Transmedia Storytelling

Twelve Postulates

GUNDOLF S. FREYERMUTH

> "Only he who perceives the indices and signatures of the archaic in the most modern and recent can be contemporary."
> GIORGIO AGAMBEN[1]

Transmedia storytelling happens in a wide range of cultural production environments: from commercial endeavors that gross billions of dollars to avant-gardist experiments depending on grants and other subsidies. At the popular end of the spectrum are globally distributed story worlds like JAMES BOND,[2] LORD OF THE RINGS,[3] STAR TREK,[4] STAR WARS,[5] HARRY POTTER,[6] RESIDENT EVIL,[7] or ASSAS-

1 Agamben, Giorgio: *"What is an Apparatus?" and Other Essays*, Stanford, Calif.: Stanford University Press 2009.

2 Novels since 1953, TV adaptations since 1954, feature films since 1962, digital games since 1983.

3 Novels since 1954, radio adaptations since 1955, animated films since 1978, digital games since 1982, feature films since 2001.

4 TV series since 1966, board games since 1967, novels since 1968, digital games since 1971, animated TV series since 1973, feature films since 1979, theme park attractions since 1998.

5 Novels since 1976, feature films and comics since 1977, games since 1978/79, theme park attractions since 1987, animated films since 2003.

6 Novels since 1997, feature films and games since 2001.

7 Digital games since 1996, novels and comics since 1997, animated movies since 2000, feature films since 2002.

My sixth postulate, therefore, is: *Transmedia storytelling reflects the experiences of digital culture as genuinely as theater once did for mechanical culture and film and television did for industrial culture. Transmedia now is, as the older media once were, the basis for the social construction of reality and its aesthetic perception.*

VII. INTENSIVE AND EXTENSIVE TRANSMEDIALITY

Over the last quarter century, two variants of transmedia formed in artistic and professional practice. First, there is the design of fictional or non-fictional artifacts that contain many different media and thus—within their interior structure—transcend traditional media boundaries. The most popular form of such artifacts are games and, in particular, Massively Multiplayer Online Role Playing Games (MMORPGS). Already a decade ago, Jesse Schell wrote: "There is nothing that cannot be part of a game. You can put a painting, a radio broadcast, or a movie into a game, but you cannot put a game into these other things. ... At their technological limit, games will subsume all other media."[37] Obviously, these digital transmedia artifacts more closely resemble containers like magazines than they do closed works. In fact, they usually remain open for endless modifications by their designers as well as by their users. For this first variant of transmedia artifacts and processes I have proposed the term "intensive transmedia."[38]

Equally popular and important is a second variant of transmedia: the effort to tell the same story, or parts of it, distributed over several media. Henry Jenkins described this in 2007 as "a process where integral elements of a fiction get dispersed systematically across multiple delivery channels for the purpose of creating a unified and coordinated entertainment experience. Ideally, each medium makes its own unique contribution to the unfolding of the story."[39] In the same vein, Drew Davidson characterizes this practice as resulting in "integrated, interactive experiences that occur across multiple media, with

37 Schell, Jesse: *The Art of Game Design: A Book of Lenses*, Amsterdam und Boston: Elsevier/Morgan Kaufmann (Kindle Edition) 2008, loc. 1326-29.

38 See G. S. Freyermuth: *Games | Game Design | Game Studies: An Introduction*, p. 222.

39 Jenkins, Henry: "Transmedia Storytelling 101," *henryjenkins.org*, March 22, 2007, http://henryjenkins.org/2007/03/transmedia_storytelling_101.html

multiple authors and have multiple styles."[40] For this second variant of transmedia artifacts and processes I have proposed the term "extensive transmedia."[41]

My seventh postulate is that *the breaching, crossing and sublation of the traditional boundaries separating analog media resulted in two variants of transmedia: intensive transmediality, the merging of several media within one artifact containing one or many multi- or non-linear narratives; and extensive transmediality, the distribution of one or many multi- or non-linear narratives over several media artifacts.*

VIII. TRANSMEDIA AUTHORSHIP

It seems evident that both variants of transmedia storytelling, for qualitative as well as quantitative reasons, require more than one author. On the other hand, some unifying authority is needed to guarantee the coherence of transmedia stories or story worlds. Consequently, the professions of *story architects* or *transmedia producers* have emerged over the last couple of decades. This development questions once more the culturally still dominant idea of single authorship,

---

40 Davidson, Drew: *Cross-Media Communications: An Introduction to the Art of Creating Integrated Media Experiences*, 1.0th ed, Pittsburgh, PA: ETC Press (Kindle Edition) 2010, loc. 36. Davidson uses the term cross media, but he considers cross and transmedia to be synonyms. However, in 2010, the Producers Guild of America Board of Directors "approved the addition of Transmedia Producer to the Guild's Producers Code of Credits (PCOC)." (N, N.: "PGA Board of Directors Approves Addition of Transmedia Producer to Guild's Producers Code of Credits," *producersguild.org*, April 6, 2010, http://www.producersguild.org/news/39637/PGA-Board-of-Directors-Approves-Addition-of-Transmedia-Producer-to-Guilds-Producers-Code-of-Credits.htm) As a consequence, the term cross media fell out of fashion, first in the industry, then in academia as well.

