Wolf, M. J. (2012).“Nature”y “Culture”. En: Building Imaginary Worlds. The Theory and History of Subcreation. Taylor & Francis.

Nature

Imaginary worlds almost always have some kind of physical setting to them, or, in the case of supernatural worlds, laws and modes of being that operate in an analogous manner to a physically-based world, without which the world would cease to be relatable to an earthly audience. *Nature*, then, deals with the materiality of a world, its physical, chemical, geological, and biological structures and the ecosystems connecting them. Almost inevitably, worlds subcreated to this degree are less likely to be earthbound ones, since so many Primary World defaults have been changed. They also typically become, at some level, thought experiments about subjunctive worlds in which the consequences of changed Primary World defaults are explored and extrapolated.

The most common type of invention regarding an imaginary world's natural realm is that of new flora and fauna. Adding new plants and animals does little to disrupt the other defaults of the natural world, and even in the Primary World, new species continue to be discovered and studied. While such inventions appeared early on as sources of humor and satire, as in Lucian of Samosata's *True History* and Rabelais' Gargantua and Pantagruel series, they were also made in a more serious vein in the traveler's tales that described strange foreign lands and their inhabitants. In most of these worlds, new creatures were merely presented without any attempt to consider how they might fit into ecological systems or affect the structures built upon them (such as culture, language, philosophy, and so forth). Early utopias explored more of the effect they might have on these structures, but typically did not reinvent the natural realms of their worlds to any great degree. Underground worlds tended to connect invented flora and fauna to other structures of the world, usually by necessity, to explain how their inhabitants could meet the basic needs of food, water, shelter, and light. Robert Paltock's *The Life and*

Adventures of Peter Wilkins (1751) was one of the first worlds to base a culture on its unique plants and animals, including the glumms and gawreys, the winged natives of Sass Doorpt Swangeanti; the crullmott tree whose fruit tastes like fowl; the padsi bush whose fruit tastes like fish; and sweecoes, which are insects that can glow and produce light. When invented flora and fauna are more than merely window-dressing or replacements for Primary World animals that serve a similar function (such as pets or beasts of burden), they are usually used to solve world-building problems: for example, Paltock's sweecoes are housed in wicker lamps to provide light while bioluminescent algae light the underground lake of the D'ni in the Myst universe; the babel fish of the Hitchhiker universe is inserted into one's ear and used as a universal translator to overcome language barriers; and the sandworms of Arrakis in *Dune* are used as a mode of transportation and a by-product of their life cycle is the spice melange needed for the guild navigators who use it to fold space and achieve faster-than-light travel. Occasionally an invented plant or animal even provides the impetus for a story, as any fantasy quest to defeat a dragon demonstrates.

Worlds that are subcreated to an even deeper level include new kinds of biology, ecosystems, and planets with unusual material compositions. For example, Koestler's Planet, from Barrington J. Bayley's "Mutation Planet" (1973), has organisms that can change their genetics and produce radically different offspring. The planet Sequoia, from Neal Barrett Jr.'s *Highwood* (1972) is a land of huge trees, and the planet Karimon, from Mike Resnick's *Purgatory: A Chronicle of a Distant World* (1993) consists of tall trees that are entire ecosystems. Some planets are metal-poor and their inhabitants must use other materials: on Lyra IV, the planet from Cyril M. Kornbluth's "That Share of Glory" (1952), technology is based on ceramics, while on Land and Overland from Bob Shaw's *The Ragged Astronauts* (1986) astronauts launch wooden spaceships to travel between the two planets, which orbit so close that they share an atmosphere. Some elaborate subcreations even have entire books devoted to their invented flora and fauna, for example, David Day's *A Tolkien Bestiary* (1979), Anne Margaret Lewis and R. K. Post's *Star Wars: The Essential Guide to Alien Species* (2001), and Dinah Hazell's *The Plants of Middle-earth: Botany and Sub-creation* (2007). Filmmaker James Cameron even assembled a 350-page *Pandorapedia* for his planet Pandora in *Avatar* (2009) and, according to *Wired* magazine:

> Every animal and plant received Na'vi, Latin, and common names. As if that weren't enough, Cameron hired Jodie Holt, chair of UC Riverside's botany and plant sciences department, to write detailed scientific descriptions of dozens of plants he had created. She spent five weeks explaining how the flora of Pandora could glow with bioluminescence and have magnetic properties. When she was done, Cameron helped arrange the entries into a formal taxonomy.[31]

