumstances, until my first visit to the Tartu, Estonia fertility clinic in September 2007. Because of my age, the clinic doctor told me that I would have a 1% probability of getting pregnant using my own eggs. So began my acceptance of using my good health to be an incubator for someone else’s genes (from the Baltics) and following my long dream of having a family, but now with a

¹⁶turingchurch.com/2012/01/02/order-of-cosmic-engineers/, accessed August 16, 2016.



Fig. 8.3 The meeting of the Order of Cosmic Engineers in Silvermoon

twist of beginning it solo. Life has a way of helping you, when you follow your dreams.” The virtual meeting room was decorated with a Halloween snapshot of Amara’s pregnant abdomen painted to look like a pumpkin, a sonogram picture of the as-yet unborn baby, a photo of Amara nearly nude showing how sexy a pregnant woman can be, and a picture of a plaster cast of that same glorious abdomen. Indeed, that baby was born healthy, ample proof that Transhumanism can be life-enhancing.

On April 18, 2010, I attended a European seminar organized by Giulio Prisco, experimenting with a commercial virtual environment system, specifically designed for such meetings, called *Teleplace*. This was the sad Sunday when many world leaders had hoped to attend a memorial service for Lech Kaczynski, the president of Poland, and 95 others who were killed in a plane crash on their way to a memorial for the victims of the Katyn massacre 70 years earlier, when the Russian government slaughtered thousands of Polish prisoners of war in order to decapitate the society in preparation for Soviet dominance. Yet many mourners could not get to Poland that Sunday in 2010, nor could I have flown to Italy where the meeting was organized, because dust from volcanic eruptions at Eyjafjallajökull in Iceland had grounded most planes across western Europe. One can hardly think of a set of circumstances that better reflect the tragic quality of real life, and the global potential of virtual worlds. Yet the meeting struggled with Internet connectivity issues that interrupted the media feed, while participants joked that the volcano was really to blame.

The speaker was Anders Sandberg, a colleague of Nick Bostrom at the Future of Humanity Institute of Oxford University, and a prominent Transhumanist in his own right. His abstract summarized his topic, very close to the theme of this chapter:

In the past the human mind was seen as atomic and clearly distinguished from the body and environment. As cognitive science has advanced this view has become increasingly untenable. The emerging view is instead that our minds are composed of networks of simpler parts. As we understand our brains better new possibilities for enhancing cognition biologically open up, but also intriguing possibilities to offload or copy our mental processes into external systems such as software. This talk will discuss the possibilities for distributed cognition inside our brains and computers and across society.¹⁷

Other virtual gatherings were hosted by The Order, but to take cosmic evangelizing to a higher level, Giulio Prisco created the Turing Church. In part, the name commemorated Alan Turing, a brilliant mathematician and tragic figure in the history of British science, whose suicide remains mysterious. He was famous for the Turing Test, a method for distinguishing a person from a computer simulation, that some day would verify the ultimate success of artificial intelligence by failing [43]. At a Transhumanism and Spirituality conference in 2010, Giulio introduced the cosmic visions of the Turing Church, connecting them to the Turing-Church Conjecture.¹⁸ Sometimes called the Church-Turing Thesis, this is a standard theory in computer science, named after Turing and the American mathematician Alonzo Church.¹⁹ It concerns what kinds of problems can definitely be solved by a computer following strict logical laws of behavior. In this context, what I like to call the *Prisco Theorem* can be derived from it: If the human mind follows the Turing-Church Conjecture, then it can be exactly emulated by a computer. In later online sermons, Giulio enunciated the goals of his new religion:

We will go to the stars and find Gods, build Gods, become Gods, and resurrect the dead from the past with advanced science, space-time engineering and “time magic.”

God is emerging from the community of advanced forms of life and civilizations in the universe, and able to influence space-time events anywhere, anytime, including here and now.

God elevates love and compassion to the status of fundamental forces, key drivers for the evolution of the universe.²⁰

Among the most recent virtual meetings of Turning Church, two of the most interesting were small seminars of Transhumanist leaders, taking place in a Stonehenge the church had built on Terasem's island. The first was held Sunday, February 14, 2016, and concerned a debate about a recent \$26,735 award that honored a scientific achievement that might be a step toward the preservation of human brains. It had recently been announced on the website of the Brain Preservation

¹⁷ giuliprisco.blogspot.com/2010/04/anders-sandberg-on-neuroselves-and.html, accessed August 16, 2016.

¹⁸ www.slideshare.net/giuliprisco/transpirit2010, accessed August 16, 2016.

¹⁹ en.wikipedia.org/wiki/Church%20Turing_thesis, accessed August 16, 2016.

²⁰ turingchurch.com/2014/10/04/launching-the-turing-church-swarmwise, accessed August 16, 2016.

Foundation: “The Small Mammal Brain Preservation Prize has officially been won by researchers at 21st Century Medicine. Using a combination of ultrafast chemical fixation and cryogenic storage, it is the first demonstration that nearperfect, long-term structural preservation of an intact mammalian brain is achievable.”²¹

Organized by Julio Prisco, the meeting was largely an intense but polite debate between Ken Hayworth, President of the Brain Preservation Foundation, and Max More representing the Alcor Foundation. The winners of the award, Robert McIntyre and other staff of the 21st Century Medicine (21CM) corporation were not present, but the discussion focused very much on the scientific paper that earned them this award, titled “Aldehyde-Stabilized Cryopreservation” and published in the journal *Cryobiology* [44]. On its website, the company had been proud to accept the award, but was careful to avoid making Transhumanist claims for the application of this technique: “21CM performs research testing and produces lab-scale cryopreservation solutions for research and educational purposes only. No current 21CM test or product is used for or meant for diagnosis or treatment of any human medical condition or disease.”²²

Also present were Natasha Vita-More, Lori Rhodes the administrative assistant for Martine Rothblatt (who was not present), and Linda Chamberlain, one of the couple that founded Alcor Life Extension Foundation. Like FM-2030, Chamberlain’s husband, Frederick, is currently in cryopreservation at Alcor. Another active participant was Extropia DaSilva, described on the Turing Church website as “a digital person, currently residing in Second Life. Her purpose is to explore how NBIC technologies are redefining concepts of self. She chairs the Thinkers discussion group.”²³ NBIC stands for the convergence of Nanotechnology, Biotechnology, Information technology and new technologies based on Cognitive science [45].

Figure 8.4 is how the computer screen appeared to a participant, with many parts of the user interface visible that we usually close before taking pretty pictures. Communication was chiefly through voice chat, and at the moment Natasha Vita-More was speaking; she is the person sitting in the lower right corner just to the right of the virtual dog. Simultaneously, people are posting written notes in the text chat in the dark box to the lower left. Probably not legible in this printed version, Natasha had just posted, “I have a comment to make.” Note how the technology allows two separate but related channels of communication to take place simultaneously, thus potentially enhancing human social cognition. The small box in the lower right corner of the interface moves the viewpoint, such that the user need not be looking through the eyes of the avatar, thus providing another form of consciousness expansion.

One February 8, 2016, I learned about the impending prize and was invited to the February 14 meeting in *Second Life*. On February 9, the prize was announced to the public, and on February 12 the Alcor Foundation posted a dissenting opinion. The

²¹ www.brainpreservation.org/small-mammal-announcement/, accessed August 25, 2016.

²² www.21cm.com, accessed August 25, 2016.

²³ turingchurch.com/extropia-dasilva, accessed August 25, 2016.



Fig. 8.4 A meeting of leading Transhumanists at the Turing Church

appropriateness of any method for preserving biological tissues depends on the intended goals. The modest goals proclaimed by 21CM did not include achievement of immortality.

The idea of simply freezing a human body, and then restoring it to life after thawing was repeatedly explored in the science fiction of the 1930s, influentially by Neil R. Jones in “The Jameson Satellite,” and more fancifully by Edgar Rice Burroughs in “The Resurrection of Jimber-Jaw.” [46] Extensive publicity for this method was gained by popular movies, *Buck Rogers* (1939) and *The Thing* (1951). Inspired by such stories, Robert C. W. Ettinger developed the idea in his 1964 book, *The Prospect of Immortality*, and extended it in the direction of Transhumanism in his 1972 book, *Man into Superman* [47, 48].

Freezing and thawing take time, however, and as a practical matter the freezing usually cannot begin until quite a while after death. As the ice forms, its crystals can rip the cells of the body, so much research effort has been invested in methods for quick freezing and the use of chemicals to assist the preservation. In its dissenting opinion, Alcor argued that Aldehyde-Stabilized Cryopreservation (ASC) is not an appropriate technology for achieving immortality:

While ASC produces clearer images than current methods of vitrification without fixation, it does so at the expense of being toxic to the biological machinery of life by wreaking havoc on a molecular scale. Chemical fixation results in chemical changes (the same as embalming) that are extreme and difficult to evaluate in the absence of at least residual viability. Certainly, fixation is likely to be much harder to reverse so as to restore biological viability as compared to vitrification without fixation. Fixation is also known to increase freezing damage if cryoprotectant penetration is inadequate, further adding to the risk of using fixation under non-ideal conditions that are common in cryonics. Another reason for lack of interest in pursuing this approach is that it is a research dead end on the road to developing reversible tissue preservation in the nearer future.²⁴

²⁴ www.alcor.org/blog/alcor-position-statement-on-brain-preservation-foundation-prize/, accessed August 27, 2016.

Giulio Prisco posted on YouTube a video of the February 14 meeting, and linked to it from the Turing Church Facebook page.²⁵ The debate was complex, with Max More arguing that science should accord more respect to the methods already being used at Alcor, which he believes are already preserving lives, and Ken Hayworth arguing that the ASC methods could attract more scientific respect to the general preservation endeavor even if it was not the right method to preserve lives. As Hayworth was criticizing Alcor's cryopreservation, Linda Chamberlain posted in the text chat: "You are not alone in your opinion. It has been the majority view for over 40 years. However, over 1000 people have a shot at living again because of cryonics... and that includes my soul mate, Fred Chamberlain... and I would hate to think of him in any condition other than cryostasis... It was our original goal to give people a chance at life... I'm sure happy my soul mate, Fred Chamberlain is now in stasis, has a chance, rather than suffering information theoretic death."

On Sunday, June 26, the Turning Church hosted a related presentation by long-time Transhumanist leader, Robin Hanson, who is associate professor of economics at George Mason University. Back in 1994, he had published an intriguing essay in *Extropy*, titled "If Uploads Come First: The Crack of a Future Dawn," considering the possibility that uploading – the transfer of a human mind to a computer – would be achieved before fully artificial intelligence.²⁶ Now Oxford University Press had just published his full book on what the world would be like if most intelligent inhabitants were uploads, analyzed in terms of economic theory: *The Age of Em: Work, Love, and Life when Robots Rule the Earth* [49]. An "em" is a whole brain computer emulation of a person. In his book as well as his talk, Hanson preferred not to speculate about which particular technology would produce ems, but to analyze what the world might be like after they had become common partners with the few remaining biological humans, and doing most of the work. Figure 8.5 shows him standing before the computer display that illustrated his lecture.

Again, Prisco posted a video of the event at YouTube, accessed through the Facebook page and website of the Turing Church, but this time also the PowerPoint slides.²⁷ Hanson began with an analysis that argued human progress was accelerating, illustrated by many graphs, then he outlined what brain emulation could mean. He was very explicit that he felt discussions about how the technology might actually be developed were somewhat unproductive at the present time, and his book was focused on the likely consequences if and when intelligence actually did migrate from biological to electronic systems. Searching YouTube for "robin hanson age of em" revealed that he made similar presentations to the Brooklyn Futurist Meetup at Brooklyn Law School, an informal gathering called Capla-Con hosted by his George Mason colleague Bryan Caplan, a high profile Google event, Thalesians 8th Séance in Budapest, and the Future of Humanity Institute of Oxford University,

²⁵ www.youtube.com/watch?v=SFPTzEHqbwc, accessed August 27, 2016.

²⁶ mason.gmu.edu/~rhanson/uploads.html, accessed August 27, 2016.

²⁷ turingchurch.com/2016/06/27/video-robin-hanson-in-second-life-on-the-age-of-em/, www.youtube.com/watch?v=OKGHixNpjng, accessed August 27, 2016.



Fig. 8.5 Professor Robin Hanson presenting his new book to the Turing Church

among others.²⁸ Clearly, leading Transhumanists distribute their message widely, both online and in the real world, through organizations of their own like the Future of Humanity Institute of Oxford University, and more traditional media such as Oxford University Press.

8.5 Adaptive Radiation

As Wikipedia informs us, “In evolutionary biology, adaptive radiation is a process in which organisms diversify rapidly from an ancestral species into a multitude of new forms, particularly when a change in the environment makes new resources available, creates new challenges, or opens new environmental niches.”²⁹ This could describe the proliferation of Protestant denominations after Roman Catholicism lost its monopoly of Christianity in western Europe, and it may be happening today with Transhumanism. The environmental change is the growth of the World Wide Web across the broad plains of Internet, and emergence of such fertile swamps as Facebook.

There are two obvious ways to search Facebook for other Transhumanist groups, either simply to enter into Facebook search terms like “transhuman” or to identify personal Facebook pages of Transhumanists and check which groups they belong to. I was able to find the personal pages of 96 of the 172 core members of the IEET

²⁸ www.youtube.com/watch?v=XP-p-O200jo, www.youtube.com/watch?v=TPT7QjQ_jl0, www.youtube.com/watch?v=N4I2If3x_9g, www.youtube.com/watch?v=BLTmWE90XU4, www.youtube.com/watch?v=s2Glr43sU, accessed August 27, 2016.

²⁹ en.wikipedia.org/wiki/Adaptive_radiation, accessed August 27, 2016.

by looking them up in the Facebook friend lists of James Hughes (2298 friends), George Dvorsky (2369), Giulio Prisco (1513) and Natasha Vita-More (4973). But the following independent Facebook groups turned up in an ordinary search for groups:

EGALITARIAN TRANSHUMANISM (23,331 members): “The main goals of EGALITARIAN TRANSHUMANISM: (1) Eliminate human misery and suffering; (2) Vastly increase people’s existential happiness, health and lifespan; (3) Give to everyone a high sense of achievement and fulfillment, and considerably elevate human dignity, creativity and (all types of) intelligence by augmenting everyone’s genetic potentials, in an egalitarian way, through biotechnology and other technologies.”