41 G. S. Freyermuth: *Games | Game Design | Game Studies: An Introduction*, p. 222.—In principle, the practices of extensive transmediality and adaptation are similar. In analog media, adaptation was a successive process: First the original work was published; adaptations came later. Transmedia replaces this analog sequentiality—say, from novel to movie to videogame—with parallel production thus enabling a higher degree of aesthetic exchange, particularly of narrative and visual assets. In the reception, parallel offerings of the same story or story world in different media increase the potential for immersion.

and, more specifically, the concept of individual ownership of intellectual property.

As an aesthetic as well as a legal concept, individual authorship is a cultural construct whose origins date back to the Renaissance and the invention of the printing press. John Locke's theory of individual property[42] and Immanuel Kant's theory of individual creativity[43] laid the intellectual foundation. In reaction, the British Statute of Anne codified copyright (1710) and the legislation of the French Revolution established the author's right (Droit d'auteur, 1791). While the 19th century Romantics subsequently idolized individual creatorship, the concept was soon called into question by the industrialization of (mass) cultural production with its collaborative work-sharing processes. This is particularly true for the new industrial media of the early 20th century: film, radio, and television. Beyond the existing legal framework and against cultural values and prejudices, the practical reality of mass media institutionalized a new collective authorship.

Now, in the context of transmedia, a new form of authorship is emerging once again. Its central characteristic is not individual or collective but distributed creativity. This concerns, first and foremost, professional production. Not different from a theater, film, or TV production, transmedia storytelling demands the combination and integration of diverse talents. However, empowered by virtualization and digital networking, the individuals involved don't have to collaborate in traditional ways anymore, i.e., hierarchically organized and working at the same place or at the same time. Second, this new distributed creativity and authorship also concerns what used to be the process of reception. As is well known, software artifacts that are created in the digital transmedium remain open for arbitrary modification—by anyone including their readers, viewers, players, or, "the people formerly known as the audience."[44] Being "the ideal aesthetic

42 Locke, John: *Two Treatises of Government: in the former, the false principles, and foundation of Sir Robert Filmer, and his followers, are detected and overthrown. The latter is an essay concerning the true original, extent, and the end of civil government*, London: A. Churchill 1690.

43 Kant, Emanuel (sic!): "Of the Injustice of Reprinting Books," in: Emanuel Kant (sic!) (ed.), *Essays and Treatises on Moral, Political, and Various Philosophical Subjects*, London: William Richardson 1798, pp. 225-239, https://archive.org/details/injustice_kant_books. The text was first published in 1785 (in German).

44 Rosen, Jay: "The People Formerly Known as the Audience," in: *press think*, June 27, 2006, http://archive.pressthink.org/2006/06/27/ppl_frmr.html

form for an era of collective intelligence,"[45] as Henry Jenkins claims, transmedia storytelling prepares the way for a new "participatory culture."[46]

Over the last quarter century, very different forms of contributions to transmedia storytelling have evolved, ranging from a variety of interactive opportunities built into transmedia worlds to planned or unplanned co-authorship through new content generated by users—such us add-ons, mods, mashups, remixes, machinima, fan cuts, fan fiction —to so-called open development of story and game worlds. What these emerging forms of distributed authorship might end up looking like is not yet foreseeable. Even less can the cultural impact be fully assessed. However, contours of the new participatory story genre stemming from such distributed authorship are already evident, as Janet H. Murray writes:

"Some of its conventions are clear, based on the way people have wanted to connect with existing story worlds and multiplayer games: It will involve an internally consistent but puzzling fictional world, an authored but participatory plot, and an encyclopedically large cast built around a small number of iconic figures."[47]

My eighth postulate: *After mechanical culture spawned the concept of individual authorship and industrial culture created the practice of collective authorship, digital culture now allows for a historically new form of distributed authorship: the networked collaboration of individuals—professionals as well as amateurs—who, largely independent of one another and without restrictions in terms of space and time, are designing, writing, producing, amending, and updating transmedia projects—in principle indefinitely.*

IX. LUDIFICATION AND GAMIFICATION

My ninth postulate investigates the influence of digital games on transmedia storytelling. Industrialization forced playfulness, which was important in pre-industrial culture generally and work specifically, into the private sphere (with

45 H. Jenkins: "Transmedia Storytelling 101."

46 Jenkins, Henry: *Fans, Bloggers, and Gamers: Exploring Participatory Culture*, New York: New York University Press 2006.