At least one scientist has parodied this kind of scientific work; the German zoologist

Gerolf Steiner, writing under the name Harald Stümpke, invented a fictitious order of mammals known as Rhinogrades or Snouters, which evolved in the imaginary Hi-Iay (or Hi-yi-yi) Islands along with a complete ecosystem, all described in detail in two books in the early 1960s.[32]

Among invented creatures, one often finds humanoid races, who range from those that are only slightly different from humans and treated like new nationalities, to races in which a subcreator has changed biological defaults in order to propose thought experiments designed to make an audience see Primary World biology in a new light. For example, many alternative sexual biologies can be found in imaginary worlds. In Defontenay's *Star* (*Psi Cassiopeia*) (1854), the natives of Tassul are hermaphrodites able to beget and give birth alone. The Gethen of Ursula LeGuin's *The Left Hand of Darkness* (1969) are neither male or female and have gender identities only once a month. Esthaa, the planet of James Tiptree Jr.'s "Your Haploid Heart" (1969) is inhabited by a race whose generations alternate reproductive methods, changing between asexual and sexual reproduction. Races with three sexes can be found in both Samuel R. Delany's Branning-at-Sea (where they are known as La, Le, and Lo) and in Isaac Asimov's para-Universe (where they are known as the Rationals, Emotionals, and Parentals). Melissa Scott's *Shadow Man* (1995), set on the planet Hara, has a race with five sexes (fem, herm, man, mem, and woman) and nine modes of sexual preference (bi, demi, di, gay, hemi, omni, straight, tri, and uni). In most cases, the main character's encounter with new sexes and the social norms and behaviors arising from them becomes a crucial part of the stories and worlds in which they appear.

Subcreating nature to an even deeper level, we find worlds in which the laws of physics are different from those of the Primary World; for example, in the world of Greg Egan's *The Clockwork Rocket* (2011), light has no universal speed. Some worlds introduce new colors, such as "jale" and "ulfire" (due to a blue sun in David Lindsay's *A Voyage to Arcturus* (1920)), "rej" in Philip K. Dick's *Galactic Pot-Healer* (1969), or "octarine", the "color of magic" in Terry Pratchett's Discworld universe. Some colors may not be given a name; as Raymond King Cummings writes in *The Girl in the Golden Atom* (1922), "Her lips were full and of a color for which in English there is no name. It would have been red doubtless by sunlight in the world above, but here in this silver light of phosphorescence, the color red, as we see it, was impossible."[33] Certain conventions of the science fiction genre, such as hyperspace, faster-than-light travel, wormholes, and so forth, already imply new laws of physics; but some worlds introduce new forces, like "noggox" in Brian Aldiss' "Legends of Smith's Burst" (1959), which keeps matter and antimatter from annihilating each other; or the gravitational forces of Linovection and Reticutriation in the Tryslmaistan universe of Jennifer Diane Reitz's *Unicorn Jelly* (2000). In his novel *Diaspora* (1998), Greg Egan invents new theories of physics including Kozuch Theory, which views elementary particles as six-dimensional wormholes; while Orson Scott Card invents "philotes", which are subatomic particles that allow for faster-than-light

communication. Some video game worlds even let players experience alternative physical laws, like the negative gravity in some of the "universes" in *Gravitar* (1982), the non-Euclidean wraparound space of *Asteroids* (1979), or the user-generated spatial connections of *Portal* (2007).

Some worlds have characters who have the power to subcreate worlds, like the Thoans in the World of Tiers universe or the D'ni in the Myst franchise, and they can make worlds in which the laws of physics are different. For example, in *Myst: The Book of Atrus* (1995), Catherine's Age is a giant torus with a column of water that passes through the center, as a waterfall on one side and an enormous waterspout on the other. With most of the world's mass placed along the outer edge of the torus the water is pulled through the central hole and around the torus, to fall back as rain again on the other side. In many cases, "magic", as found in the genre of fantasy, often works according to a set of conventions or rules, and these could also be seen as implying new laws of physics, albeit indirectly. Virtual worlds set in computer-generated spaces also have their own rules, programmed by their makers, like the world inside the computer in *Tron* (1982), cyberspace in *Neuromancer* (1984), or the machine-created world of *The Matrix* (1999), in which the laws of physics can be bent or even broken.