Scientific Transhumanism (17,721): “While the goals of transhumanism intersect with many of the vain promises of many world religions (happiness, joy, immortality, self-realization) transhumanism, for us, is a challenging but realistic attempt to realize these goals through hard work, science and disciplined focus on reality.”

Transhumanism (6,779): “This is a group for discussing transhumanism and sharing related topics.”

Transhumanism: The Future of Humanity (6,474): “Transhumanism is not fueled by egoism or fear of death. It is the next frontier in human evolution, placing the improvement of the human condition, and its advancement in the universe, at the forefront of the future. Transhumanism is an evolved way of thinking, feeling, functioning, and being.”

Global Transhumanist Association (6,442): “Transhumanism can be viewed as an extension of humanism, from which it is partially derived. Humanists believe that humans matter, that individuals matter. We might not be perfect, but we can make things better by promoting rational thinking, freedom, tolerance, democracy, and concern for our fellow human beings. Transhumanists agree with this but also emphasize what we have the potential to become.”

Techno-Optimism (5,340): “Let’s embrace technology and optimism and find ways to share these visions with those of the common doom and gloom mentality. To solve our grand challenges as quickly as possible we must first envision the grand future we all deserve. We can be short-sighted and imagine only the future we will exist within. Or we can be far-seeing and imagine all of the future to come.”

Rational Transhumanism (5,238): “This group aims to create an environment where H+ topics may be discussed in a scientific environment without distractions. Professional levels of calm, courteous and civil behavior are requested at all times, especially on the part of administrators. While moderate and enduring concerns can be shared, crusades and rants are strongly discouraged.”

Stanford Transhumanist Association (4,646): “Transhumanists support the application of technologies to augment human capabilities and lifespans. We support an informed and highly-tolerant debate on the ethical applications and potential consequences of these future advancements... Our aim is to prepare students and the public for a world characterized by an ever-increasing amount of technological and social change.”

The Hedonistic Imperative (4,187): “The Hedonistic Imperative outlines how genetic engineering and nanotechnology will abolish suffering in all sentient life. The abolitionist project is hugely ambitious but technically feasible. It is also instrumentally rational and morally urgent. The metabolic pathways of pain and malaise evolved because they served the fitness of our genes in the ancestral environment. They will be replaced by a different sort of neural architecture – a motivational system based on heritable gradients of bliss.”

Posthuman Network (3,556): “Posthuman Network is a technoprogressive futurist community... This facebook group is for everyone who is interested in posthumanism and futuristic ideas: extropy, singularitarianism, transhumanism, techno-progressive ideals,

futurism, life extension, existential risks, space exploration, virtual & augmented reality, etc.”

Transhumanist Art (2,571): “Transhumanist art is an art movement which focuses on the concept of transhumanity, a transitional stage in a perceived progression from human to transhuman to posthuman. First named in 1983 by Natasha Vita-More, transhumanist art claimed a role for artists as purveyors of futuristic aspiration and visionary thinking in an era of scientific and technological challenge, questioning traditional roles of the artist, the era of modern art and conventional aesthetics. Instead its proponents advocate a future-oriented aesthetics, often reflecting transdisciplinary works in art, science and technology.”

Seven smaller but significant religious Transhumanist groups were found by links from the 96 personal pages of IEET members, listed here with data from August 21, 2016, in Table 8.1. Of these IEET members, 37 had set their group membership to be private, so it was necessary to search the membership lists of the groups for each of them. We have already discussed Buddhist Transhumanism, but its page adds this observation: “Buddhism and transhumanism share various important common goals, among the most important is compassion and the working towards the cessation of suffering for all sentient beings.” Prisco’s religious group offers this self-description on its Facebook page: “The Turing Church is a working group at the intersection of science and religion. Hacking religion, awakening technology.”

Although 10 of the 96 IEET members also belong to the Mormon Transhumanist Association group, only one of them, Lincoln Cannon, is among the group’s 5 administrators. He founded the group in 2007 with two of the other admins, the fourth joined in 2014, and the fifth is that anonymity violating Facebook’s convention, a non-person named Mormon Transhumanist that has a personal page. This group describes itself thus: “The Mormon Transhumanist Association is the world’s largest advocacy network for ethical use of technology and religion to extend human abilities.” The first of 16 YouTube videos posted at the top of its website rather boldly proclaims: “Mormonism is, above all other things, an immersive discipleship of Jesus Christ. I am a Transhumanist not despite my Mormonism but rather I am a Transhumanist because of my Mormonism. My Mormonism mandates Transhumanism.”³⁰ I read into this that Mormonism requires living a new kind of

Table 8.1 Transhumanist religious groups on Facebook

Group	Members	Admins	IEET links
Buddhist transhumanism	1060	2	5
Mormon transhumanist association	788	5	10
Turing church	737	1	6
Spiritual transhumanism	713	1	3
Christian transhumanism	534	3	7
Transhumanism and religion	439	1	6
Christian transhumanist association	415	4	7

³⁰ transfigurism.org/, www.youtube.com/user/transfigurism, www.youtube.com/watch?v=VePRByRNIAc, accessed August 27, 2016.

life, that transcends old traditions even as it follows Jesus, and Transhumanism is the best path to transcendence in the modern world of advancing technology.

As its Facebook self-description says, Spiritual Transhumanism “aims to create an environment where Transhumanist & Singularitarian topics may be discussed in a spiritual context.” Wikipedia explains further, “Singularitarianism is a movement defined by the belief that a technological singularity – the creation of superintelligence – will likely happen in the medium future, and that deliberate action ought to be taken to ensure that the Singularity benefits humans.”³¹ Thus, Singularitarianism is a modern form of Millenarianism. If we asked a Singularitan whether God exists, the answer logically would be: “Not yet.”

Christian Transhumanism has the motto “humanity raised to a higher power.” It proclaims: “As anticipated by the Catholic priest Pierre Teilhard de Chardin, we are now consciously evolving at an accelerated rate. Humanity has acquired the ability to choose what the species *Homo sapiens* becomes and we are calling it transhumanism. Let’s take Chardin’s directed evolution, or transhumanism to the limit: Over the ages a natural trend of growing in understanding and creative powers will yield a supernatural looking state of being.” On March 10, 2005, James McLean Ledford posted an essay on the Web titled “Prepare for HyperEvolution with Christian Transhumanism,” that asserts: “Christian Transhumanism is an ancient idea, and yet it is the most advanced form of Christianity.”³² He derives this idea from the Lutheran theologian Paul Tillich who had offered “...a profound doctrine of what I call a transcendent humanism, a humanism which says that Christ is the fulfillment of essential man, of the Adamic nature.” [50] To derive Transhumanism from Pierre Teilhard de Chardin and Paul Tillich suggests a very different meaning from that of FM-2030’s Transhumanism, yet not necessarily incompatible.

The Christian Transhumanist Association describes its purpose as “participating with God in the redemption, reconciliation, and renewal of the world.” Dating from April 2014, it created its Facebook page on May 22, 2015, more than 5 years after the page for Christian Transhumanism, which dates from February 28, 2010. Its executive director, Micah Redding, is “the son of a Church of Christ preacher,” while the chairman of its board of directors, “Rev. Dr. Christopher Benek is a pastor serving the largest church in the Presbytery of Tropical Florida,” and its secretary, Dorothy Deasy, is active in the Mormon Transhumanist Association.³³ An essay by Micah Redding, titled “Christianity Is Transhumanism,” was posted on the Facebook page of the earlier group October 26, 2013. He belongs to all the groups listed in Table 8.1 except the Buddhists, and Giulio Prisco is the only other IEET member who belongs to both Christian Transhumanist groups.

Rather than being rival groups, these two may represent different stages in the development of Christian Transhumanism. Late in March 2014, Christopher Benek asked Ledford online whether there was any effort to create Christian Transhumanist groups outside of Facebook, and Ledford replied, “Yes we have started the CT asso-

³¹ en.wikipedia.org/wiki/Singularitarianism, accessed August 27, 2016.

³² www.hyper-evolution.com, accessed August 27, 2016.

³³ www.christiantranshumanism.org/announcement, accessed August 27, 2016.

ciation. Message Micah. I'm sure he will put you on the mailing list. I mean message Micah Redding :) We have about 30 members from all over the world. I'm Catholic, Micah is Protestant, and of course lots of Mormons!" He added a link to a page on the Turing Church website, where Prisco had promoted Redding's plan to create an ecumenical Christian Transhumanist movement.³⁴

The Transhumanism and Religion group also has the name Transhumanist Spirituality, announcing: "This group is set up so that Transhumanists, Singularitarians, or anyone interested or involved in science and technology to discuss their religious and/or spiritual views, or lack of them, in a respectful and safe place in a private setting." Among the people who have posted on this page, Christopher Benek is a frequent contributor, but Micah Redding and Lincoln Cannon have also done so. The most frequent poster is Tim Gross, the group's administrator. On April 23, 2016, he posted a link to an IEET blog titled "Is The Singularity A Religious Doctrine?" by John Messerly, whose view that religion is obsolete we cited at the beginning of this chapter. Messerly asserts that the Singularity and technological immortality are real possibilities, rather than pseudoscience or religion. His blog is a response to a *Scientific American* article by John Horgan:

I don't agree with Horgan's conclusion. He believes that belief in technological or religious immortality springs from a "yearning for transcendence," which suggests that what is longed for is pseudoscientific fantasy. But the fact that a belief results from a yearning doesn't mean the belief is false. I can want things to be true that turn out to be true.³⁵

Titled "The Singularity and the Neural Code," Horgan's article asserts that understanding the dynamics and structure of a human brain is "science's hardest problem," impossible to be solved soon, and probably never [51]. It is worth noting that Horgan is among the best known skeptics of continued scientific progress, having published a serious book on the topic in 1996, with the title *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age* [52]. Hanson suggested that mind uploading would be achieved before general artificial intelligence, but this complex debate suggests that both may arrive after the Second Coming of Christ. Or, is the Singularity the Second Coming?

References

1. Dinerstein, J.: Technology and its discontents: on the verge of the posthuman. *Am. Q.* **58**(3), 569–595 (2006)
2. Messerly, J.G.: The end of religion: Technology and the future. Institute for Ethics and Emerging Technologies, January 24, 2015. ieet.org/index.php/IEET/more/messerly20150124. Accessed 5 July 2016

³⁴ turingchurch.com/2013/07/08/a-christian-transhumanist-association, accessed August 27, 2016.

³⁵ ieet.org/index.php/IEET/more/Messerly20160423, accessed August 27, 2016.

3. Bruere, D.: Transhumanism – The final religion? Institute for Ethics and Emerging Technologies, July 16, 2015. ieet.org/index.php/IEET/more/bruere20150715. Accessed 5 July 2016
4. Bruere, D.: ‘The Praxis’ – Transhumanism as religion and the conversion of philosophy into action. Institute for Ethics and Emerging Technologies, October 15, 2012. ieet.org/index.php/IEET/more/bruere20121015. Accessed 5 July 2016
5. FM-2030: Are You a Transhuman? Warner, New York (1989)
6. More, M., Vita-More, N.: The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future. Wiley-Blackwell, New York (2013)
7. Anonymous: Terminally ill teen won historic ruling to preserve body. BBC, November 18, 2016., www.bbc.com/news/health-38012267
8. De Freitas-Tamura, K.: Last Wish of Dying Girl, 14, to Be Frozen, Is Granted by Judge. New York Times, November 18, 2016. www.nytimes.com/2016/11/19/world/europe/frozen-girl-judge-last-wish.html
9. FM-2030: Are You a Transhuman? pp. 194–195. Warner, New York (1989)
10. Bainbridge, W.S.: Personality Capture and Emulation. Springer, London (2014)
11. Bostrom, N.: Are we living in a computer simulation? *Philos. Q.* **53**(211), 243–255 (2003)
12. Hughes, J.: Citizen Cyborg. Westview, Cambridge, MA (2004.) , 167
13. More, M., Vita-More, N.: The Transhumanist Reader Chichester: Wiley-Blackwell, 5
14. Bergson, H.: Creative Evolution. H. Holt, New York (1911)
15. Minsky, M.L.: The Emotion Machine: Commonsense Thinking, Artificial Intelligence, and the Future of the Human Mind. Simon and Schuster, New York (2006)
16. Kurzweil, R.: The Age of Spiritual Machines: When Computers Exceed Human Intelligence. Viking, New York (1999)
17. More, M., Vita-More, N.: The Transhumanist Reader. Wiley-Blackwell, Chichester, 55
18. Pellissier, H.: Transhumanism: There are [at least] ten different philosophical categories; which one(s) are you? ieet.org/index.php/IEET/more/pellissier20150708. Accessed 10 July 2016
19. Hughes, J.: Citizen Cyborg. Westview, Cambridge, MA (2004.), 107
20. President’s Council on Bioethics: Beyond Therapy: Biotechnology and the Pursuit of Happiness. President’s Council on Bioethics, Washington, DC (2003)
21. President’s Council on Bioethics: Human Cloning and Human Dignity: An Ethical Inquiry. President’s Council on Bioethics, Washington, DC (2002)
22. Fukuyama, F.: “Transhumanism.” Foreign Policy (September–October 2004). <http://www.keepmedia.com/pubs/ForeignPolicy/2004/09/01/564801?page=4>; Our Posthuman Future: Consequences of the Biotechnology Revolution. Farrar, Straus, and Giroux, New York (2002)
23. Bainbridge, W.S.: Cognitive science and the new atheism. In: Amarasingam, A. (ed.) Religion and the New Atheism, pp. 79–96. Brill, Leiden (2010)
24. Mori, M.: The Buddha in the Robot. Kosei, Tokyo (1981)
25. Sorgner, S.L.: Nietzsche, the overhuman, and transhumanism. *J Evol Technol*, 2009, 20(1):29–42. jetpress.org/v20/sorgner.htm. Accessed 7 August 2016
26. Murray, H., Icarus, A.: In: Burton, A., Harris, R.E. (eds.) Clinical Studies in Personality, 3rd edn, pp. 615–641. Harper and Row, New York (1955)
27. Nietzsche, F.: Beyond Good and Evil. Macmillan, New York (1907.) p. 146
28. Nietzsche, F.: Human, All Too Human. University of Nebraska Press, Lincoln (1996.) p. 251
29. Nietzsche, F.: Thus Spake Zarathustra. Macmillan, New York (1896.) p. 144
30. Francke, K., Howard, W.G., Singer, I.: The German Classics, 15. German Publication Society, New York (1914.) p. 277
31. Hopkins, P.D.: Transcending the animal: how transhumanism and religion are and are not alike. *J Evol Technol*. **14**(2), 13–28 (2005.) <http://jetpress.org/volume14/hopkins.html>
32. Gregory, E.J.: Apologia for transhumanist religion. *J Evol Technol*. **15**(1), 55–72 (2006.) <http://jetpress.org/>