47 Murray, Janet H.: "Transcending Transmedia Part 2," *inventingthemedium.com*, November 20, 2011, https://inventingthemedium.com/2011/11/20/transcending-transmedia-part-2/

some good reason, considering the violence and danger arising from industrial machines and processes). In the transition from industrial to digital culture, however, a variety of industrial practices and values were successively and successfully supplanted by playful ones.[48]

This long-lasting transformation began in the early 1960s and specifically in the context of teaching and learning. Allucquere Rosanne Stone, for example, describes the appropriation of expensive computer processing power for pleasure purposes—which happened when MIT students programmed SPACEWAR! in 1962, one of the first games that were played on computers—as a replacement of work-ethic with play-ethic.[49] With their deliberate 'waste' of resources, these students mocked the economic efficiency principle of collective organizations and displaced it with the luxurious pleasure principle of the individual. In the culture of the 1960s, the gradual breakdown of industrial work ethic revealed itself as a popularization of the playful: From Eric Berne's bestseller *Games People Play: The Psychology of Human Relationships* (1964)[50] to Joe South's hit song, which it inspired, *Games People Play* (1968), and Clark C. Abt's book *Serious Games* (1970)[51] to the *New Games* movement that Stewart Brand initiated in the atmosphere of San Francisco's hippie culture and that was popular in the 1970s and early 1980s.[52]

Since then, the rise of knowledge work followed the same path. In contrast to industrial work—which takes place in the material world—, digital knowledge work—which takes place in the virtual world—is characterized by acting independently in the creative and thoroughly exploratory, and thereby playful, manipulation of software programs and files and their virtual symbols.[53] From this

48 For the relation of industrialism and playfulness see G. S. Freyermuth: *Games | Game Design | Game Studies*, pp. 229-231; Huizinga, Johan: *Homo Ludens: A Study of the Play Element in Culture*, Boston: Beacon Press (Kindle Edition) 1955 (*1938), chapter XII "The Play Element in Contemporary Civilization."

49 See Stone, Allucquere Rosanne.: *The War of Desire and Technology at the Close of the Mechanical Age*, Cambridge, Mass.: MIT Press 1995, p. 13f.

50 Berne, Eric: *Games People Play: The Psychology of Human Relationships*, New York: Grove Press 1964.

51 Abt, Clark C.: *Serious Games*, New York: Viking Press 1970.

52 Foundation, New Games/Fluegelman, Andrew: *The New Games Book*, Garden City, N.Y.: Dolphin Books 1976.

53 See for the term *Knowledge Worker*: Drucker, Peter F.: *Post-Capitalist Society*, New York NY: HarperBusiness 1993. And for the term *Symbolic Analyst*: Reich, Robert

perspective, it is hardly surprising that at the same rate that knowledge work—especially in the so-called 'creative industries'—is becoming the most important source of economic growth, so, too, are changes in cultural behavior toward aesthetic artifacts taking shape. The contradiction between work-ethic and play-ethic that industrial rationality assumed, and that existed in factories as well as in bureaucracies, is gradually dissipating. This shift has already heavily impacted the education and ideals of advanced Western regions and brought on a change in both knowledge production and knowledge transfer between individuals and generations. In sum, during the last half-century, Western culture enjoyed a slow process of post-industrial (re-)ludification.[54] It places digital games—and especially serious games, which convey knowledge and promote awareness—in playful contention with industrialism, its logic as well as its ethics.

A more recent indicator showing the infiltration of the playful into culture and work is the practice of so-called *gamification*, i.e., the application of digital game elements—feedback mechanisms, competition, and reward systems—in areas that have had little affinity for games, such as education, marketing, and motivation. Gabe Zicherman calls it "[...] the process of using game thinking & dynamics to engage audiences and solve problems."[55] In this respect, it seems useful to distinguish between gamification of the first and second order:

- *invasive gamification* (or ludification), which has been driven by a (to a large extent 'naturally' occurring) popularization of analog as well as digital games since the 1960s, as well as the intrusion of games and other playful practices into areas of culture previously reserved for other media and practices;
- *pervasive gamification,* which has for the past decade—deliberately and professionally—appropriated and exapted elements of digital games for fields and purposes outside the area of games.

B.: *The Work of Nations: Preparing Ourselves for 21st-century Capitalism*, New York: A.A. Knopf 1991.

54 See for example Frans Mäyrä's ongoing research project: "Ludification and the Emergence of Playful Culture (2014-2018)," https://ludificology.wordpress.com/2014/12/22/aims-of-the-research-project/

55 Zichermann, Gabe/Cunningham, Christopher: *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps*, Sebastopol, Calif.: O'Reilly Media 2011.

Therefore, my ninth postulate states that *transmedia is characterized by twofold gamification: First, in transmedia story worlds digital games can take on functions that until recently were reserved for other media; second, stories told in other media can apply elements of games to intensify engagement, involvement, and immersion.*

X. HYPERREALISM AND AUTHENTICITY

My tenth postulate investigates the qualities of digital visuality, particularly with regard to the authenticity of transmedia storytelling as well as transmedia knowledge transfer. After the proliferation of perspectival 2D realism following the Renaissance and then of 2D and 3D photorealism in the 19th and 20th century, a new variant of realistic image production is evolving with digitalization: Virtual image production combines the non-indexical quality of painterly realism with the indexical quality of camera-produced photorealism. Such imagery was anticipated in painting since the 1960s and was described by art criticism as 'hyperrealism' since the early 1970s.[56] The aesthetic result is a new, third form of realistic representation: 'photorealistic' imagery without, or rather beyond, photographic indexicality.