While worlds have been built in many shapes, such as rings, discs, tiers, concentric shells, or even the negative curvature of a hypersphere (in Christopher Priest's *Inverted World* (1974)), the most extreme examples of changing the defaults of the natural world are those imaginary worlds with a dimensionality different from that of the Primary World. The first of these appears in Edwin Abbott Abbott's *Flatland: A Romance of Many Dimensions* (1884), which introduced not only the two-dimensional world of Flatland, but also the one-dimensional world of Lineland. One of the book's goals, besides satirizing the Victorian society of its day, was the introduction of four-dimensional mathematics to its general readership. The book begins with a detailed account of Flatland that builds the world and explains how it works over several chapters, and then the two-dimensional protagonist, A. Square, visits Lineland where he attempts to describe what the second dimension is like. Later, A. Square is visited by the Sphere, who attempts to describe to him what a third dimension is like, and through their discussion, a fourth dimension, and what four-dimensional entities might be like, are extrapolated from observations about the first three dimensions. Flatland was an exceptional work of subcreation for its time, and would go on to remain in print and to inspire an entire subgenre of worlds that experiment with dimensionality, as other authors' sequels took up where Abbott left off.

The first sequel to *Flatland* was C. H. Hinton's *An Episode of Flatland: Or, How a Plane Folk Discovered the Third Dimension* (1907), which recognized one of the faults of Abbott's original Flatland. The descriptions of Abbott's Flatland, along with his illustrations, give the impression of watching an overhead view of shapes moving around in Flatland, entering houses which are shown like floor plans, with the insides laid out

like a diagram. Since Abbott's characters move around like figures over a background, there are really two layers to the world; the background and what lies upon it, making it less than completely flat. Hinton indirectly acknowledges the need for a revisioning of Flatland in his Introduction:

> Placing some coins on the table one day, I amused myself by pushing them about, and it struck me that one might represent a planetary system of a certain sort by their means.... And in this case considering the planets as inhabited worlds, confined in all their movements around their sun, to a slipping over the surface of the table, I saw that we must think of the beings that inhabit these worlds as standing out from the rims of them, not walking over the flat surface of them. Just as the attraction in the case of our earth acts towards the centre, and the centre is inaccessible by reason of the solidity on which we stand, so the inhabitants of my coin worlds would have an attraction proceeding out in every direction along the surface of the table from the centre of the coin, and "up" would be to them out from the centre beyond the rim, while "down" would be towards the centre inwards from the rim. And beings thus situated would be rightly described as standing on the rim.[34]

Hinton realized that a two-dimensional being could be more complicated than lines or triangles, and still be two-dimensional; though he does not go into detail as to what exactly their anatomy might be. After a brief review of the history of his world, which he calls Astria, most of his book is about the personal details of the character's lives, dinner parties, conversations, romance, and so forth, while Hugh Farmer, one of the principle characters, leads a crusade to convince the Unæans of Astria that the third dimension exists, a question which becomes a metaphysical controversy that shakes the foundations of their society. However, as far as world-building goes, most of the novel reads as though it were taking place in the Primary World, with relatively little examination of the consequences of making a world two-dimensional and only a few detailed descriptions of how their world operates differently than ours.

Dionys Burger's *Sphereland: A Fantasy about Curved Spaces and an Expanding Universe* (1965) is a book more along the lines of Abbott's work, and is a sequel, continuing the story of A. Square through his grandson, A. Hexagon. Burger's version of Flatland updates Abbott's with a relativistic worldview (as the book's subtitle reveals) that gives his two-dimensional universe a finite but unbounded space, in the shape of the surface of a sphere. Upon that surface, Flatland itself is a disc-shaped planet, much like Hinton's Astria, but the towns, homes, and forests are still laid out in overhead view, and they do not react to the gravity that pulls everything else toward the center of the world-disc. In a passage revealing the author's world-building difficulties, Burger seems aware of the awkwardness of combining the two approaches, writing:

> Of course the question immediately arises why everything is not falling down. Solid objects such as houses and buildings, and plants such as single trees and the trees in forests, all stay put and do not show any inclination to sink. The answer is not so easy, and it might be best to just write it off to natural laws. This does not alter the fact, however, that scientific theories have been worked out to explain the phenomenon. I will be glad to touch on the matter in a few words, but this particular theory is so complicated that you need not worry if you do not understand it. Consider for a moment that all these solid objects are resting on a space parallel to our world—in other words, they are attached to a flat plane, directly beside the plane of our space. I admit that this hypothesis—it is no more than a mere supposition—is extremely difficult for a layman to grasp, even though it is not as difficult for a three-dimensional being as it is for us. Let us therefore simply note as fact that trees and houses *do* stay put, there being no question that they do.[35]