33. Bainbridge, W.S.: *Star Worlds: Freedom Versus Control in Online Gameworlds*. University of Michigan Press, Ann Arbor (2016.) p. 225
34. Moravec, H.P.: *Mind Children: The Future of Robot and Human Intelligence*. Harvard University Press, Cambridge, MA (1988)
35. Kurzweil, R.: *The Age of Spiritual Machines: When Computers Exceed Human Intelligence*. Viking, New York (1999)
36. Kurzweil, R.: How neuronautotechnology will lead to melding of mind and machine. *J Geoethical Nanotechnol.* **2**(4), (2007.) www.terasemjournals.org/GNJournal/GN0204/rk1.html. Accessed 16 August 2016
37. Minsky, M.: The emotion machine: commonsense thinking, artificial intelligence, and the future of the human mind. *J Personal Cyberconsciousness.* **3**(3), (2008.) www.terasemjournals.org/PCJournal/PC0303/mm1.html. Accessed 16 August 2016
38. McCorduck, P.: *Machines Who Think*. A. K. Peters, Natick (2004)
39. Minsky, M., Papert, S.: *Perceptrons*. MIT Press, Cambridge, MA (1969)
40. Kurzweil, R.: Human body Version 2.0. In: Klein, B.J., Sethe, S. (eds.) *The Scientific Conquest of Death: Essays on Infinite Lifetimes*, pp. 93–106., p. 103. Immortality Institute, Birmingham (2004)
41. Minsky, M.L.: Will robots inherit the earth. In: Klein, B.J., Sethe, S. (eds.) *The Scientific Conquest of Death: Essays on Infinite Lifetimes*, p. 123, pp. 123–134. Immortality Institute, Birmingham (2004)
42. Hughes, J.: Democratic transhumanism. *J Geoethical Nanotechnol.* **1**(2), (2006.) www.terasemjournals.org/GNJournal/GN0102/hughes_01g.html. Accessed 16 August 2016
43. Turing, A.: Computing machinery and intelligence. *Mind.* **59**, 433–460 (1950)
44. McIntyre, R.L., Fahy, G.M.: Aldehyde-stabilized cryopreservation. *Cryobiology.* **71**(3), 448–458 (2015)
45. Mihail, C.R., Bainbridge, W.S.: *Converging Technologies for Improving Human Performance*. Kluwer, Dordrecht (2003)
46. Jones, N.R.: The Jameson satellite. *Amazing Stories* 30 (1956): 156–176, reprinted from the July 1931 issue; Edgar Rice Burroughs, “The Resurrection of Jimber-Jaw;” *Argosy* (20 February 1937).
47. Ettinger, R.C.W.: *The Prospect of Immortality*. Doubleday, Garden City (1964)
48. Ettinger, R.C.W.: *Man into Superman: The Startling Potential of Human Evolution – and how to Be Part of It*. St. Martin’s Press, New York (1972)
49. Hanson, R.: *The Age of Em: Work, Love, and Life when Robots Rule the Earth*. Oxford University Press, Oxford (2016)
50. Tillich, P.: *A History of Christian Thought, from Its Judaic and Hellenistic Origins to Existentialism*, p. 45. Simon and Schuster, New York (1968)
51. Horgan, J.: The singularity and the neural code. *Sci. Am.*, March 22, 2016. blogs.scientificamerican.com/cross-check/the-singularity-and-the-neural-code. Accessed 27 August 2016
52. Horgan, J.: *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age*. Addison-Wesley, Reading (1996)

Chapter 9

Transcendence: Virtual Artificial Intelligence

Abstract Information technology helps us consider the possible limitations of humans in understanding their own nature and the nature of the universe that surrounds them. A key belief among Transhumanists is that it will soon be possible to upload human personalities to computers, as one form of technological immortality. This chapter places that claim in a skeptical context, based on familiarity with the current state of artificial intelligence in computer science. One section considers the historical background of robotics, and another the limited understanding of human personality within social psychology, employing a 200-item questionnaire dataset from online software designed to measure the controversial but standard Big Five personality dimensions, with fully 3267 respondents. A third section considers the subjective experience that many more thousands of people have had online, interacting with simulated gods and friends. The conclusion considers the respectable but unconventional perspective in cosmological science known as the Anthropic Principle, which directly contradicts a traditional philosophical argument for the existence of God, the Argument from Design, but also implies a near-term end to scientific progress. This suggests that perhaps there have been three dynamic stages of secularization, separating four cultural perspectives in human history, believing: (1) The universe is the chaotic result of conflict between multiple gods who personify competing cosmic principles. (2) The universe was intentionally created by one, supernaturally intelligent God. (3) The universe is the inexorable result of mathematical logic, in which each force and phenomenon has a precise, undeniable relationship to every other one. (4) The universe is infinite randomness, within which our environment was naturally selected because it alone could support the evolution of intelligence.

If God created us, do we become gods if we create artificial intelligence? Ancient peoples anthropomorphized the forces of nature and called them gods; what does it mean to anthropomorphize machines? [1–3] At least since the famous conference at Dartmouth College in 1956, artificial intelligence has been a prominent theme within computer science, at times promising to duplicate the human mind and thus challenging human spiritual uniqueness [4, 5]. A classic joke in science fiction imagines that scientists built a super-intelligent computer to answer the fundamental questions. They asked it whether God exists, and it replied, “I do now.” A more recent version of the answer is: “I do now, and my name is Google.”

In several senses, artificial intelligence already exists, but remains very far away from creating a machine capable of duplicating the complex and distinctive behavior of a human being, still susceptible to criticisms made decades ago [6]. Google is one kind of artificial intelligence that uses vast data archives and sophisticated search algorithms to classify websites created by human beings. Google Translate can indeed do a pretty good but imperfect job of translating ordinary text from one language to another, but only because vast quantities of documents already translated by human beings produced its dictionaries and rules. Thus, many important examples that might be called AI need not be conceptualized that way, because they are systems for combining the natural intelligence of many human beings. However, given that language and technology are social creations, it can well be said that individual human intelligence is not fully autonomous either, deriving most of its concepts and information from other human beings just as Google does.

A powerful form of large-scale computation is often called *machine learning*, with the implication that it involves artificial intelligence. Yet social scientists may be infuriated by this expression of the arrogance by computer scientists, because machine learning is merely a diverse category of complex statistical analysis algorithms. The *learning* part of the name merely indicates that the process is iterative, as in one way or another the algorithm goes through data multiple times, improving its model of the data in a series of steps. When I learned factor analysis and multi-dimensional scaling in the 1970s, we did not call them *machine learning*, although both were iterative.

Since the early 1980s, I have explored computer simulation as a tool for developing and testing the reliability of social-scientific theories about religion, and many of the algorithms I use can be described as artificial intelligence. My primary goal was to improve the rigor of the Stark-Bainbridge theory of religion, that viewed it as a system of general compensators, unverifiable and possibly false beliefs that provided psychological benefits for believers and thus indirectly supported societal cooperation [7]. In a series of publications beginning in 1987, I described neural net algorithms that would allow one simulated *agent* to learn how to obtain rewards through cooperative exchanges with other agents. The algorithms were verified by the fact that indeed a *multi-agent system* would emerge in which most or even all of the agents would benefit through economic exchanges with each other. But if the desired reward did not exist within the economy, the agents generalized from their experience obtaining other rewards, and developed theories about exchange partners that did not exist within the system, namely gods [8–10].

The most complex versions of these multi-agent systems allowed agents to exchange not only rewards, but information about what kinds of exchange partners to seek for specific rewards. At this level of cognitive complexity, the system would develop shared assumptions about which supernatural beings would provide a desired but non-existent reward such as eternal life. In other words, depending upon the complexity of the algorithm-based simulation, the virtual equivalent of multiple religious faiths could emerge, and even compete with each other for adherents. These simulation studies did not empirically prove the theory that religious beliefs are primarily general compensators, unfounded hopes for grand rewards, but it did



Fig. 9.1 An imaginary scene of four people, three of whom are robots

demonstrate that the theory was a workable system of concepts, not just rhetoric written on the pages of our books.

Critiques of artificial intelligence include the claim that computers can never duplicate human consciousness, because they follow excessively strict rules that do not permit the uncertainty and subjectivity that make us human [11, 12]. However, there are many kinds of AI, and only some are rule-based. My multi-agent systems often employed strict rules to govern interactions between agents, although with some randomness thrown into the mix, but the main reason for approximating rule-based reasoning was to allow the program to model a particular sociological theory, in a context of running experiments in which parameters could be set differently from run to run. In many of my programs, and thousands of programs written by other researchers, the method mimics the neural nets of the human brain, not perfectly but also not coding the learning in terms of formal rules. On ordinary computers, neural nets are really connectionist simulations, because a rule-based central processing unit is handling all the actions. But it is possible to do away with a CPU, and base a robot's brain on our growing understanding of how the human brain functions.

Figure 9.1 shows a very different kind of computer simulation of culture, society, and technology, one that I explored but did not program, and which tens of thousands of other people experienced deeply. It is a scene in the workshop of a private home in the massively multi-player online game, *Star Wars Galaxies*, based on the Jedi

mythology that Chap. 5 of this book considered semi-real, rather than just fictional. The woman standing near the center is Algorithmia, my droid engineer avatar, flanked by three robots and two of the manufacturing devices she used to construct them and other equipment. The robots could actually be programmed to perform simple tasks, such as walking around an enemy, returning the enemy's fire, and responding to Algorithmia's commands with polite expressions of obedience. Note that the two droids to the left of Algorithmia are not R2-D2 and C-3PO, two beloved robots that appear throughout the movie series, but merely machines of the same general types, astromech droid and protocol droid. She loves them dearly, because the astromech is easy to program, and the protocol droid seems to love her in return.

Remarkably, the *Star Wars* mythos was exploited for political purposes by US Senator Jeff Flake in December 2015, at one point focusing on C-3PO, the beloved protocol droid that looks like the one standing to the left of Algorithmia in the picture. Beginning in 2009, Republican Senator Tom Coburn had annually published *Wastebook*, supposedly documenting 100 wasteful expenditures of the federal government. When he retired from the Senate, this tradition was inherited by Flake. To exploit the publicity generated by the new movie, *Star Wars: The Force Awakens*, he subtitled the 2015 edition *The Farce Awakens* and filled it with *Star Wars* pictures and metaphors, apparently immune from copyright violation litigation because he was a senator or because it was parody. The cover of his *Wastebook* shows cartoons of Flake playing the role of Luke Skywalker and Coburn as his mentor Obi-Wan Kenobi.

The 15th of 100 allegations of waste concerns NASA's development of ideas about future missions to explore the planet Venus: "A city in the clouds, floating in the gassy atmosphere above an alien planet. Has the return of *Star Wars* to the silver screen caused an awakening in the force at NASA? The science fiction space adventure that took place a long time ago in a galaxy far, far away seems to be the inspiration to create a 'cloud city' above Venus similar to the one in *The Empire Strikes Back* where Han Solo was frozen in a block of carbonite. NASA's High Altitude Venus Operational Concept (HAVOC) would begin by sending a robot into the atmosphere of Venus to 'check things out' with the goal of establishing 'a permanent human presence there in a floating cloud city.'" [13]. For the record, a cloud city appears in the 1936 *Flash Gordon* movie serial, one of many memes borrowed decades later by *Star Wars*.

Actually, the floating cloud city idea was merely one of many long-term possibilities contemplated by spaceflight enthusiasts, and NASA's more realistic goal was developing a robot probe that could remain high in the dense atmosphere of Venus, because the hot temperatures on the surface quickly destroyed any robot lander, with the possible medium-term goal of a human mission to Venus that would remain safely in the atmosphere.¹ To be sure, terrestrial governments are not currently prepared to send human explorers even back to the Moon, let alone to Mars where they could land and Venus where they could not. Most aspects of

¹ sacd.larc.nasa.gov/branches/space-mission-analysis-branch-smab/smab-projects/havoc/, accessed October 6, 2016.

NASA's budget are controversial, given the uncertainty of practical benefits for Americans, and the motivational confusions introduced by the fanciful dreams of enthusiasts. Yet exploring technical possibilities is certainly a legitimate part of NASA's mission.

Past editions of Wastebook often both misrepresented how much money was invested in the part of a project considered wasteful, and ignored the scientific and engineering goals of the work, although in this they were often assisted by the awkward press-release attempts of the researchers, their sponsors, and journalists to give the projects human interest. Flake identified three other robot related projects to be frivolous, without considering that they were field testing or encouraging innovation in serious aspects of potentially important robotics [14]. For example: "The Defense Advanced Research Projects Agency (DARPA) is spending \$2 million to hire a team of musicians and researchers to develop musical machines including robots capable of performing a trumpet solo and jamming with human musicians." This case was derived from journalistic accounts which only peripherally mentioned that the real goal was to develop ways for robots guided by artificial intelligence to improvise more generally in their actions, not merely in music. Another example claimed that the Office of Naval Research wasted \$2,500,000 on a robot that would greet visitors to a lobby in the University of Central Florida but really referred to one tiny demonstration within a much larger research project on human-robot interaction.² Another DARPA example was a highly publicized competition between academic robotics teams, in which humanoid robots often fell over when trying to navigate an environment such as one where they could rescue people from disasters: "How would any of these robots stand up – literally – in an actual emergency situation if they fall over just trying to open a door?.. Clearly, these are not the droids you are looking for."

Example 76 used the *Star Wars* term *droid* repeatedly, rather than the more conventional *robot*: "The droid C-3PO from Star Wars boasts of being fluent in over six million forms of communication but admits to not being 'very good at telling stories. Well, not at making them interesting anyway.' It turns out C-3PO's inability to articulate a riveting tale may not be all that unusual for artificial intelligence (AI), even in the real world." [15]. The quotation is taken from the script of the original *Star Wars* movie of 1977, but by the third movie in 1983, C-3PO had mastered storytelling.³ The hairy Ewok people of the forest on Endor were so impressed by C-3PO that they considered him a god. After much trouble, he was able to convince them that Luke and his companions could be friends with the Ewoks, and he did so by vividly telling them a story in the Ewok language which none of the humans had mastered, as described in the movie's script: "Threepio is in the midst of a long, animated speech in the Ewok's squeaky native tongue. The Ewoks listen carefully and occasionally murmur comments to each other. Threepio points several times at

² www.onr.navy.mil/Media-Center/Press-Releases/2015/Human-Surrogate-Interaction-Lobby-Study.aspx, accessed October 6, 2016.