While analog photos and movies obviously must show what has actually happened somewhere at some time, hyperrealistic pictures and audio-visions—like realistic paintings—can show what their creators were able to imagine and to produce or program skillfully. More importantly for transmedial storytelling, hyperrealistic audiovisions (created in the mathematical transmedium of software) can be manipulated arbitrarily by their originators as well as by later users. This endless manipulability, however, leads to the loss of a medially established

56 In retrospect, the picturesque hyperrealism of the sixties and seventies proved to be, like large parts of analog special effects technology, an aesthetic anticipation of digital media technology and its effects. For picturesque hyperrealism see Chase, Linda: *Hyperrealism*, London: Academy Editions 1975.—For cinematic hyperrealism see Brinkemper, Peter V.: "Paradoxien der Enträumlichung. Zur Philosophie des 3-D-Films," in: *Glanz und Elend. Literatur und Zeitkritik* (2012), http://www.glanzundelend.de/Artikel/abc/s/starwars.htm.—For the historical and aesthetic differentiation of realism, photorealism, and hyperrealism see Freyermuth, Gundolf S.: "Cinema Revisited. Vor und nach dem Kino: Audiovisualität in der Neuzeit," in: Daniela Kloock (ed.), *Zukunft Kino*, Marburg: Schüren 2007, pp. 15–40.

authenticity as it used to result, in industrial photorealism, from the various basic procedures of imprinting light and sound waves directly onto analog media. In digital hyperrealism, authenticity is not a semi-automatic function of specific media affordances (as it was in pre-industrial media), but of the creative processes associated with authorship.

Thus, the tenth postulate is: Based on the virtualization of media, *transmedia per se and specifically transmedia storytelling can offer seemingly photorealistic experiences that have no foundation in material reality. They obtain their authenticity, i.e., believability and authority, solely and exclusively from the quality of their authorship, its believability, and authority.*

Currently, three different modes to produce non-indexical hyperrealistic audiovisuals co-exist which are all employed in transmedial storytelling: virtual creation in the tradition of analog animation, i.e., digital generation ex nihilo; hybrid creation in the tradition of analog feature film production, i.e., hyperrealistic modifications of previously captured live-action footage or blending of such footage with computer generated images, and procedural creation in the tradition of digital games, i.e., image generation through game engines in real-time depending on user interaction. Particularly the last variant allows for the creation of participatory hyperrealistic artifacts that can be entered and navigated in real time.

This ability to physically interact with digital data complements and advances the transformation that images undergo with their digitalization. Kevin Kelly was probably one of the first to recognize that screens and what they show—still and moving digital images—turn into "portals" once we can interact with them naturally.[57] Writing about his friends' young daughter—a child of the digital age—, Thomas Elsaesser put this shift in the view and perception of perspectival images in more concrete terms:

"... for her generation, pictures on a computer screen are not something to look at, but to *click* at: in the expectation of some action or movement taking place, of being taken to another place or to another picture space. The idea of a digital photo as a window to a

57 Kelly, Kevin: "Window on the World," in: N.N, '13 of the Brightest Tech Minds Sound Off on the Rise of the Tablet', in: *Wired*, August 29, 2010, http://www.wired.com/magazine/2010/03/ff_tablet_essays/all/1: "Don't think of them as tablets. Think of them as windows that you carry. [...] This portable portal will peer into anything visible. You'll be able to see into movies, pictures, rooms, Web pages, places, and books seamlessly."

view (to contemplate or be a witness to) had for her been replaced by the notion of an image as a passage or a portal, an interface or part of a sequential process—in short, as a cue for action."[58]

XI. SIMULATION AND WORLDBUILDING

Artifacts that virtualize processes and procedures of real or imagined worlds are called simulations. Their technological basis is the transmedium's ability to represent systems, the affordance of procedurality. Because of their medial characteristics, simulations do not simply—as is the case with literature—describe systems, or merely—as is the case with visual arts and photography, theater, film, television—represent them visually or audiovisually. Rather, digital games can simulate how systems function and thereby they enable players to experience these systems.

At the end of the 1990s, Janet H. Murray recognized this special quality of digital narrations: "The most important element the new medium adds to our repertoire of representational powers is its procedural nature, its ability to capture experience as systems of interrelated actions."[59] Ian Bogost later introduced procedurality into Game Studies as a term describing the medial affordance for the construction of dynamic models of real-world processes: "This ability to execute a series of rules fundamentally separates computers from other media."[60] Digital games use procedurality as their "core representational model."[61]

Virtual systems can simulate biological, social, cultural, and economic conditions, while simultaneously enabling interaction with these simulations. Through their playful interactions users tend to build mental models: "The com-

58 Elsaesser, Thomas: "Die 'Rückkehr' der 3D-Bilder. Zur Logik und Genealogie des Bildes im 21. Jahrhundert," in: Gundolf S. Freyermuth/Lisa Gotto (eds.), *Bildwelten Visualität in der digitalen Medienkultur*, Bielefeld: transcript 2013, pp. 25-67, p. 54. (Quote taken from Thomas Elsaesser's English manuscript.)