If the inhabitants of a two-dimensional disc-shaped world are to live on the surface of that world, they would have to be confined to the space above a curving line, resulting in only four directions; back and forth, and up and down. Hinton realized this but the consequences of it only occasionally figured into his story, whereas Burger keeps the two-dimensionality of his world always in mind; but, as the preceding passage shows, Burger had trouble keeping his design consistent. An amazing number of these problems were solved, however, in A. K. Dewdney's Planiverse in *The Planiverse: Computer Contact with a Two-Dimensional World* (1984).

In an amazing feat of subcreation, A. K. Dewdney describes Arde, a two-dimensional disc-shaped world with its own physics, chemistry, biology, planetary science, astronomy, creatures, cultures, and technologies, all of which are designed to work in a world of two dimensions. As a computer scientist and mathematician (and with the help of colleagues in other disciplines, credited in the acknowledgments), Dewdney considers how atoms, electromagnetic forces, light and sound waves, turbulence, and other physical phenomena would operate in two dimensions, and the implications these would have on the existence of Arde's inhabitants, the Nsana. He gives solutions and working designs for such things as doors, electrical wiring, hinges, gears, and other simple technologies that work differently in two dimensions, and provides descriptions and illustrations of more complex two-dimensional machines like clocks, printing presses, ground and air vehicles, and steam engines (see Figure 3.3). He also describes and illustrates two-dimensional biological mechanisms including propulsion, digestion, cell division, and more. From all of these things arise the culture of the Nsana, with its own traditions and customs, for example, who passes over whom when two travelers meet who are traveling in opposite directions, or the order in which passengers board and disembark vehicles.