³ www.imsdb.com/scripts/Star-Wars-A-New-Hope.html, www.imsdb.com/scripts/Star-Wars-Return-of-the-Jedi.html, accessed October 6, 2016.

the Rebel group and pantomimes a short history of the Galactic Civil War, mimicking the explosion and rocket sounds, imitating Imperial walkers.”

Flake claims that the National Science Foundation wasted \$204,000 by funding Mark Riedl at Georgia Institute of Technology through grant 1350339 “CAREER: Combining Crowdsourcing and Computational Creativity to Enable Narrative Generation for Education, Training, and Healthcare.” CAREER grants are designed to support the integration of research and education early in the careers of scientists and engineers, and many such projects are creative and represent the cutting edge that may be far beyond the awareness of most people. The first paragraph of its public abstract says:

The proposed project explores the problem of automated narrative generation, the creation of narratives by computer systems. The project introduces a transformative new approach to narrative generation that blends human and computational creativity with crowdsourcing. The system addresses fundamental limitations of computer reliance on pre-coded domain knowledge in order to generate a virtually unlimited variety of narratives and make it possible for non-experts and non-programmers to create interactive narratives. The research has four major components: (1) Develop artificial intelligence algorithms that emulate human ability to create narratives. (2) Design and implement novel models of human-computer creative collaboration. (3) Study fundamental questions pertaining to human narrative learning and cognition. (4) Explore the role of narrative generation in real-world domains: virtual agents that create rapport with humans and intelligent creativity augmentation tools for creating and sharing interactive experiences. The work will be piloted in two healthcare systems: a virtual agent that creates rapport and fosters longitudinal engagement with patients through autobiographical narratives; and intelligent tools that allow caregivers to create social skill scenarios for young adults with autism to practice.⁴

Flake apparently thinks that developing artificial intelligence methods for creating narratives is frivolous, and he may be unimpressed by human storytellers as well. Or artificial intelligence narrative may seem sacrilegious to him, because only a sensitive human soul can tell a meaningful story. Riedl’s research actually employs collaboration between AIs and humans, not assuming AIs can replace human minds, and having the potential to evaluate criticisms like those of Flake in a rigorous manner. The general area Riedl works in can be of great value, whatever the outcomes of the particular research projects. Perhaps, a firm line will be discovered, beyond which artificial intelligence cannot improve, and on the way to that barrier some useful applications of more limited AI will be discovered. Perhaps we should ask C-3PO to tell us how he and we are different, whether we can usefully cooperate in the coming years, and whether droids will ever become gods.

⁴ nsf.gov/awardsearch/showAward?AWD_ID=1350339, accessed October 6, 2016.

9.1 Robotics

Once upon a time there was a professional oarsman, fully trained in all the arts of rowing a boat through the water, rather contemptuous of mere paddlers but expert in all their moves, from C-stroke to J-stroke, and when he was feeling flamboyant, even the challenging Z-stroke. But then the king hired a rigger to add a mast and sail to the royal yacht, and the oarsman was out of a job. The point of this story is that from the dawn of time new technologies have rendered old ones obsolete, along with the people who remained dedicated to the old ways.

That obvious point became a sophisticated scientific concept when Creative Destruction theory became popular, the claim that new technology produced new jobs faster than it destroyed old ones [16, 17]. However, that analysis assumes there will be new industries, and could be disproven if data showed that the rate of job creation was consistently below the rate of job destruction. Now that information technology is invading the distinctive territory dominated by the human mind – namely processing of information – optimistic assumptions may be obsolete.

Technological unemployment has been a factor for at least two centuries, since the Luddites in England reacted against the ways the textile industry technology was worsening their employment conditions, by smashing machinery. They are usually recalled as wrong-headed opponents of progress, but their situation was objectively difficult and the social conventions of their day gave them few alternatives. Labor unions were illegal, and their working conditions were worsened by temporarily deteriorating world economic conditions, connected to the Napoleonic wars [18]. Incidentally, the textile industry over in France had adopted futuristic information technology, notably in the Jacquard loom invented a decade earlier, in which a chain of cards programmed with holes just as in the century-later Hollerith cards of early computing, controlled the weaving of complex patterns in fancy cloth [19].⁵

Jacquard's method was adapted to musical performance through a series of difficult steps during the nineteenth century, leading to the popular player piano. Having repaired some of these when I was a professional piano technician, I am quite aware of how they work, using air (or literally suction) rather than electricity to read the pre-programmed notes from a roll of paper. Early in the twentieth century, a number of humanistic scholars expressed discomfort that recorded music could be produced either by player pianos or phonographs, rather than being the sacred expression of human emotions through live performances [20, 21]. In mid-century, poet Robert Graves imagined a utopia in which printing of written text was forbidden, and Kurt Vonnegut titled a dystopian novel about technological unemployment, *Player Piano* [22, 23].

Arguably, human beings should not be doing oppressive, mechanical work, but enjoy the right to do work that is humane, even creative like singing songs, writing poems, or tending to the needs of children and elderly people. The worry is that information technology can replace humans in all kinds of jobs, and machine

⁵ en.wikipedia.org/wiki/Jacquard_loom, accessed September 13, 2016.

intelligence has been creeping up on us for better than two centuries. Consider the tremendously consequential revolution that began in 1776. No, I certainly do not mean the American revolution, because Britain and America have been equally democratic allies, speaking the same language and developing very similar technologies, at least since the chance evaporated that Britain might have a formal alliance with the Confederacy during the 1861–1865 Civil War. No, the consequential revolution of 1776 took place inside Britain, and was the successful marketing of the Watt steam engine. Its benefits to transportation, mining, and manufacturing were immense, but the relevant point for us here was that it incorporated what was apparently the first example of machine learning, a governing device that used feedback to stabilize the machine’s speed [24].

Some notion of artificial intelligence must be very ancient, because devices as diverse as sundials, sailboats, and mechanical dolls seemed to be able to think and communicate, at least in a crude manner. Exactly two centuries ago, E. T. A. Hoffman wrote a story about a man who fell in love with a mechanical doll that seemed to be a beautiful girl, later retold in the 1870 ballet *Coppélia* by Léo Delibes and the 1880 opera *Tales of Hoffmann* by Jacques Offenbach [25]. This can be interpreted not as a story in which machines conquer the hearts of humans, but as one about the loss of feeling in human themselves. She is incapable of loving him. The far-fetched metaphors of player pianos and dancing dolls suggest that we should examine the history of concerns about mechanization of humanity, as a basis on which to understand current worries about artificial intelligence.

An efficient research tool is the simple word “robot” that was introduced into the English language nearly a century ago to refer to artificial people, but in recent years has taken on a variety of more limited meanings. Wikipedia reports: “The term ‘robot’ was first used to denote fictional automata in the 1921 play *R.U.R.* (Rossum’s Universal Robots) by the Czech writer, Karel Čapek. According to Čapek, the word was created by his brother Josef from the Czech ‘*robo*ta’, meaning servitude.”⁶ Two complications deserve mention.

First, Čapek’s robots were grown in vats, thus biological rather than electronic, and seem simply to represent an oppressed working class, that eventually rebels against the capitalist ruling class and becomes fully human at the end of the drama. So *R.U.R.* is not an intellectual exploration of the future of electronic computers but a poetic representation of political and cultural concerns about economic relations in industrial society that were already at least a century old when the play was first performed.

Second, the etymology of the word *robot* is more complex than Wikipedia reports. An initial insight can be gained by entering the English word *work* into Google Translate and comparing the Czech with the Russian translations. The simplest Russian equivalent for the English work is *работа* (*rabota*), while no cognate for either *work* or *rabota* shows up in the Czech translation. Of course, there are various forms of the root word, such as these in Russian: *работать* (to work) and *работник* (worker).

⁶en.wikipedia.org/wiki/History_of_robots, accessed September 13, 2016.

Table 9.1 Frequency of *Robot* and *Religion* in JSTOR publications

	Robot	Religion	Robot/Religion (%)	Robot & Religion
1926–1935	82	5963	1.4	8
1936–1945	223	7328	3.0	25
1946–1955	214	9076	2.4	32
1956–1965	288	10,974	2.6	26
1966–1975	313	12,652	2.5	41
1976–1985	454	14,903	3.0	32
1986–1995	820	17,402	4.7	72
1996–2005	1219	20,837	5.9	173
2006–2015	1057	11,885	8.9	58

Thus, considered from a linguistically cosmopolitan perspective, *robot* could mean simply *worker*. What was its formal application in Czech history? It was the local Czech term for a very widespread practice in feudal Europe, the requirement that peasants owed a certain number of days of work each year to the aristocratic landowner, the equivalent of a tax in a society where money was not the basis of the economy. Interestingly, the Czechs used a foreign, Slavic term, while the English language uses the foreign French term *corvée* for this unpaid labor. Of course the aristocrats may have extracted far more value from the peasants than whatever security or other services than they gave in return, and the abolition of this practice was a popular Czech political advance in the mid-nineteenth century [26–28].

Čapek's introduction of *robot* into the world's languages was not limited to science fiction, and through 2015 fully 4670 of the social-scientific and scholarly publications archived online at JSTOR contain this word.⁷ Table 9.1 tabulates the listings by decade, along with the more popular *religion*. By pure luck, 467 articles or exactly 10% of the robot articles contain the word *religion* as well, although the table shows that the religion articles rarely return this favor. While an extensive analysis of all these publications would be interesting, here we shall consider just a few of the early JSTOR publications containing *robot*.

Already in 1928, sociologist Harvey Warren Zorbaugh was able to write critically not only in response to Čapek's fantasy but also in awareness of a real if crude mechanical humanoid robot named Televox made by Roy Wensley at Westinghouse Electric.⁸ The target of his attack was not artificial intelligence, but the widespread view among scientists that human behavior was largely conditioned by innate instincts: "There is a psychological theory, which has enjoyed a tremendous popular vogue, that conceives of man as being a sort of Televox or Robot; as coming into the world equipped with a set of elaborate ready-made and stereotyped behavior patterns which run off in perfectly automatic fashion in response to appropriate environmental situations." [29]. Notice the implied contrast between the scientific

⁷ www.jstor.org/action/showAdvancedSearch, accessed September 25, 2016.

⁸ history-computer.com/Dreamers/Elektro.html, accessed September 25, 2016.

concept of *instinct*, and the religious concept of *soul*, the former being mechanical, and the latter spiritual.

John Dollard, famous for the apparently reductionist theory that aggression results from frustration when an individual's path to a goal is blocked, accused cultural theories of being too reductionist: "The result is the mechanical man of sociology – the man with 'attitudes' determined by 'culture' but no testes or viscera. This cultural robot comes into being by projecting culture patterns on the shapeless clay offered to society by animal evolution." [30, 31]. Dollard is often described as a Behaviorist, a perspective that educational psychologist Benjamin Simpson dismissed as the dogma "that consciousness, mind, human experience are mere delusions and that human life is the rôle of a mechanistic robot." [32].

In 1934, the associate superintendent of schools in New York City argued that a graduate of industrial education "is not a mere factory robot. He has not only specific skills but a mastery of principles, industrial insight, enlightened judgment, fluid initiative, and can rapidly adjust himself to any one of a variety of jobs when the one he happens to hold is outmoded or superseded by technological advance in production processes." [33]. Five years later, economist Sir Ralph George Hawtrey noted that creative destruction caused by unintelligent machines might eventually end:

The reduction of costs in one direction sets free man-power to be used in others, and, when so used, it will require material equipment. So long as any considerable part of the available man-power is engaged on functions of a mechanical character, the opportunity exists for the increase of productive power by further mechanisation. The human force is being supplemented by a continually greater and greater robot force. Eventually this tendency may come to an end. If all processes that do not require initiative and imagination were performed mechanically, and if all the human wants that could be supplied by such processes reached satiety, no field would remain for a further deepening of capital [34].

Other authors were concerned that organizational strictures could inhibit human initiative and imagination. Writing in a journal titled *The Mathematics Teacher* in 1931, influential education philosopher Susanne K. Langer advocated giving math students the time and encouragement needed to understand the general concepts of algebra deeply: "If we teach the student to operate with letters in place of numbers, and can push him over his natural bewilderment at being asked to multiply the last letter of the alphabet by the first, he can learn, like a Robot, to operate with these meaningless symbols as though he was getting sums and products. In fact, he can learn the whole mechanics of the system much faster if he is not constantly called upon to explain the sense of the procedure." [35]. In 1934, Ralph Bunche, the African-American political scientist and diplomat who remains an inspirational role-model, argued in *The Journal of Negro Education* that colonial powers were underestimating the intellectual potential of Africans: "If education in Togo and Dahomey is to make anything of the native other than a robot and rubber-stamp, it must be adapted not only to the local conditions of native life but must afford an opportunity for transcending those conditions as well." [36]. At the end of the same decade, J. S. Seidman wrote in *The Accounting Review* that financial record checking must be done critically, not mechanically: "If the reviews are made inattentively

and the approvals are affixed in robot fashion, all pretense of internal control should be swept aside. It would be more realistic to hand to an employee bent on fraud, a key to the treasury.” [37].

Today, we may worry that computerizing many jobs does not merely replace many human workers by machines, but transforms the remaining humans into what intellectuals of the 1930s called *robots*. In 1931, Carl Seashore, prominent psychologist who specialized in the acoustics of speech and music, asserted that “The experimental attitude is the opposite of gullibility and blind faith in every field of knowledge... An enormous amount of energy is wasted in experimental work because the experimenter does not think. He works on an assigned situation with mechanical precision of a robot. This is true not only of young students but often of men who devote a lifetime to research work and remain mere pack horses.” [38].