59 Murray, Janet Horowitz: *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*, New York: Free Press 1997, p. 274.

60 Bogost, Ian: *Persuasive Games: The Expressive Power of Videogames*, Cambridge, Mass.: MIT Press 2007, loc. 125.—Bogost himself points out that Janet H. Murray, already in 1996, recognized procedurality as a central characteristic of the digital transmedium, from which its special storytelling capabilities result. See Ibid., loc. 119.

61 Ibid., loc. 36.

puter is just an incremental step," says Will Wright, "an intermediate model to the model in the player's head."[62] In general, simulations concern themselves—independent from any degree of realism—with simplified abstractions of real-world role models: "A simulation does not attempt to simulate every aspect of its referent, but instead focuses on those elements necessary to the game."[63] Different principles can underlie these abstractions, from the production of specific experiences to the teaching or training of specific skills:[64] "Ultimately, of course, we don't care about creating either stories or games—we care about creating experiences," Jesse Schell states: "Stories and games can each be thought of as machines to help create experiences."[65] Most transmedia simulations, however, aim for hyperrealism, i.e., they try to build audiovisual worlds which are not only functionally but also aesthetically consistent.

Such fictional worldbuilding is certainly not an entirely new practice in the history of the arts. Epic storytelling strove to capture dying worlds, as, for example, Honoré de Balzac undertook with the *Comédie Humaine*.[66] Others attempted to invent entirely new fictional worlds, like J. R. R. Tolkien with *The Lord of the Rings*.[67] Dramatic storytelling, however, bound to audiovisual representation in

---

62 Quoted after Fullerton, Tracy/Swain, Christopher/Hoffman, Steven/Books24x7 Inc.: *Game Design Workshop: Designing, Prototyping and Playtesting Games*, San Francisco, Calif.: CMP 2004, loc. 4092.

63 Salen, Katie/Zimmerman, Eric: *Rules of Play: Game Design Fundamentals*, Cambridge, Mass.: MIT Press (Kindle Edition) 2003, loc. 785.

64 Quoted after T. Fullerton et al.: *Game Design Workshop*, loc. 4092.

65 J. Schell: *The Art of Game Design*, loc. 5474. Also, McGonigal, Jane: *Reality Is Broken: Why Games Make Us Better and How They Can Change the World*, New York: Penguin Press (Kindle Edition) 2011, loc. 595. "A good game is a unique way of structuring experience and provoking positive emotion."

66 French writer Honoré de Balzac (1799-1850) conceived the idea of a panoramic portrait of society which came to be known as *La Comédie humaine* in 1832. It "consists of 91 finished works (stories, novels or analytical essays) and 46 unfinished works (some of which exist only as titles)." See https://en.wikipedia.org/wiki/La_Comédie_humaine#cite_note-1

67 British writer and professor of English language John Ronald Reuel Tolkien (1892-1973) wrote the epic saga *The Lord of the Rings* as a sequel to his children's book *The Hobbit* (1937) between 1937 and 1949. Published in three parts in 1954 and 1955, the saga created a whole fantasy world whose strong influence on popular culture and specifically games and transmedia productions is ongoing.

time and space, was largely barred from such worldbuilding—mostly for media-technological reasons: both the production requirements and the circumstances of reception in theater, cinema, and television. Only with the transition to virtual, i.e., software-based audiovisuality, did the construction and reception of entire audiovisual worlds move into the realm of possibility. Worldbuilding was pioneered in games but has become important in filmmaking as well. "Constructing worlds is the main idea," states WATCHMEN production designer Alex McDowell: "By creating a 3-D virtual production space, you can work with your fellow filmmakers in a very descriptive, data-rich, virtual representation of the film before you even start making it."[68] In a similar way James Cameron described AVATAR's hyperrealistic "movie-scape": "It's like a big, powerful game engine. If I want to fly through space, or change my perspective, I can. I can turn the whole scene into a living miniature."[69] Tom Chatfield thus considers the "aesthetics of world-building" as a central moment of digital culture.[70]

In contemporary transmedia, *story worlds* or *story universes* may not completely replace linear storylines, but they certainly start to compete with them. These three-dimensional action areas have to be designed rather than simply described. Henry Jenkins speaks of the "story architecture" of narrative transmedia worlds: Designers, who develop these forms of 'environmental storytelling,' work as "narrative architects [...] privileging spatial exploration over plot development."[71] This holds true for intensive as well as extensive forms of transmedia. Consequently, a defining trend in transmedia storytelling—whether extensive or intensive—has been, as Elizabeth Evans analyzed, a switch from succession to layering:

"Rather than building a single narrative flow from screen to screen, leading the viewer from a webisode prequel to the episode to a game in sequence, multiple micro flows are in place within individual episodes and across screens, from the television to the app and

68 Quoted from Hart, Hugh: "Virtual Sets Move Hollywood Closer to Holodeck," *Wired*, March 27, 2009, http://www.wired.com/underwire/2009/03/filmmakers-use/

69 Quoted from Chatfield, Tom: *Fun Inc.: Why Games are the Twenty-First Century's Most Serious Business*, London: Virgin (Kindle Edition) 2010, loc. 623-625.