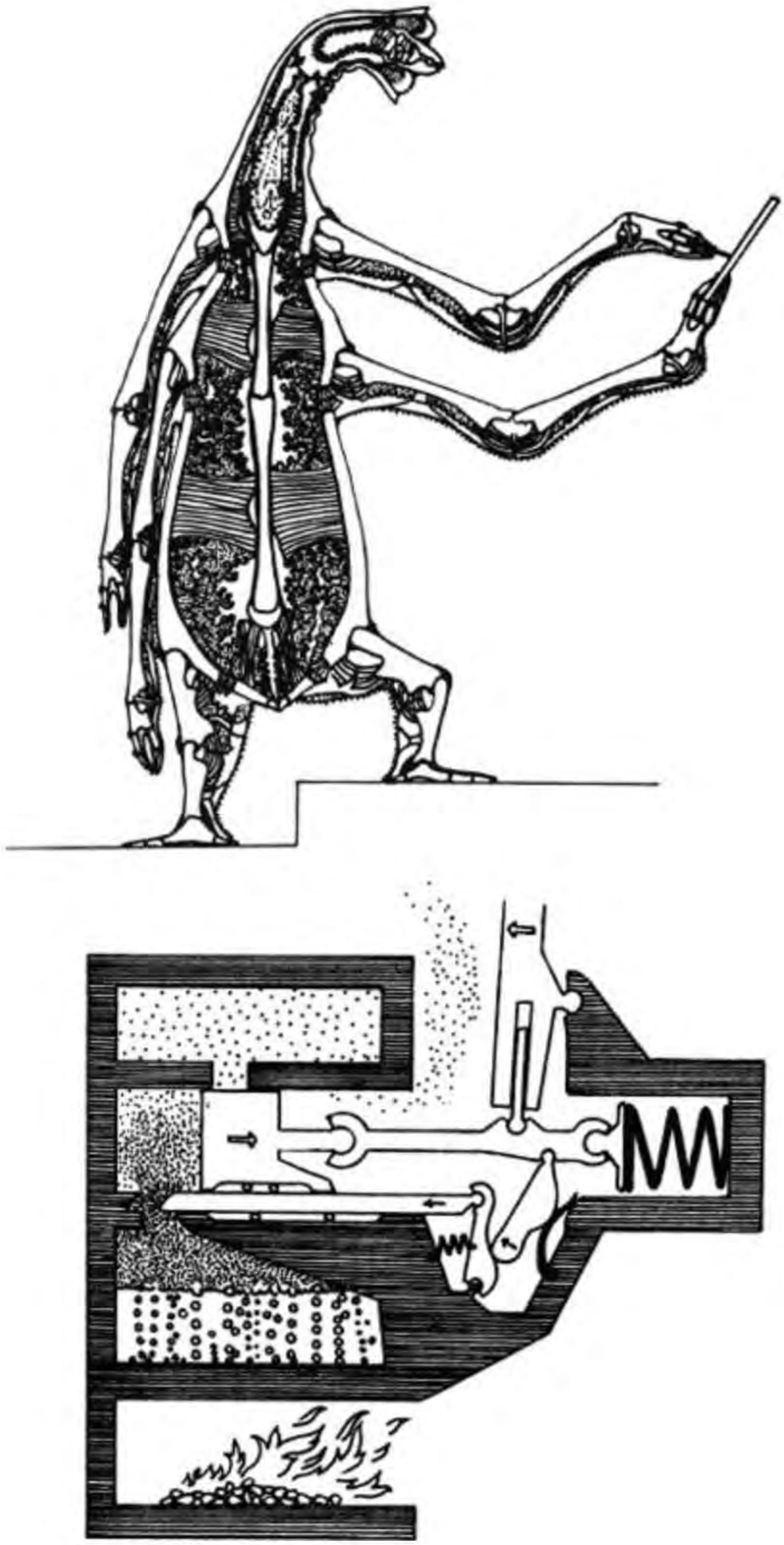

FIGURE 3.3 A Nsana (top) and a steam engine (bottom) from Arde, the two-dimensional world of A. K. Dewdney's *The Planiverse*. (Images courtesy of A. K. Dewdney.)

The book's story involves human computer science experimenters on Earth who, through their computer system, make contact with a Nsana named Yendred. The story is little more than a device to link together all the explanations of how things in the world works, but as is the case with so many subcreated worlds, narrative is only a single aspect of the world, and *The Planiverse* is worth reading as a brilliant piece of subcreation. So successful was Dewdney's subcreation, that some people actually believed the world was real. As Dewdney states in the "Preface to the Millennium Edition":

> When The Planiverse first appeared 16 years ago, it caught more than a few readers off guard. The line between willing suspension of disbelief and innocent acceptance, if it exists at all, is a thin one. There were those who wanted to believe, despite the tongue-in-cheek subtext, that we had made contact with a two-dimensional world.... It surprised and worried the author that so many people believed the tale was factual. Subtext that should have implied a fantasy (albeit a highly detailed one) was missed by many.[36]

That some readers actually believed the world existed demonstrates the power of good subcreation, even when a secondary world is so far removed from our own.

Most secondary worlds, however, subcreate nature to a very limited degree, if they do so at all. Many will instead wish to ground their realism with Primary World defaults so far as nature is concerned. In the series bible for the rebooted *Battlestar Galactica* (2004–2009), there seems to be a sense of pride in the description of the show's science and how it does not partake of some of the usual conventions of science fiction:

> *Science*. Our spaceships don't make noise because there is no noise in space. Sound will be provided from sources inside the ships—the whine of an engine audible to the pilot for instance. Our fighters are not airplanes and they will not be shackled by the conventions of WWII dogfights. The speed of light is a law and there will be no moving violations.[37]

To whatever degree they use Primary World defaults or reset them, the natural realm provides the raw materials for civilizations and the production of the more commonly subcreated area of *culture*.

Culture

Culture links nature to history and is usually central to the unique situation that provides a story's conflict; and an invented culture can be more specifically tailored to the author's needs and does not come with the baggage of an existing culture. By providing a worldview that shapes the natural world's resources into such things as agriculture, architecture, clothing, vehicles, and artifacts, which in turn inform customs,

traditions, language, and mythologies, culture grounds and connects the various productions of a people into a (hopefully) coherent structure through which characters see the secondary world.

As mentioned in Chapter 2, imaginary-world stories typically have the main character experiencing and learning about a new and foreign culture along with the audience; such was the basic structure of travelers' tales. The main character is often either someone from the Primary World who is a foreigner to the secondary world, or someone from a marginal area of the secondary world who journeys into an unfamiliar part of it. As early as More's *Utopia* (1516), culture became an important part of the story and world, with its proposal for a new way of living and inherent critique of existing culture; this became typical of utopias in general, since a cultural critique was usually one of the main reasons behind the writing of a utopia. Other works such as *Gulliver's Travels* (1726) even showed how its human protagonist appeared from the points of view of those in the foreign cultures encountered, attempting to make strange the author's own culture, by contrast.