For intellectuals living within a Christian culture, robots may seem like people who lack souls, but the political meanings Čapek assigned may still be relevant. The path-breaking 1927 German science fiction movie, *Metropolis*, used a robot to impersonate a woman leader of the working class, and inspire workers to rebel precisely so the ruling class would have an excuse to destroy them. In the 1939 American movie serial, *Buck Rogers*, robots were men forced to wear “amnesia helmets” that rendered them slaves by removing their will power as well as memory and good judgment. Yet when *Star Wars* launched in 1977, it was popular to present robots as friends, perhaps lacking supernatural Force powers because most people also lack them, but possessing souls.

In the previous chapter, we noted that a Buddhist perspective on robots might accord them the same respect as human beings. The case was most clearly made by Japanese robotics pioneer Masahiro Mori, who argued:

The robot’s relationship to me is like my relationship to the Buddha. I, like all other human beings, was created by the Buddha (by the Void). Every movement of my hands or feet, every blink of my eyelids, is the result of the Buddha’s will. There is no way in which a human being’s body or mind can separate itself even momentarily from the Buddha’s laws. To express it differently, men are appearances brought into being by the Void. ... How is it with machines? Reason dictates that they too must be “appearances brought into being by the Void.” ... Specifically, since I myself was created by the Buddha, the machines and robots that I design must also be created by the Buddha [39].

In the first chapter of this book, we mentioned the connection between Arthur Koestler and support for academic research based on belief in paranormal phenomena. Throughout his life, Koestler inconsistently sought transcendental meaning from a non-religious attachment to his Jewish heritage, atheistic Marxism or equally fervent anti-Marxism, and mysticism. His frantic search ended in suicide. Along the way, he wrote an angry book about Yoga and Zen, *The Lotus and the Robot*, arguing that religious beliefs and rituals can dehumanize people, turning them into the traditional stereotypes of robots that lack creativity or full self-awareness [40]. Mori was a very creative roboticist, while Koestler used *robot* merely as a metaphor. Whom shall we trust to advise us on the future relations between robots and humans, artificial intelligence and immortal souls? I suggest we ask Algorithma.



Fig. 9.2 Two virtual people, either escaping our universe or preparing for death

Figure 9.2 shows Algorithmma with her best friend, her protocol droid, in their spaceship, preparing to escape a galaxy far, far away. The date is December 11, 2011, but we can imagine they are a real woman and a real droid, escaping the destruction of our world in our real future. Virtual life in *Star Wars Galaxies* ended four days after the picture was taken, as the game was shut down to make room in the marketplace for the newer *Star Wars: The Old Republic* multiplayer game introduced in Chap. 5 [41]. Should we feel more grief over the death of Algorithmma than of her beloved droid? If she survived in some afterlife, did he as well?

9.2 Calibrating Personhood

To create computer systems that duplicate human thought and behavior, we would first need to understand how humans operate. The nearest thing to a consensus in social psychology about human nature does not seem as scientific today as it may have seemed two or three decades ago, the Big Five theory of major personality traits, often but not exclusively defined as OCEAN: Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism [42]. Yet this ocean does not have well-defined shorelines, and leaves us very much at sea when

we seek the precise definitions that could be translated into computer programming code.

These five orthogonal dimensions of personality variation were distilled by statistical factor analysis of questionnaire data in which the items typically represented very large numbers of descriptive terms from ordinary language. According to the *lexical hypothesis*: “Those individual differences that are most salient and socially relevant in people’s lives will eventually become encoded into their language; the more important such a difference, the more likely is it to become expressed as a single word.” [43]. For example, someone who fulfills their work responsibilities is *conscientious*, while someone who is pleasant to interact with is *agreeable*. Both are desirable qualities that benefit other people, described by single words in ordinary talk, but they differ in whether they relate to task-focused contexts or to mere pleasantness. This is a clear example of the principle that social psychology is the formalization of folk knowledge about human interaction.

For Friedrich Nietzsche, Apollo was the principle of individuation, that later writers associated with intraverted personalities, while Dionysus was the lusty collectivism of a chorus, and thus more associated with social extraversion [44]. This distinction between intraverted and extraverted personalities was adapted by Freud’s associate Carl Gustav Jung, and became a central feature of the Myers-Briggs Type Indicator personality test, generally judged inferior to the Big Five but popular with corporate management [45–47]. The term *introversion*, spelled in that way, was in general use but uncommon in the nineteenth century appearing in 7 articles in the *New York Times* during that period, and in 287 articles since the 1920s.⁹ In contrast, the spelling used in the Big Five, *intraversion*, appeared in just one article, in the year 1981. The contrasting term is also spelled two ways, *extroversion*, which appeared in 353 articles since 1920, compared with *extraversion*, the Big Five spelling, which appeared only 33 times. This raises the question of how influential the Big Five are outside academic psychology.

Collecting descriptive terms from ordinary language, immediately after World War II, Raymond Cattell developed a system for measuring personality through questionnaires with fully 16 personality factors [48, 49]. He was an advocate for statistical factor analysis, and over the following decades other psychologists used this method, plus debatable decisions about what common words to include in the tests, to merge together the sixteen small factors into the Big Five. I am a fan of factor analysis, and often used it in my research, but it is based on assumptions that have arbitrary qualities.

One assumption of factor analysis is that the entities that have been measured should be graphed in two or more linear dimensions, rather than for example being separated into distinct categories that are not spatially arranged on a graph, or being arranged in a branching tree diagram such as is commonly used in modern computational ontologies. For example, dividing carnivores into dogs and cats gives a very different result from mapping animals in terms of weight and length, such that tigers are at one end of the map, wolves in the middle, and kittens at the opposite end.

⁹Tabulated from Chronicle at the *New York Times*, chronicle.nylabs.com, September 8, 2016.

Somewhat different statistical calculations are made in different brands of factor analysis, and a scientist can make different decisions about *rotation* of the factors after the initial calculations are done.

For a questionnaire study I did measuring the popularity of 125 possible goals for the space program, I initially believed that factor analysis was the wrong method, because there was no reason to believe that each of the more general goals contained an equal number of more specific goals, so I used a computationally intensive method of clustering called *block models* [50]. Years later, I applied a form of factor analysis to the same data and got rather similar results. So factor analysis is not entirely arbitrary, but also is not the one best objective method, especially if you have doubts whether the data represent linear dimensions of variation rather than some very different structure [51, 52].

Recently, I had the opportunity to administer Lewis Goldberg's set of 100 Big Five questionnaire items online, using an Android app, with good responses from fully 3267 people, vastly more than such studies usually have, and thus potentially strengthening the reliability of the statistics [53, 54]. While this is not a random sample, that criterion for ideal statistical sampling is seldom met by studies on personality. The 100 items are phrases in ordinary language that could describe a person, such as "talk to a lot of different people at parties." That is one of 20 extraversion items, and each of the five dimensions had 20 measures. I had programmed an interface that presented the respondent with what looked like a checkerboard, in which touching one square would answer two questions about the phrase, on a 1–8 scale, how poorly or well it describes the respondent, and how bad or good it is for a person to have this characteristic [55, 56].

Focusing just on the 100 self-descriptions, I ran two different factor analyses. In a *confirmatory analysis*, I told the statistical analysis software to do a common kind of principal component analysis with rotation, calling for exactly five factors, and pretty exactly I got the Big Five. Then I compared an *exploratory analysis*, with everything the same, but asking for as many factors had eigenvalues greater than 1. That produced 15 factors. Shades of Raymond Cattell's 16 factors! All 15 made perfect sense, although of course they did not match the antique 16 factors, given the items. Only one of the Big Five actually emerged intact, extraversion-intraversion. Jerome Kagan, who has been very critical of the Big Five primarily because they rely only upon verbal responses to questionnaires rather than physiological and behavioral measures, might interpret this scientifically as an indirect reflection of the one personality dimension he recognized, how reactive versus passive people tend to be [57–59]. I prefer to see it as the resurrection of the ancient Greek gods, Apollo and Dionysus, as transmitted to us through mystics like Friedrich Nietzsche and Carl Gustav Jung.

Two other factors among the Big Five appeared in attenuated form as factors 2 and 3, neuroticism and portions of agreeableness that I prefer to call *benevolence*. This nice benevolence factor was led by "sympathize with others' feelings," "think of others first," "take time out for others," and "love to help others." Intraverted and disagreeable items were missing from both these factors, so each was only half of one of the Big Five. The neurotic items are listed in Table 9.2. They were in random

Table 9.2 Neurotic items from an online study with 3267 respondents

Factor item	Factor loading	Mean “Describes Me” rating, by “Describes Me” thirds			Mean “Good to Be” this rating, by “Describes Me” thirds		
		Low	Medium	High	Low	Medium	High
49. Get irritated easily	0.72	3.07	5.05	6.90	4.24	4.57	4.74
64. Get angry easily	0.72	2.53	4.29	6.37	3.89	4.35	4.70
68. Have frequent mood swings	0.72	2.74	4.69	6.76	4.06	4.56	4.87
43. Get upset easily	0.71	2.69	4.45	6.49	4.03	4.52	4.79
62. Get stressed out easily	0.69	3.24	5.12	6.98	4.16	4.74	4.79
81. Panic easily	0.65	2.22	3.88	5.90	3.81	4.35	4.58
48. Change my mood a lot	0.65	3.40	5.26	6.85	4.60	4.97	5.03
79. Get overwhelmed by emotions	0.65	3.45	5.35	6.98	4.42	4.86	5.05
65. Get caught up in my problems	0.64	3.55	5.17	6.88	4.22	4.62	4.63
71. Am easily disturbed	0.63	2.79	4.21	6.01	4.14	4.51	4.89
26. Take offense easily	0.60	2.83	4.34	6.08	4.15	4.52	4.68
89. Often feel blue	0.60	2.70	4.39	6.07	3.87	4.32	4.58
20. Worry about things	0.50	4.59	5.99	7.01	4.59	5.09	5.12
8. Feel threatened easily	0.46	2.84	4.19	5.49	3.91	4.19	4.50
11. Grumble about things	0.43	3.41	4.62	5.65	4.15	4.53	4.64

order in the questionnaire, but are here arranged in terms of a five-factor loading, on which the anti-neurotic items had very weak negative loadings, none greater than -0.33 , so they are omitted. Six columns of the table show mean scores on the 1.00–8.00 scale for both ratings of each item. The 3267 respondents were divided into three groups of 1089, in terms of their total score neuroticism score, with those at a boundary assigned at random: Low, Medium, High. So, for example, of 1089 respondents who felt they were not neurotic, the average score on “get irritated easily” was only 3.07. For the highly neurotic 1089 respondents, the average “get irritated easily” was much higher at 6.90, just 1.10 short of the maximum 8.00.

The three columns at the right of the table are where things might get interesting. For the low-neurotic respondents, the average rating of how good it is for somebody to “get irritated easily” was 4.24. The average of 1.00 and 8.00 is 4.50, so this is slightly on the bad side. For high neurotic respondents, “get irritated easily” got an

average rating of 4.75, therefore on the good side. To summarize, as a journalist might: Neurotic people think it is good to be neurotic!

We see this pattern for all the neurotic items. Should we conclude that neurotic people are defensive, and thus minimize how negatively they evaluate their own flaws? Or does this striking result merely reflect that some people tend to agree with questionnaire items (yea-saying), while others habitually disagree (nay-saying)? [60]. Or is it a mere artifact of the Android mobile device interface, thus reflecting a tendency of right-handed people (the majority, presumably) to move between the lower-left and upper-right corners of my checkerboard when selecting a response? Or is it a reflection of cultural differences, given that emotional volatility might be valued by some social groups? Or is it merely further evidence of the unscientific nature of social psychology?

One thing is sure: All the phrases in the table are ordinary expressions of folk culture, rather than technical concepts from a highly advanced science. This does not prove that it will be impossible to define human nature precisely at some time in the future, although we cannot be sure how much longer computer technology will advance, given the stasis into which nuclear and rocket technologies have fallen. But it does indicate three facts. First, we have not yet become gods. Second, we can only dimly imagine a posthuman or angelic civilization. Third, any current experience with full artificial intelligence will require dramas expressing the thoughts of real humans.

9.3 Virtual Friends, Virtual Gods

As we saw in earlier chapters, computer role-playing games often include non-player characters that are comparable to virtual robots, capable of responding in simple ways to the actions of a player. Actually, methods already exist to make these NPCs much smarter, but current trends in the online game business do not seem to warrant using them. For example Kathryn E. Merrick and Mary Lou Maher achieved some success in programming NPCs to exhibit realistic curiosity, seeking information about unusual events in their environments [61]. This allows NPCs to develop new skills that can add complexity to the changing ways they interact with players. Consider the issue of how a mere human being could interact directly with an NPC god possessing artificial intelligence [62].

I explored the 2005 solo videogame *God of War* on a PlayStation 2 TV-game system, rather than a computer [63]. Each player is assigned the same identity, an ancient Spartan warrior named Kratos. He had served Ares the God of War, as every good Greek warrior should, until Ares tricks him into killing his own family, as a step in training him to be a remorseless killer. But Kratos is not merely a servant, like some robot, but a human being. As such, he has two alternatives, suicide or deicide, and he freely selects the impossible second alternative. This nicely motivates the player to undertake a series of adventures, with some assistance from other

gods, to build up his strength until he has nearly become a god himself and is ready to face Ares in personal combat.

Thus, virtual worlds not only allow human beings to interact closely with artificial people, but also, on rare occasions, with artificial gods, but defining gods as classical Pagans did, superior but not perfect beings. In the first chapter, we considered the centrality of souls in a South Korean online game, and now we shall encounter a deity in another, *Tera: Fate of Arun*, created by a small group who call themselves Bluehole. A central feature of the history of religion is conflict between traditions and sectarian movements. The conflicts between virtual worlds are also significant, not limited as one might imagine to economic competition in the marketplace. In a sense, Wikipedia describes *Tera* as a sectarian movement that split away from the *Lineage* denomination of games, possessed by the NCsoft papacy (i.e. corporation):

In 2007, NCsoft filed a complaint to South Korean gosu gamer authorities and brought a civil action for damages and an injunction to Bluehole. The Bluehole founders and employees, formerly employed under NCsoft and working on the *Lineage III* development team, were convicted by a Korean criminal court for the theft of valuable trade secrets from NCsoft in 2009. In 2010, a Korean civil court held these individuals, along with Bluehole, liable for misappropriation of trade secrets, awarding NCsoft about \$2 million in damages and issuing an injunction against utilizing trade secrets for monetary gain. The damages were later reversed by an appellate court, but the injunction remained in place. Despite the injunction, Bluehole developed and released *Tera* in South Korea.