70 Ibid., loc. 2188-92.

71 Jenkins, Henry: "Game Design as Narrative Architecture," in: Noah Wardrip-Fruin, Pat Harrigan (eds.), *First Person: New Media as Story, Performance, and Game*, Cambridge, Mass.: MIT Press 2004, pp. 119-129. Quoted from: http://web.mit.edu/21fms/People/henry3/games&narrative.html

back again, and through different components within the app. [...] The early transmedia storytelling strategies that led viewers through different narrative experiences, separated by a linear temporal structure as well as different devices have evolved into a layering of experiences onto a single narrative moment."[72]

My eleventh postulate: Based on the affordance to procedurally simulate systems functionally as well as aesthetically, *transmedia enables a new kind of spatial and layered storytelling. Its core element is the hyperrealistic construction of consistent 'worlds'—whether fictional or documentary—that can be navigated and experienced in real-time.*

XII. VANISHING POINT

In summary, the story of transmedia seems to go like this:

An age-old desire to overcome the mechanical and industrial separation of media (I) found its technological realization in the digital transmedium of software (II). It promises more efficient ways to express and transfer cultural knowledge (III) by progressing from intermedia exchange and multimedia integration to a full-fledged merging of media (IV). In its dialectical unit of technological convergence and aesthetic complementarity (V), transmedia has the aesthetic affordance to reflect and express the cultural experiences of digitalization, specifically new perceptions of time and space (VI). So far, two new variants of storytelling have emerged: intensive and extensive transmedia, the fusion of several media within one artifact and the distribution of narratives over several media (VII). Both variants require and establish (in the structurally open-ended creation of transmedia works) a new kind of distributed authorship involving many networked individuals, professionals, and users (VIII). Artistically, three signature features characterize transmedia storytelling: first, a twofold gamification, i.e., a reflection of the growing cultural importance of games and play as well as the specific application of game design principles in non-game-related areas (IX); second, hyperrealism, i.e., the use of non-indexical visuals and audio in fictional as well as non-fictional contexts whose authenticity depends on

72 Evans, Elizabeth: "Layering Engagement: The Temporal Dynamics of Transmedia Television," *Storyworlds: A Journal of Narrative Studies*, 2015, pp. 111-128, http://eprints.nottingham.ac.uk/30924/1/Evans%20-%20Layering%20Engagement%20(Storyworlds).pdf

authorial authority (X); third, simulative worldbuilding, i.e., the construction of consistent and navigable domains for spatial and layered narrative experiences (XI).

Which leads, in conclusion, to my twelfth and final postulate: *From these multiple perspectives, (at least) one vanishing point ascends in the distance where the discrete and diverse developments of transmedia converge: the playful multi-layered hyperrealistic simulative worlds of Virtual Reality.*

BIBLIOGRAPHY

Abt, Clark C.: *Serious Games*, New York: Viking Press 1970.

Agamben, Giorgio: *"What is an Apparatus?" and Other Essays*, Stanford, Calif.: Stanford University Press 2009.

Ascott, Roy: "Gesamtdatenwerk. Connectivity, Transformation and Transcendence (*1989)," in: Timothy Druckrey (ed.), *Ars Electronica: Facing the Future*, Boston: MIT Press 1999; reprint, Online: http://epc.buffalo.edu/584/docs/ascott.html, pp. 86-89.

Barthes, Roland: "The Death of the Author," *Aspen Magazine*, Fall-Winter, 1967, http://www.ubu.com/aspen/aspen5and6/threeEssays.html; Bazin, André/Hugh Gray: *What Is Cinema?*, Berkeley: University of California Press 1967.

Benjamin, Walter, et al.: *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media*. Cambridge, Mass.: Belknap Press of Harvard University Press 2008.

Berne, Eric: *Games People Play: The Psychology of Human Relationships*, New York: Grove Press 1964.

Bogost, Ian: *Persuasive Games: The Expressive Power of Videogames*, Cambridge, Mass.: MIT Press 2007.

Brinkemper, Peter V.:"Paradoxien der Enträumlichung. Zur Philosophie des 3-D-Films," in: *Glanz und Elend. Literatur und Zeitkritik* (2012). Published electronically without release date: http://www.glanzundelend.de/Artikel-abc/s/starwars.htm

Bush, Vannevar: "As We May Think," in: *The Atlantic Monthly* Juli (1945); http://www.theatlantic.com/unbound/flashbks/computer/bushf.htm.

Campbell, Joseph: *The Hero With a Thousand Faces*. 3rd ed. Novato, Calif.: New World Library 2008 (*1949).

Chase, Linda: *Hyperrealism*. London: Academy Editions 1975.

Chatfield, Tom: *Fun Inc.: Why Games are the Twenty-First Century's Most Serious Business*. London: Virgin (Kindle Edition) 2010.