Occasionally foreign cultures are presented directly in the form of documents from the cultures in question; for example, in Defontenay's *Star (Psi Cassiopeia): The Marvelous History of One of the Worlds of Outer Space* (1854), the chest that the narrator finds in the crashed meteor is full of Starian books, which make up the text of the novel. There is a description of the stars and planets of the Starian system, a book of ancient history, a poem related to the history, individual histories of each planet and their exploration, two plays, writings on philosophy, morality, and law, and the book-within-a-book entitled *The Voyage of a Tassulian to Tasbar* to which Defontenay adds, "I have preserved in the Tassulian's account two literary pieces which were found inserted, convinced that the reader will not be displeased to discover several samples of Tasbarite literature."[38] Though the range of texts is a disparate one, they are arranged in roughly chronological order and together present a coherent history of the Starian system and its peoples and cultures.

The development of fictional cultures, both in their depth as well as the quality and plausibility of the cultures generated, depends greatly on the ability and background of the author. The most complete and consistent imaginary world and culture of the first half of the twentieth century would have to be that of Austin Tappan Wright's *Islandia* (1942), written before the author's death in 1931. In it, main character and narrator John Lang leaves the United States to become consul to Islandia, which we discover and learn about along with him. The nation of Islandia, long closed off to foreigners and foreign trade, for the most part, is facing a time of internal debate as to whether the country should be opened up to the outside world. Lawyer that he was, Wright argues both sides of the issue, both explicitly in the speeches made by Lord Mora and Lord Dorn around the midpoint of the book, and implicitly throughout the entire book, and particularly at the end, where John Lang must decide where his destiny lies between the two cultures of

Islandia and America.

The culture of Islandia is fleshed out to a great degree, and a variety of different scenes, settings, and discussions bring out its richness of detail. Many of the cultural concepts introduced are central to an understanding of the story, and though we do not get to see much of the Islandian language, these concepts are given Islandian terms since no exact equivalent exists in English. One such notion is that of *tanrydoon*, literally *soil-place-custom*, which means there is a room always reserved for you in a friend's home where you are welcome. The concept is first described to Lang by Perier, the French consul to Islandia:

> "Did you know that even the Islandian city man does not feel that the city is his home?"
>
> "In a way." I knew from Bodwin that city men usually had some relative in the country at whose place they were welcome.
>
> "More than that," he said. "*Every* city man has such a place. It is the same place for his grandfather that it is for his grandson; not only is he welcome but he has a right—a legal right—to go there and stay as long as he likes, though if he stays over a month he is expected to do some work. He may go and take all of his children. Good taste controls the actual working out."
>
> Perier was silent for a moment.
>
> "When you marry," he continued, "a month or so before your child is to be born you will put yourself and your wife on a boat bound for Doring, and you two will go to the house of Lord Dorn, and there you will find them expecting you and glad to see you. There your wife will stay until the child is weaned, and longer maybe, and you as long as and whenever you can. If the child becomes sickly or bored in The City here, back you will all go to Lord Dorn's. That, and a great deal more, is *tanrydoon*."[39]

While *tanrydoon* serves an important purpose in the story, even more important to the story are the four Islandian words for "love": *alia* (love of a place, specifically an ancestral home and land), *amia* (love of friends), *ania* (the desire for marriage and commitment), and *apia* (sexual attraction). These kinds of love, and the differences and relationships between them, are central to the book's romances and relationships and how they shape the narrative. The Islandian culture is carefully thought out and laid out in great detail, more so than any other fictional culture to appear before it. Through an interesting combination of elements, Wright achieves a new culture which is neither Eastern nor Western in outlook, and original enough that it does not feel like a thinly-veiled imitation of an actual existing earthly culture (as so often happens with fictional cultures), nor is it so primitive as to seem crude or undeveloped.

With the growth of archaeology and anthropology during the twentieth century, more fictional cultures, and more developed fictional cultures, began to appear as audiences

became increasingly sophisticated in their expectations. In America, the growth of mass media, along with new possibilities for travel and tourism, and waves of immigrants arriving in the country, meant that most Americans had more contact with (or at least knowledge of) cultures outside of their own, and thus had more firsthand cross-cultural experience. Also, imaginary worlds that appeared in audiovisual media could not rely on mere verbal description as novels did; cultural design, in such areas as costume, architecture, vehicles, and so forth, had to be considered concretely, in the form of sounds and images, and had to be considered as an integrated whole, rather than as a collection of unrelated designs.