On January 9, 2012, NCsoft filed a civil action in the United States against Bluehole and its U.S. subsidiary En Masse. NCsoft was seeking a preliminary and permanent injunction prohibiting the launch of *Tera* in the United States, or damages for the substantial harm that the launch would cause NCsoft. They asserted claims for copyright infringement, trade secret misappropriation, breach of confidence, unfair competition, and unjust enrichment under the laws of the state of New York.

On April 18, 2012, En Masse Entertainment announced they were found not guilty in the Korean civil actions. However, three employees were found guilty.¹⁰

This chapter has already reported that *Star Wars: The Old Republic* had caused the death of an earlier and much beloved virtual world, *Star Wars Galaxies*. In Chap. 6 we saw that separate companies produced the *Fallout* games, and the histories of the often small groups that produce many kind of novel information technology involve mergers, acquisitions, and also schisms. In Chap. 7 we saw that *WildStar* was created by people who had defected from *World of Warcraft*. The many Transhumanist groups described in the previous chapter are rather like the wealth of Protestant denominations today, not engaging in public conflict, but some harboring private disagreement with others. The same is true for the Jediism groups, the remnant Processean groups, and with greater hostility the Children of God. More generally, fragmentation, repaginization, and innovation in the world of information technology generate a tremendously dynamic secularization.

When I entered *Tera* on July 4, 2015, I did so in the Celestial Hills role-playing server, and was told, “Long ago, when the titans, Arun and Shara, fell asleep, they

¹⁰ [en.wikipedia.org/wiki/Tera_\(video_game\)](https://en.wikipedia.org/wiki/Tera_(video_game)), accessed September 11, 2016.



Fig. 9.3 A virtual wizard contemplating a statue of the goddess he is about to meet

dreamed our world into existence.” Or, I wondered to myself, was I dreaming Arun, Shara, and Tera into existence? I created a sorcerer character, and named him Bainbridge so that I could perceive this dream directly as myself, rather than through some alternate personality. After some questing, I arrived at the main city, Velika, which I learned was named after the Goddess Velik. Note that the names of a city and a goddess are connected, like Athens with Athena, and if I had been playing the game as an avatar of deceased sociologist Emile Durkheim I might have pondered his theory that a god was a metaphor for a society [64]. Figure 9.3 shows me standing before a statue of goddess Velik, with her angelic wings.

On my way to the maximum experience level of 65, at level 28, I began the Phantom Menace quest arc that begins with an assignment called Revelation of the Goddess, meeting the actual goddess Velik herself.¹¹ “Those who fight for Velika will always see the gates to the temple held open for them,” she proclaimed. “Those who would seek to destroy Velika, though – they will taste our wrath.” I clicked the button to advance the mission, and she responded: “We meet at last, Bainbridge. I’ve watched your brief, but illustrious, career. You’ve served with courage, honor, and, most importantly, compassion. I have need of soldiers like you.” I clicked a button that asked how I may serve her. That triggered a rather beautiful *cutscene*, like a high-quality animated movie of me standing before the goddess, as beautiful images swirled around, and she spoke in a sweet but strong voice:

... the goddess Velik takes notice.
For no one’s vision is keener than the goddess of hunters.
There is always a place in my city for heroes like you...

¹¹ tera.wikia.com/wiki/Quest:Revelation_of_the_Goddess, accessed October 8, 2016.

...especially in the dark days to come.
Despite your victory,
shadows linger ...in Velika and elsewhere.
I sense a wider conspiracy-
one that aims to throw everything into chaos.
Thus I command you: hunt down the conspiracy.
Follow their tracks wherever they may lead.
Though this is the Age of Mortals,
I still have some divine power to grant you.
Take my blessing, and fly!
Hunt down those who would destroy us from within.

Defending the city meant defending the Dream. In an Age of Mortals – or Era of Secularization – belief may become suspension of disbelief, and faith is no more than fantasy. We may not take fictional deities seriously, and yet Velik's divine words seem to describe the world we live in today. Social scientists may not usually think of themselves as hunting down conspiracies, although if sociology is really “slow journalism,” we need to contemplate the fact that professional journalists do engage in much conspiracy hunting these dark days.

The encounter with Velik seemed realistic, because traditionally gods speak to humans but do not listen to them. Thus, no artificial intelligence was required. Every-day interaction between a player's avatar and an ordinary non-player character will require more advanced artificial intelligence, but the technology already permits two kinds of realistic interaction: rituals and emergencies. We can illustrate both with one of the most complex virtual humanoids, the Orc named Thrall in the extremely influential online game, *World of Warcraft*.

The first session of Convergence of the Real and the Virtual, the scientific conference I organized in WoW, took place on the seacoast just east of Thrall's city, Orgrimmar, on Friday, May 9, 2008. The panel consisted of five highly respected researchers on virtual worlds: Bonnie Nardi, Hilde G. Corneliusen, Celia Pearce, Nic Ducheneaut, and Tanya Krzywinska. They had developed a list of ten questions that were considered in order, with more than a hundred other participants free to provide responses in the text chat that were distilled into a chapter of the book of proceedings that resulted. The last question was: “Is ‘the magic circle’ a suitable concept for understanding *World of Warcraft*, or are there better ways of describing the relation between game and non-game?” The term magic circle was adopted by game researchers from a classic work on play by Johan Huizinga that described it in terms of “a stepping out of ‘real’ life into a temporary sphere of activity with a disposition all of its own.”[65]. A magic circle facilitates suspension of disbelief, but these are only metaphors, and some conference participants criticized them for their imprecision. The published proceedings of the conference summarized the chat-based debate:

Others argued that terms like *magic circle* do have utility for understanding virtual worlds, noting that a conference had been devoted to this topic just a month earlier, in Tampere, Finland.¹² The real world itself is divided into many different subcultures and settings with

¹²<http://breakingmagiccircle.wordpress.com/programme/>

different rules. It has its own magic circles – a froth of *magic bubbles* more like, with few rules between. Given the complex relations between realms of human activity, a more appropriate term might be *magic fractal*. People differ in the extent to which real world distractions intrude, and possibly women experience more family distractions at home where games are typically played in western nations. People with unsatisfactory lives might need a magic circle, and thus enter into role playing online with greater vigor. In a very lively discussion with many participants, the conversation then turned to the need for empirical research on the conditions in which the magic circle becomes weaker or stronger [66].

After the session, many of the participants went on a long expedition together, which began by visiting Thrall at Grommash Hold in Orgrimmar, the capital city of the Orc Horde, a photo-op to have their pictures taken standing beside him. He seemed to tolerate these selfies, and the fact that it was not possible to engage him in conversation seemed natural, given the ritualistic nature of this particular encounter. Some months before, on February 9 to be precise, I had been one of a questing group of five players who encountered Thrall 7 years earlier [67]. WoW's magic circle had allowed us to travel into the past through the Caverns of Time to undertake a problematic quest for the Keepers of Time, semi-divine dragons whose purpose is to prevent time travelers from distorting history. In the original *Warcraft* game of 1994, Orcs had invaded the Human-held world of Azeroth, and complex events followed that left many Orcs in prison camps, Thrall among them. Now a human-form Keeper named Andormu, announces:

Forces are working against the Horde warchief, Thrall, attempting to prevent him from ever escaping Durnholde Keep. If Thrall never escapes, this world – as you know it – will cease to exist. Gather a group of adventurers and take the timeway to old Hillsbrad. Two of our agents await you inside. Speak with Erozion on the other side.

Our worst fears might soon be realized. The forces at work behind this temporal disturbance are a new flight of dragons known as the Infinite. We do not know where they came from or why they are destroying timeways. In this pocket of time, they have kidnapped Taretha Foxton, daughter of Tammis Foxton, the secretary of Aedelas Blackmoore, ruler of Durnholde and overseer of all internment camps on Azeroth.¹³

It had been Taretha's role to liberate Thrall, but now Erozion tells the adventurers they must do so in her stead. The action battling guards is so intense that there is no opportunity to try (and fail) to engage Thrall in conversation. Liberated from his cell, Thrall does say, "Thank you strangers. You have given me hope." He runs to an armory to get a weapon, and then runs outside, where more guards await them. After the last battle just outside the gate, Thrall grabs a horse and rides frantically to rescue Taretha from nearby Tarren Mill, apparently assuming that the adventurers are her friends and want him to do so. After a furious battle, Thrall and Taretha greet each other, as shown in Fig. 9.4.

In 2016, it was still possible to experience this mission, either by creating a WoW avatar and gaining enough experience to undertake the Caverns of Time missions, or by searching YouTube for videos of the event played by other people.¹⁴ Neither

¹³ [www.gamepedia.com/Quest:Old_Hillsbrad](http://wow.gamepedia.com/Quest:Old_Hillsbrad), accessed October 112, 2016.

¹⁴ www.youtube.com/watch?v=w1-zXr6pUFA, www.youtube.com/watch?v=N6QzpEkS3tU, accessed October 11, 2016.



Fig. 9.4 Encounter between two virtual friends who are about to lose their memories

Thrall nor Taretha understands fully what has just happened to them, and as history is returned to its original path, they must even forget the intervention of the adventurers:

Thrall:

“I’m glad you’re safe, Taretha. None of this would have been possible without your friends. They made all of this happen.”

Taretha:

“Thrall, I’ve never met these people before in my life.”

Thrall:

“Then who are these people?”

Erozion (to Thrall and Taretha):

“I believe I can explain everything to you two if you give me a moment of your time.”

Erozion casts a magic spell of forgetfulness on Thrall and Taretha.

Erozion (to the team of five players):

“That spell should wipe their memories of us and what just happened. All they should remember now is what reality would be like without the attempted temporal interference. Well done. Thrall will journey on to find his destiny, and Taretha ... Her fate is regrettably unavoidable.”

Thrall:	“Goodbye, Taretha. I will never forget your kindness.”
Taretha:	“They call you a monster. But they’re the monsters, not you. Farewell, Thrall.”

The historical background and the fate of Taretha were explained in detail by Christie Golden’s novel, *Lord of the Clans*, which is a biography of Thrall [68]. While he was a slave child, Aedelas Blackmoore trained him to become a gladiator. As I summarized in my book about WoW: “By the very act of naming him Thrall, Blackmore sought to brand him forever his slave. But during his upbringing, Thrall learned mercy and honor from the sergeant who tutored him, and kindness from Taretha, daughter of the servant ordered to house him. Eventually, after Thrall has become the most formidable warrior in the service of Blackmoore, Taretha helps him escape. In a series of raids, he liberates many of his people and establishes the core of the eventual Horde. When his forces surround Durnholde, and he honorably requests the release of the remaining Orcs, Blackmoore answers him by delivering the severed head of Taretha.” [69].

9.4 The Argument from Design

We actually do not currently know whether self-contained humanoid robots will ever be able to duplicate human cognition, because the currently dominant form of computing involves central processing units that move data back and forth between memory units, rather than the massively interconnected system exemplified by the vast number of neurons in the human brain [70]. Perhaps the most we can achieve with transistor-based computers is remote operation of humanoid robots by elaborate parallel-processing database-centric artificial intelligence in the Internet Cloud. That uncertainty suggests that we need to consider how human intelligence could possibly have evolved naturally on the planet Earth. A standard philosophical formulation of traditional religious beliefs is the *argument from design*. We know God exists, because the world seems marvelously well created to support human life [71]. As we now create realistic virtual worlds using computers connected by Internet, so God employed some unknown supernatural powers to bring Earth into existence.

In the classical Pagan world, this theory was held by some philosophers, but not couched in monotheistic terms. Plato explained why he knew the gods exist. “Why, to begin with, think of the earth, and sun, and planets, and everything! And the wonderful and beautiful order of the seasons with its distinctions of years and months!”[72]. It is difficult to think of a more profound challenge to religion, philosophy, and science than this issue. Indo-European pagan religions tended to conceptualize the many gods as one generation in a complex genealogy of supernatural beings, while monotheists tend to avoid the question of who created their one God.

Nearing the last page of this book, we cannot look deeply into this abyss, but find an efficient way to suggest a few main points. Imagine there are these four main competing theories of existence:

1. The universe is the chaotic result of conflict between multiple gods who personify competing cosmic principles.
2. The universe was intentionally created by one, supernaturally intelligent God.
3. The universe is the inexorable result of mathematical logic, in which each force and phenomenon has a precise, undeniable relationship to every other one.
4. The universe is infinite randomness, within which our environment was naturally selected because it alone could support the evolution of intelligence.

There may be more alternatives than these four, and of course social scientists have identified numerous watersheds in history, from the Neolithic Revolution in which the invention of agriculture transformed society, to the Copernican Revolution that transformed cosmology, to the various stages of Industrial Revolution we debate today. The exile of Adam and Eve from the Garden of Eden is an early theory of historical stages, the separation of humanity from nature that was replicated through other myths in other cultures [73]. The second theory clearly reflects the Judeo-Christian-Islamic tradition, and there is room to debate whether Asia might have discovered a different path. But I find these four a reasonable conceptual structure, especially if they are considered as the results of three eras of secularization in which the earlier theory faded, yielding place to new.

This book makes no claim to have considered the rich meanings of polytheism, and the chief examples offered, the Process and Wagner's *Ring*, are modern countercultures rather than genuine faiths of the human past. But the four theories are not meant to be statements of faith in any particular religious tradition, but abstractions that can be considered apart from any traditional rituals or scriptures. For example, given that Jedi religion draws upon Asian traditions, it might be interesting to ask one of its emerging theologians whether the destruction of the first Death Star was really drawn from *Zen in the Art of Archery*, and whether the chaotic history of the *Star War* universe reflects the fourth alternative listed above, perhaps as expressed by *The Dancing Wu Li Masters* [74, 75]. However interestingly a Jedi Master might answer such questions, here we had better deal with abstractions.

While *Polytheism* refers to a system of multiple gods, really each supernatural being is not what a monotheist means by a *god*, but the personification of some humanly important but finite principle. In a pantheon, one god may represent *father*, while one goddess represents *mother*. One deity may represent *love* while another represents *hate*, or *air* versus *sea*. The legends include lesser beings, some being super-human tribes of *giants* and *dwarves*. Others may reflect the history of the gods, such as *titans* or the *world tree*. Importantly, tribes may be represented by totemic deities, or may debate whether their father gods are really the same: Zeus, Jupiter, and Odin for example.