———: "Bridging the Gap." *Prospect*, 2011, http://www.prospectmagazine.co.uk/arts-and-books/bridging-the-gap

Davidson, Drew: Cross-Media Communications: An Introduction to the Art of Creating Integrated Media Experiences, 1.0th ed. Pittsburgh, PA: ETC Press (Kindle Edition) 2010.

Drucker, Peter F: *Post-Capitalist Society*, New York NY: HarperBusiness 1993.

Eisenstein, Sergei: "On Stereocinema (*1947)," in: Dan Adler et al. (eds.), *3D Cinema and Beyond*, Bristol, UK: Intellect Ltd 2014, pp. 20-59.

Elsaesser, Thomas: "Die 'Rückkehr' der 3D-Bilder. Zur Logik und Genealogie des Bildes im 21. Jahrhundert," in: Gundolf S. Freyermuth/Lisa Gotto (Ed.), *Bildwerte: Visualität in der digitalen Medienkultur*, Bielefeld: transcript 2013, pp. 25-67.

Engelbart, D. C.: "Augmenting Human Intellect: A Conceptual Framework" (1962); http://sloan.stanford.edu/mousesite/EngelbartPapers/B5_F18_ConceptFrameworkInd.html and http://www.liquidinformation.org/ohs/62_paper_full.pdf

Evans, Elizabeth: "Layering Engagement: The Temporal Dynamics of Transmedia Television," in: *Storyworlds: A Journal of Narrative Studies* (2015), pp. 111-28, http://eprints.nottingham.ac.uk/30924/1/Evans-Layering Engagement (Storyworlds).pdf.

Foucault, Michel: "What Is an Author?," in: James D. Faubion (ed.), *Aesthetics, Method, and Epistemology: Essential Works of Foucault, 1954-1984*, New York: New Press, Distributed by W.W. Norton 1998, p. 205-222.

Freyermuth, Gundolf S.: "Cinema Revisited. Vor und nach dem Kino: Audiovisualität in der Neuzeit," in: Daniela Kloock (ed.), *Zukunft Kino*, Marburg: Schüren 2007, pp. 15-40.

———: "Der Big Bang digitaler Bildlichkeit: Zwölf Thesen und zwei Fragen," in: Gundolf S. Freyermuth/Lisa Gotto (eds.), *Bildwerte: Visualität in der digitalen Medienkultur*, Bielefeld: transcript 2013, pp. 287-333.

———: "From Analog to Digital Image Space: Towards a Historical Theory of Immersion," in: Burcu Dogramaci/Fabienne Liptay (eds.), *Immersion in the Arts and Media*, Amsterdam: Rodopi 2015, pp. 165-203.

———: *Games | Game Design | Game Studies: An Introduction*, Bielefeld: transcript 2015.

———: "Intermedialität Transmedialität," in: *figurationen. gender literatur kultur 8* (2007), p. 104-177.

Friedberg, Anne: *The Virtual Window: From Alberti to Microsoft*, Cambridge, Mass.: MIT Press 2006.

Fullerton, Tracy, et al.: *Game Design Workshop: Designing, Prototyping and Playtesting Games*. San Francisco, Calif.: CMP 2004.

Hart, Hugh: "Virtual Sets Move Hollywood Closer to Holodeck." *Wired*, March 27, 2009, http://www.wired.com/underwire/2009/03/filmmakers-use/

Huizinga, Johan: *Homo Ludens: A Study of the Play-Element in Culture*. Boston: Beacon Press (Kindle Edition) 1955 (*1938).

Jenkins, Hen: "Transmedia Storytelling: Moving Characters From Books to Films to Video Games Can Make Them Stronger and More Compelling." *Technology Review*, 15. Januar, 2003, http://www.technologyreview.com/news/401760/transmedia-storytelling/

———: "Game Design as Narrative Architecture," in: Noah Wardrip-Fruin/ Pat Harrigan (Hg.), *First Person: New Media as Story, Performance, and Game*, Cambridge, Mass.: MIT Press 2004, pp. 119-129.

———: *Fans, Bloggers, and Gamers: Exploring Participatory Culture*. New York: New York University Press 2006.

———: "Transmedia Storytelling 101." *henryjenkins.org*, March 22, 2007, http://henryjenkins.org/2007/03/transmedia_storytelling_101.html

Kant, Emanuel (sic!): "Of the Injustice of Reprinting Books," in: Emanuel Kant (sic!) (ed.), *Essays and Treatises on Moral, Political, and Various Philosophical Subjects*, London: William Richardson 1798, pp. 225-239, https://archive.org/details/injustice_kant_books

Kay, Alan/Adele Goldberg: "Personal Dynamic Media," in: Noah Wardrip-Fruin/Nick Montfort (eds.), *The New Media Reader*, Cambridge, Mass.: MIT Press 2003, pp. 393-404, http://www.newmediareader.com/book_samples/nmr-26-kay.pdf

Kelly, Kevin: "Window on the World (In: N.N., '13 of the Brightest Tech Minds Sound Off on the Rise of the Tablet')," in: *Wired*, August 29, 2010, http://www.wired.com/magazine/2010/03/ff_tablet_essays/all/1

Lang, Berel: *Primo Levi: The Matter of a Life*, New Haven: Yale University Press 2013.