Whether on-screen or on the page, the fictional cultures of imaginary worlds often have one or more simple defining features to quickly establish and position them against other cultures (for example, in the *Star Trek* universe, the image of Klingons as warriors, Vulcans as logical, Ferengi as businessmen, and so forth). Just as entire planets often contain a single type of terrain, much like a single earthly location, quite often locations in secondary worlds are home to a single culture, regardless of whether those locations are cities, countries, or entire planets. In multi-planet worlds, planets that are the main home base of more than two or three cultures are relatively rare, since each culture can be given its own planet (unless the story requires otherwise). As mentioned earlier, in multi-planet worlds that include Earth, all of humanity is often grouped together under the same cultural umbrella (as "Earthlings" or "Humans"), with the implicit assumption that differences between human cultures on Earth are small compared to interplanetary cultural differences. Whatever the case, the lines dividing cultures are usually clearly drawn ones, and cultural differences are emphasized.

Cultures, then, provide important structural frameworks for the worlds into which they are integrated. Even with guides and mentors who are members of a culture and who provide explanations to main characters and the audience, new sets of cultural defaults, which may include different languages, artifacts, foods, customs, and so forth, often produce a great expository burden to be overcome. Besides maps, timelines, genealogical charts, and glossaries which convey structural information in a very direct way (but usually appear outside the narrative), some aspects of cultures can be conveyed through more indirect means. Elements may be introduced without explanation if there are Primary World analogs to which they can be compared, and if the meanings of the new elements can be obtained though the context in which they appear. In image-based media, elements of culture may appear visually but without explanation, leaving the audience to figure things out from context. For example, in video games like *Riven* (1997) or *Rhem* (2003), the player encounters machines the purposes of which are unexplained, and it is only after the player interacts with them and watches the consequences that their functions become apparent. Shaun Tan's graphical story of an immigrant family, *The Arrival* (2007), is a book-length example of learning a culture through context.

Cultural aspects that can be easily summarized or explained can be given in appendices as well. *Dune*, for example, includes appendices on the ecology of Dune, the religion of Dune, the Bene Gesserit and their motives and purposes, short biographies of characters, and a glossary in which we find that a baliset is "a nine-stringed musical instrument, lineal descendent of the zithra, tuned to the Chusuk scale and played by strumming. A favorite instrument of Imperial troubadors."[40] Since fictional cultures often are constructed or cobbled together from various aspects or aesthetics of existing real world cultures, it is not unusual to find a residue of connotations attached to them, which can be used by an author to aid explanations or create expectations (for example, *Dune*'s desert culture is patterned after Arab and Middle-Eastern cultures to some degree).

Like characters, fictional cultures often have stories of origins (involving the world's history), character arcs over the course of a story (cultural shifts and changes), and are often depicted during the turning points, power struggles, and decisive moments that determine their future paths. Quite often, this involves a world which is under the sway or at least the threat of evil powers; the main character learns about the evil power, joins the fight against it, and then plays a crucial role in fighting and defeating it (for example, Dorothy fighting the Wicked Witch in Oz, Frodo helping destroy the Ring and defeat Sauron, Luke Skywalker helping defeat the Empire, Tron helping to bring down the Master Control Program, or Neo helping to defend Zion against the machines). Usually, the decisive moment in the culture's history is an invasion or war, a debate as to whether or not to accept certain technologies or foreign influences, or its first encounter with another culture. Quite typically, cultural clashes are central to the stories being told, sometimes with a cross-cultural love story thrown in to personalize the conflict and add the friction so necessary to fictional romances. And, just as the end of a story will indicate the future direction taken by the main character, we are usually given enough information to assume the future direction in which the culture will be heading, which is usually a more peaceful and stable one.

Culture, as a means of structuring a world, not only helps to unite other structuring systems (like geography, history, nature, and so forth), but gives them a context that relates directly to the experience of its characters, and gives them meaning. Culture can be one of the most compelling ways that a world can exceed a story and spark the kind of speculation and conjecture that brings a secondary world alive in the imagination. And among all the various aspects of culture, *language* is one that immediately gives a sense of a culture's aesthetics and worldview.