Polytheism is not only a theory of the universe, but also a theory of ethics, albeit a problematic one, because some gods are in conflict with others, even before a *trickster* is found lurking at the edge of the pantheon. It implies that morality is

limited, either to one's own tribe, or even to one's cult within a tribe, legitimating many kinds of conflict and exploitation between humans. Monotheism, therefore, may be an ethical system as much as a cosmological theory. Moses brought us ten commandments, but they all came from one god. Jesus may have added one or two more, but they hearken back to a single deity, here reported in Matthew 22:35–40:

Then one of them, which was a lawyer, asked him a question, tempting him, and saying, Master, which is the great commandment in the law?

Jesus said unto him, Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind.

This is the first and great commandment.

And the second is like unto it, Thou shalt love thy neighbour as thyself.

On these two commandments hang all the law and the prophets.

Christians like to conceptualize *neighbour – neighbor* west of the Atlantic – not as a fellow tribe member, but as any fellow human being, thus rendering Christianity a universal rather than ethnic religion. While there is room for debate about the implications of monotheism for science, it is noteworthy that the scientific progress of the Greeks did not somehow transfer to the technologically-oriented Romans, and modern science arose half a millennium ago in Christian nations [76, 77]. For a time, science and religion harmonized through Natural Theology, the view that God had made this world using a unified system of principles that the human mind could comprehend, giving scientists the mission of learning more about God even as they studied nature [78].

It would be controversial to suggest that the transition from polytheism to monotheism was an episode of secularization, yet it can legitimately be seen that way. Many of the supernatural beings and forces of ancient polytheistic religions were directly experienced as forces of nature, few as dramatic as Thor's thunderbolts, but all placing the sacred manifestly within the natural, in a dynamic and directly perceived system that did not require scientific research to experience. Going from many gods and demigods to one God, is a simplification of theology, but required God to withdraw from the world, especially within mainstream denominations, no longer speaking directly to prophets in the modern world, to give one obvious example. Of course, the transition to monotheism was only partial secularization, and the same is true, I suggest, for the modern transition to godless science.

Scientists may no longer mention God and consciously practice Natural Theology, but they do assume that the universe is based on a coherent, comprehensible system of laws. But if there is no divine lawgiver, how can there be cosmic laws? Since the ancient Greek mathematician Pythagoras devised his famous theorem, and then went on to create a utopian community he hoped could be designed on the basis of similarly inescapable logic, some scientists have believed that the ultimate power of the universe was abstract logic [79]. The ultimate axiom of logic is that one must begin with axioms, but what is one to do if they prove false?

Throughout history, occasionally philosophers and frequently pessimists have pondered the possibility that ultimately life lacks meaning, beyond satisfaction of the passions programmed into us by nature. Around the 1980s, a number of physicists and scholars with comparable expertise analyzed a possible rebuttal to the

Argument from Design, that came to be called the *Anthropic Principle*, which is the fourth theory of the universe listed above. The idea that the laws of physics were perhaps “finely tuned” to permit the evolution of life based on exceedingly complex molecules was well enunciated by biochemist and sociologist Lawrence Henderson in a 1913 book he titled *The Fitness of the Environment*, to suggest that “survival of the fittest” implied something about the world as well as about biological species, and a 1917 book that directly addressed the Argument from Design, titled *The Order of Nature* [80, 81]. Yet perhaps our environment was not tuned but selected.

In 1974, Brandon Carter defined the Anthropic Principle thus: “what we can expect to observe must be restricted by the conditions necessary for our presence as observers.” [82, 83] Simplistically, humanity evolved on Earth rather than some other planet of our solar system, because Venus was too hot, Mars was too small, and the other planets were too strange. So, to some extent, a principle of natural selection from random variation determined that a planet like Earth would be our home. But Carter pointed out that natural parameters that apply throughout our universe appear fine-tuned to permit our existence, such as the gravitational constant.¹⁵

Actually, that fact stimulates two questions: Why are the constants of the physical universe the particular values that they are? Why are the constants of the physical universe constant. It is one thing to observe that the mass of an electron is a particular fraction of the mass of a proton, and quite another to note that all electrons have exactly the same mass. One general approach to the constancy of constants has been to imagine that each is a dimension of the physical universe, therefore applying everywhere. However, the habit in physical sciences of representing variables as dimensions on a graph seems rather superficial to social scientists, who regularly graph non-spatial variables, for example the Big Five personality dimensions.

One possible explanation that is occasionally offered is that our universe may have originated at a single point in space, such that everything was totally connected, and the Big Bang explosion billions of years ago spread the same conditions everywhere. That raises a possible empirical test of the Anthropic Principle, in a variant of Big Bang theory that postulated that a brief period of extremely rapid inflation may have created a much larger universe that we currently observe, with distant regions having different parameters. It is an open question whether regions that obey slightly different natural laws would be causally disconnected from each other, or whether future super-telescopes might be able to observe distant regions and determine that their gravitational constants were slightly different, thus constant only locally [84].

A wild but actually rational alternative is the idea that the Big Bang was somehow the natural result of something like the implosion of a black hole, an astronomical object that was so massive that light could not escape it. In a poetic sense, a physical collapse like that takes the material in a black hole out of our universe, thereby conceivably creating another. Physicist Andrei Linde has called this theory

¹⁵ en.wikipedia.org/wiki/Gravitational_constant, accessed October 23, 2016.

the Self-Reproducing Inflationary Universe, and we have already encountered it in this book under a different name [85]. It was the fictional theology of the Children of Atom in the *Fallout* games, although adapted to assert that atomic explosions created new universes.

Starting in the late 1970s, a number of thoughtful and knowledgeable writers publicized the general idea, with a variety of variations. In 1979, Bernard Carr and Martin Rees published “The Anthropic Principle and the Structure of the Physical World” in the influential journal *Nature* [86]. This term was popularized in a 1981 *Scientific American* article by George Gale, titled “The Anthropic Principle,” and in greater detail by John Barrow and Frank Tipler in a 1986 book titled *The Anthropic Cosmological Principle* [87, 88]. The 1980s was a time of great interest in Chaos Theory, that was quite compatible with the idea that our green and pleasant land was not the home of some holy Lamb of God, but merely the one location in cosmic madness where intelligent life was possible, however nasty, brutish and short [89–92].

Today, intellectuals still debate these ideas, even if the general public takes little notice, and despite the possibility that the Anthropic Principle may become the fundamental truth that emerges from the current era of secularization [93, 94]. Despite the hype that attends all science journalism, it is beginning to dawn on us that nuclear physics and astronomical cosmology are not finding clear evidence that the laws of nature are connected into a universal system of inescapable logic. Wikipedia’s 8000-world article on the Anthropic Principle correctly presents a dense thicket of debates about its exact meaning, including the question of why we live at the particular time in history that we do.¹⁶

This part of the debate had especially interested me two decades ago, thinking in the context of historical sociology, so I presented a paper about it at the 1996 meetings of the American Sociological Association, then shared the ideas with participants at two meetings: “Shared Future: The Prospects of Revolution” (Asian Forum Japan, Tokyo, Japan, September 2–6, 1996) and “Nonlinear Dynamics in the Behavioral and Social Sciences” (National Research Council, Washington, D.C., November 15–16, 1996). The anthropic principle is an answer to a question: “Why is the world capable of producing intelligent life?” Asking a question is a human, social act. Thus, the anthropic approach is grossly incomplete unless it includes an analysis of the social process by which that question comes to be asked. If all the laws of the universe lead up to the asking of the question, then we should focus on the conditions of the moment in which the question is asked for the first time. I suggested we call that moment in time the *omicron point*.

Theologian Pierre Teilhard de Chardin had suggested that the goal of science and humanity should be the *omega point*, the convergence of God and man, possibly at a specific time in the future [95]. In the biblical *Revelation* the phrase “alpha and omega” refers to God, the beginning and ending of all existence. So, *omega* can refer to the final moment of time, toward which all history drives. But time may be open-ended, and modern cosmology can identify only one defining instant, when

¹⁶en.wikipedia.org/wiki/Anthropic_principle, accessed October 23, 2016.

the expansion of the universe began from a dimensionless point. Because the Big Bang came at the beginning, it is the *alpha* point. Then the moment when the pivotal question is first asked, in the anthropic theory, would lie somewhere between alpha and omega.

That is where we find *omicron* in the Greek alphabet. It is the moment when the universe acquires a fully aware consciousness. More pedantically, it is the time in history, perhaps around 1970, when for the first time humans well and truly asked why the universe was suitable for our existence, with the possibility of contemplating the anthropic answer that a random selection effect is responsible. What comes after Omicron? I suggested three possible scenarios [96]:

Scenario I: *Catastrophe*

Once the pivotal question has been well and truly asked for the first time, all the laws of existence have performed their function and can cease to operate.

Scenario II: *Stasis*

Let us assume that the universe is indeed defined by a particular set of relations among a very small number of parameters. No natural laws exist beyond those required to reach the omicron point. Thus no major functional social forms that had not already existed prior to the omicron point can exist after it ... The best that can be expected, therefore, is to conserve human society in the form existing at the omicron point.

Scenario III: *Navigation*

If the first scenario was extremely pessimistic, and the second one moderately so, the third scenario seeks to be optimistic. It notes that the universe is filled with an abundance of unused resources, and it suspects that the laws of nature that brought us to the omicron point have many as-yet inapplicable corollaries that wise humans of the future may selectively invoke. The human species is distinguished not only by its relatively large brains and capacity for language, but also by its ability to make and use tools, and by the tremendously effective technology that results from the combination of language and tool-making. The problem is that after the omicron point, humanity is sailing into an uncharted sea, indeed into a possibly ever more chaotic and stormy ocean where the rules of seafaring change and darkness prevents us from distinguishing innocent foam from clashing rocks.

It is often claimed that the anthropic theories are not scientific, because they cannot be empirically verified [97]. This is not strictly true, given Karl Popper's argument that it is difficult even perhaps impossible to prove that a scientific theory is true, although ample negative evidence can prove a theory false [98]. Or, looking at the conundrum from a different angle, the Anthropic Principle is the *cosmic null hypothesis*. It can be disconfirmed, but only by proving one of the competing theories to be true.

Thus, anthropic theories can be falsified – at least to a relative degree in three different ways. First, had string theory arrived at a convincing mathematical argument for why the basic parameters of the universe could not be different from what we observe, then the Anthropic Principle would be logically falsified. Second, the Omicron scenarios predict that human progress cannot achieve much more than required to reach the point when the Anthropic Principle can be articulated. Thus, if

vastly more progress were achieved, such as the extensive interstellar colonization imagined in *WildStar*, that could be evidence against the Anthropic Principle and all its corollaries. Third, if God were so kind as to return to Earth, and initiate a new age of miracles, or a host of gods visibly battled again at the gates of Olympus or Valhalla, then we could return to the beliefs of the distant past [99, 100]. More seriously, it has been argued that the Anthropic Principle fails to take account of the necessity that the universe must enable morality, for human life to be possible, not merely biology [101].

One nagging issue is how precise the Omicron Point must be. A purist would say that the pivotal question needs to be asked well and truly only once, and that progress past that point in history is impossible. At the extreme, the theory becomes egocentric. That is: the Omicron Point is that moment in time when you yourself ask the pivotal question, which suggests that the universe exists only so that you personally may exist. This is reminiscent of the philosophical arguments famously stated by René Descartes and Edmund Husserl, that begin by doubting everything except the philosopher's own existence [102–104]. The reader is free to contemplate this rather self-centered theory, but there are wide possibilities.

When I first wrote about the Anthropic Principle, this was articulated in terms of the challenge of dating when the pivotal question was well and truly asked for the first time, which might have been as long ago as ancient Greece. Another way to approach it is in terms of a gambling metaphor, based on simple notions of probability. Suppose that living in a universe suitable for intelligent life is like rolling a 7 with a pair of dice. An Efficiency Corollary for the Anthropic Principle would hold that the universe is unlikely to be more complex than the absolute minimum required for the evolution of intelligent life, and dice provide a probabilistic way of thinking about efficiency.

When you roll a pair of dice, what are the chances you will get a 7? You could try it empirically, perhaps thousands of times, recording the results of each roll, but a simpler way, if the dice are honest rather than having hidden weights or unequal sides, is simply to analyze. Each die has an equal chance of coming up with a number from 1 to 6. For two dice, that means there are $6 \times 6 = 36$ possible outcomes, of which 6 total 7: 1+6, 2+5, 3+4, 4+3, 5+2, and 6+1. The multi-universe version of the Anthropic Principle would say that 36 universes exist, but in just 6 of them is intelligent life possible. Notice that in this metaphor the 6 universes conducive to life may have somewhat different specific characteristics, and 5 alien universes exist in addition to the one we inhabit.

However, we could calculate the probabilities without actually rolling any dice, so this narrative does not assume the actual existence of multiple universes. Social scientists, like gamblers, usually conceptualize probabilities in terms of sampling from a large population of cases, but calculating the probabilities for dice as we have just done requires the existence of only one universe, the one we inhabit. The fact that we can conceptualize 5 others is not trivial, however, because that implies that some characteristics of our universe are arbitrary. That means that the Omicron Point in time is not precise, and some progress beyond it may be possible. But the

example of rolling dice is simply a popular metaphor, with little scientific or religious significance.

Another popular metaphor is the wild frontier. In the famous *Star Trek* introduction, space is the *final frontier*, meaning that the future of humanity will be decided beyond the borders of this world. Vannevar Bush equally famously called science the *endless frontier*, and if science fails to progress, humanity will indeed serve its life sentence in the terrestrial penitentiary [105]. Over a century ago, Frederick Jackson Turner analyzed the closing of the America frontier, concluding that the freedom generated in the Wild West was the major factor supporting democracy not only in the placid East, but even back in western Europe, by increasing prosperity and providing new social opportunities [106]. Thus a closing of all frontiers could bring doom.

Perhaps the actual final frontier is the one between religion and science. That is the border between sacred and profane, supernatural and natural, spiritual and material. We can imagine various ways that frontier might close. Perhaps pseudosciences focused on ethics would simply replace churches with college classrooms and psychotherapists' offices. As dramatized by the *Fallout* series, the result could however be absolute disintegration of human society. Or, as *WildStar* suggested, new kingdoms might consolidate, each justified by an established state church. Between those extremes, the future might entail a dynamic marketplace in which the Process competes with Jediism and the *Ring*. In that case, the real final frontier would be that between fiction and fact, fantasy and faith, phony and true. I wonder where this book lies in that conceptual space.

References

1. Vidal, D.: Anthropomorphism or sub-Anthropomorphism? An anthropological approach to Gods and robots. *J. R. Anthropol. Inst.* **13**(4), 917–933 (2007)
2. Waytz, A., Cacioppo, J., Epley, N.: Who sees human? The stability and importance of individual differences in Anthropomorphism. *Perspect. Psychol. Sci.* **5**(3), 219–232 (2010)
3. Waytz, A., Epley, N., Cacioppo, J.T.: Social cognition unbound: insights into Anthropomorphism and Dehumanization. *Curr. Dir. Psychol. Sci.* **19**(1), 58–62 (2010)
4. McCorduck, P.: *Machines Who Think*. A. K. Peters, Natick (2004)
5. Bainbridge, W.S.: Artificial intelligence. In: Bainbridge, W.S. (ed.) *Leadership in Science and Technology*, pp. 464–471. Sage, Los Angeles (2012)
6. Wolfe, A.: Mind, self, society, and computer: artificial intelligence and the sociology of mind. *Am. J. Sociol.* **96**(5), 1073–1096 (1991)
7. Stark, R., Bainbridge, W.S.: *A Theory of Religion*. Toronto/Lang, New York (1987)
8. Bainbridge, W.S.: *Sociology Laboratory*. Wadsworth, Belmont (1987)
9. Bainbridge, W.S.: Neural network models of religious belief. *Sociol. Perspect.* **38**, 483–495 (1995)
10. Bainbridge, W.S.: *God from the Machine: Artificial Intelligence Models of Religious Cognition*. AltaMira, Lanham (2006)
11. Putman, H.: Robots: machines or artificially created life? *J. Philos.* **61**(21), 668–691 (1964)
12. Boden, M.A.: Artificial intelligence and the mind: new breakthroughs or dead-ends? *Philos. Trans. Phys. Sci. Eng.* **349**(1689), 1–13 (1994)

13. Flake, J. (ed.): Wastebook: The Farce Awakens. US Senate, Washington, DC (2015). www.flake.senate.gov/public/_cache/files/03714fa3-e01d-46a1-9c19-299533056741/final-wastebook-2015-pdf.pdf, p. 40.
14. Flake, J. (ed.): Wastebook: The Farce Awakens. US Senate, Washington, DC, www.flake.senate.gov/public/_cache/files/03714fa3-e01d-46a1-9c19-299533056741/final-wastebook-2015-pdf.pdf, pp. 48, 94, 103.
15. Flake, J. (ed.): Wastebook: The Farce Awakens. US Senate, Washington, DC, www.flake.senate.gov/public/_cache/files/03714fa3-e01d-46a1-9c19-299533056741/final-wastebook-2015-pdf.pdf, p. 161
16. Schumpeter, J.: Capitalism, Socialism, and Democracy. Harper, New York (1942)
17. Elliott, J.E.: Marx and Schumpeter on capitalism's creative destruction: a comparative restatement. *Q. J. Econ.* **95**, 45–68 (1980)
18. Thomis, M.I.: The Luddites: Machine-Breaking in Regency England. Schocken, New York (1972)
19. Bainbridge, W.S.: Hollerith card. In: Bainbridge, W.S. (ed.) *Encyclopedia of Human Computer Interaction*, pp. 326–328. Berkshire, Great Barrington (2004)
20. Parkhurst, W.: Music Canned and Fresh. *Art World*. **1**(6), 414–416 (1917)
21. Engel, C.: The miraculous appeal of mediocrity. *Music. Q.* **5**(4), 453–462 (1919)
22. Graves, R.: Watch the North Wind Rise. Creative Age Press, New York (1949)
23. Vonnegut, K.: Player Piano. Scribner's, New York (1952)
24. Mayr, O.: The Origins of Feedback Control. MIT Press, Cambridge, MA (1970)
25. Bainbridge, W.S.: Literary representations. In: Bainbridge, W.S. (ed.) *Encyclopedia of Human Computer Interaction*, pp. 431–439. Berkshire, Great Barrington (2004)
26. Anonymous review, North Am. Rev. (1850) **71**(149): 329–359
27. Moore, J.B.: Kossuth: A Sketch of a Revolutionist: I. *Polit. Sci. Quart.* **10**(1), 95–131 (1895)
28. Davis, K.B.: The modern condition of agricultural labor in Bohemia. *J. Polit. Econ.* **8**(4), 491–523 (1900)
29. Zorbaugh, H.W.: Personality and social adjustment. *J. Educ. Sociol.* **1**(6), 313 (1928)
30. Dollard, J.: Culture, society, impulse, and socialization. *Am. J. Sociol.* **45**(1), –60 (1939)
31. Dollard, J., Miller, N.E., Doob, L.W., Mowrer, O.H., Sears, R.R.: Frustration and Aggression. Yale University Press, New Haven (1939)
32. Simpson, B.R.: A pragmatist examines the discard of mechanistic psychology. *Sci. Mon.* **44**(5), 458 (1937)
33. Sheehan, J.M.: Industrial education. *J. Educ. Sociol.* **7**(7), 437 (1934)
34. Hawtrey, R.G.: Mr. Harrod's essay in dynamic theory. *Econ. J.* **49**(195), 474 (1939)
35. Langer, S.K.: Algebra and the development of reason. *Math. Teach.* **24**(5), 290 (1931)
36. Bunche, R.J.: French educational policy in Togo and Dahomey. *J. Negro Educ.* **3**(1), 91 (1934)
37. Seidman, J.S.: Catching up with employee frauds. *Account. Rev.* **14**(4), 420 (1939)
38. Seashore, C.E.: The scholar as a person. *Sigma Xi Q.* **20**(4), 152 (1932)
39. Mori, M.: The Buddha in the Robot. Kosei, Tokyo (1981.) p. 179
40. Koestler, A.: The Lotus and the Robot. Hutchinson, London (1960)
41. Bainbridge, W.S.: Star Worlds. University of Michigan Press, Ann Arbor (2016)
42. Wiggins, J.S.: The Five-Factor Model of Personality. Guilford, New York (1996)
43. John, O.P., Angleitner, A., Ostendorf, F.: The lexical approach to personality: a historical review of trait taxonomic research. *Eur. J. Personal.* **2**, 171–203 (1988)
44. Nietzsche, F.: The Birth of Tragedy and Other Writings. Cambridge University Press, Cambridge (1999)
45. Jung, C.G.: Psychological Types. Harcourt/Brace, New York (1923)
46. Bishop, P.: The Dionysian Self: C. G. Jung's Reception of Friedrich Nietzsche. W. de Gruyter, New York (1995)
47. McCrae, R.R., Costa, P.T.: Reinterpreting the Myers-Briggs type indicator from the perspective of the five-factor model of personality. *J. Pers.* **57**, 17–40 (1989)

48. Cattell, R.B.: Primary personality factors in the realm of objective tests. *J. Pers.* **16**(4), 459–486 (1948)
49. Cattell, R.B.: *Handbook of the 16 Personality Factors Questionnaire*. Institute for Personality and Ability Testing, Champaign (1949)
50. White, H.C., Boorman, S.A., Breiger, R.L.: Social structure from multiple networks: block-models of roles and positions. *Am. J. Sociol.* **81**(4), 730–780 (1976)
51. Bainbridge, W.S.: *Goals in Space: American Values and the Future of Technology*. State University of New York Press, Albany (1991)
52. Bainbridge, W.S.: *The Meaning and Value of Spaceflight*. Springer, Cham (2015)
53. Goldberg, L.R.: The structure of phenotypic personality traits. *Am. Psychol.* **48**, 26–34 (1993)
54. Goldberg, L.R.: A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In: Mervielde, I., Deary, I., De Fruyt, F., Ostendorf, F. (eds.) *Personality Psychology in Europe*, vol. 7, pp. 7–28. Tilburg University Press, Tilburg (1999)
55. Bainbridge, W.S.: Whole-personality emulation. *Int. J. Mac. Conscious.* **4**(1), 159–175 (2012)
56. Bainbridge, W.S.: *Personality Capture and Emulation*, pp. 58–62. Springer, London (2014)
57. Kagan, J.: *Galen's Prophecy: Temperament in Human Nature*. Westview, Boulder (1998)
58. Kagan, J.: A trio of concerns. *Perspect. Psychol. Sci.* **2**(4), 361–376 (2007)
59. Kagan, J.: Two is better than one. *Perspect. Psychol. Sci.* **4**(1), 22–23 (2009)
60. Couch, A., Kenniston, K.: Yeasayers and Naysayers: agreeing response set as a personality variable. *J. Abnorm. Soc. Psychol.* **60**, 151–174 (1960)
61. Merrick, K.E., Maher, M.L.: *Motivated Reinforcement Learning: Curious Characters for Multiuser Games*. Springer, New York (2009)
62. Geraci, R.M.: Robots and the sacred in science and science fiction: theological implications of artificial intelligence. *Zygon J. Relig. Sci.* **42**(4), 961–980 (2007)
63. Grossman, H., Guess, G., Seraphim, Z., Silver, T.: *God of War: Official Game Guide*. Prima, Roseville (2005)
64. Durkheim, E.: *The Elementary Forms of the Religious Life*. Free Press, New York (1915)
65. Huizinga, J.: *Homo Ludens: A Study of the Play-Element in Culture*. Beacon Press, Boston (1950.) p. 8
66. Bainbridge, W.S. (ed.): *Online Worlds: Convergence of the Real and the Virtual*, p. 13. Springer, London (2010)
67. Bainbridge, W.S.: *The Warcraft Civilization: Social Science in a Virtual World*, pp. 49–50. MIT Press, Cambridge, MA (2010)
68. Golden, C.: *Lord of the Clans*. Pocket Books, New York (2006)
69. Bainbridge, W.S.: *The Warcraft Civilization: Social Science in a Virtual World*, p. 23. MIT Press, Cambridge, MA (2010)
70. Miers, P.: A cognitive program for semiotic functions. *MLN.* **97**(5), 1129–1146 (1982)
71. Bertocci, P.A.: Teleological argument for God. In: Ferm, V. (ed.) *An Encyclopedia of Religion*, p. 763. Philosophical Library, New York (1945)
72. Plato: *The Laws of Plato*, p. 275. Dent, London (1934)
73. Claude Lévi-Strauss: *The Raw and the Cooked*. Harper & Row, New York (1969)
74. Herrigel, E.: *Zen in the Art of Archery*. Pantheon, New York (1953)
75. Zukav, G.: *The Dancing Wu Li Masters: An Overview of the New Physics*. Morrow, New York (1979)
76. Westfall, R.: *Science and Religion in Seventeenth-Century England*. Yale University Press, New Haven (1958)
77. Merton, R.K.: *Science, Technology, and Society in Seventeenth-Century England*. Harper and Row, New York (1970)
78. Paley, W.: *Natural Theology*. Faulder, London (1807)
79. Fant, A.B.: *Half Man, Half Myth. Math. Teacher.* **62**(3), 225–228 (1969)

80. Henderson, L.: *The Fitness of the Environment*. Macmillan, New York (1913)
81. Henderson, L.: *The Order of Nature*. Harvard University Press, Cambridge (1917)
82. Carter, B.: Large number coincidences and the anthropic principle in cosmology. In: IAU Symposium 63: Confrontation of Cosmological Theories with Observational Data, pp. 291–298. Reidel, Dordrecht (1974)
83. Dicke, R.H.: Dirac's cosmology and Mach's principle. *Nature*. **192**(4801), 440–441 (1961)
84. Guth, A.H.: Inflationary universe: a possible solution to the horizon and flatness problems. *Phys. Rev.* **D23**, 347–356 (1981)
85. Linde, A.: The self-reproducing inflationary universe. *Sci. Am.* **271**(5), 48–55 (1994)
86. Carr, B.J., Rees, M.J.: The anthropic principle and the structure of the physical world. *Nature*. **1979**(278), 605–612 (1979)
87. Gale, G.: The anthropic principle. *Sci. Am.* **245**(6), 154–171 (1981)
88. Barrow, J.D., Tipler, F.J.: *The Anthropic Cosmological Principle*. Oxford University Press, New York (1986)
89. Mandelbrot, B.B.: *The Fractal Geometry of Nature*. W. H. Freeman, San Francisco (1983)
90. Hao, B.-L. (ed.): *Chaos*. World Scientific, Singapore (1984)
91. Gleick, J.: *Chaos*. Penguin, New York (1987)
92. Goerner, S.J.: *Chaos and the Evolving Ecological Universe*. Gordon and Breach, Luxembourg (1994)
93. Barnes, L.A.: The fine-tuning of nature's laws. *New Atlantis*. **47**, 87–97 (2015)
94. Wolchover, N.: Back to the drawing board for physics? *The Atlantic*, August 11, 2016. www.theatlantic.com/science/archive/2016/08/back-to-the-drawing-board-for-physics/495260/. Accessed 23 Oct 2016
95. de Chardin, P.T.: *The Future of Man*. Harper, New York (1964)
96. Bainbridge, W.S.: The micron point: sociological application of the anthropic theory. In: Eve, R.A., Horsfall, S., Lee, M.E. (eds.) *Chaos and Complexity in Sociology: Myths, Models and Theory*, pp. 91–101. Sage Publications, Thousand Oaks (1997)
97. Bostrom, N.: Self-locating belief in big Worlds: cosmology's missing link to observation. *J. Philos.* **99**(12), 607–623 (2002)
98. Popper, K.R.: *The Logic of Scientific Discovery*. Basic Books, New York (1959)
99. Holder, R.D.: Fine-tuning, multiple universes and theism. *Noûs*. **36**(2), 295–312 (2002)
100. Kaiser, D.: The other evolution wars. *Am. Sci.* **95**(6), 518–525 (2007)
101. Stanley, M.: From ought to is: physics and the naturalistic fallacy. *Isis*. **105**(3), 588–595 (2014)
102. Descartes, R.: *Descartes: Selected Philosophical Writings*. Cambridge University Press, New York (1988)
103. Husserl, E.: *Cartesian Meditations*. M. Nijhoff, The Hague (1965)
104. Pust, J.: Cartesian knowledge and confirmation. *J. Philos.* **104**(6), 269–289 (2007)
105. Bush, V.: *Science, the Endless Frontier*. U.S. Government Printing Office, Washington, DC (1945)
106. Turner, F.J.: *The Frontier in American History*. Holt, New York (1920)