Locke, John: *Two Treatises of Government: in the former, the false principles and foundation of Sir Robert Filmer, and his followers, are detected and overthrown. The latter is an essay concerning the true original, extent, and the end of civil government*, London: A. Churchill 1690.

Lyotard, Jean-François: *The Postmodern Condition: A Report on Knowledge*, Minneapolis: University of Minnesota Press 1984.

Manovich, Lev: *Software Takes Command*. Boston: MIT Press 2012.

McGonigal, Jane: *Reality Is Broken: Why Games Make Us Better and How They Can Change the World*, New York: Penguin Press (Kindle Edition) 2011.

Murray, Janet H.: "Transcending Transmedia Part 2." *inventingthemedium.com*, November 20, 2011, https://inventingthemedium.com/2011/11/20/transcending-transmedia-part-2/

———: *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*, New York: Free Press 1997.

N. N.: "Godard only knows... For decades, he was regarded as a genius and a revolutionary, but Jean-Luc Godard, 70 years old next week, has spent the last 20 years alienating everyone. Has he finally succeeded in biting off the hand that feeds him?" *The Guardian*, November 25, 2000, https://www.theguardian.com/film/2000/nov/26/features

N. N.: "PGA Board of Directors Approves Addition of Transmedia Producer to Guild's Producers Code of Credits." *producersguild.org*, April 6, 2010, http://www.producersguild.org/news/39637/PGA-Board-of-Directors-Approves-Addition-of-Transmedia-Producer-to-Guilds-Producers-Code-of-Credits.htm

Nelson, Theodor H.: *Computer Lib / Dream Machines*, Chicago: Nelson 1974.

Neumann, Alfred Robert: *The Evolution of the Concept Gesamtkunstwerk in German Romanticism*. Microfilm. Ann Arbor, Mich., University Microfilms, 1951. 1 reel 1951.

Neumann, John von: "First Draft of a Report on the EDVAC." (1945). http://www.virtualtravelog.net/wp/wp-content/media/2003-08-TheFirstDraft.pdf

New Games Foundation/Andrew Fluegelman. *The New Games Book*. Garden City, N.Y.: Dolphin Books 1976.

Oettermann, Stephan: *The Panorama: History of a Mass Medium*, New York: Zone Books 1997.

Reich, Robert B: *The Work of Nations: Preparing Ourselves for 21st-century Capitalism*, New York: A.A. Knopf 1991.

Rosen, Jay: "The People Formerly Known as the Audience," in: *press think*, June 27, 2006, http://archive.pressthink.org/2006/06/27/ppl_frmr.html

Salen, Katie/Eric Zimmerman: *Rules of Play: Game Design Fundamentals*. Cambridge, Mass.: MIT Press (Kindle Edition) 2003.

Schell, Jesse: *The Art of Game Design: A Book of Lenses*. Amsterdam und Boston: Elsevier/Morgan Kaufmann (Kindle Edition) 2008.

Shakespeare, William: *As You Like It*. First Folio. Edited by William Shakespeare 1623. http://shakespeare.mit.edu/asyoulikeit/full.html

Shannon, Claude Elwood: "A Mathematical Theory of Communication," in: *The Bell System Technical Journal* 27 (1948), pp. 379-423, pp. 623-656. Online

reprinted with corrections from The Bell System Technical Journal. http://cm.bell-labs.com/cm/ms/what/shannonday/paper.html

Stafford, Barbara Maria, et al.: *Devices of Wonder: From the World in a Box to Images on a Screen*. Los Angeles: Getty Research Institute 2001.

Stone, Allucquere Rosanne: *The War of Desire and Technology at the Close of the Mechanical Age*, Cambridge, Mass.: MIT Press 1995.

Wedeles, Laurie: "Professor Nelson Talk Analyzes 'P.R.I.D.E.'," in: *Miscellany News Vassar College)*, February 3, 1965, http://faculty.vassar.edu/mijoyce/MiscNews_Feb65.html

Zichermann, Gabe/Christopher Cunningham: *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps*, Sebastopol, Calif.: O'Reilly Media 2011.

FILMOGRAPHY

DEFIANCE (USA 2013-2015, P: Scott Stewart)
ENCOUNTER AT FARPOINT (USA 1987, D: Corey Allen)
HEAD TRAUMA (USA 2006, D: Lance Weiler)
HIGHRISE (CA since 2009, D: Katerina Cizek)
IRON SKY (FIN et al 2012, D: Timo Vuorensola)
LOST (USA 2004-2010, O: J.J. Abrams) (USA 1974, O: Gene Roddenberry)
STAR TREK: THE NEXT GENERATION (USA 1987-1994, P: Gene Roddenberry)
THE TRUTH ABOUT MARIKA (SV 2007, P: SVT)

LUDOGRAPHY

ASSASSIN'S CREED (Ubisoft since 2008, O: Ubisoft Montreal)
DEFIANCE (Trion Worlds / Human Head Studios 2013, O: Trion Worlds)
RESIDENT EVIL (Capcom since 1996, O: Capcom)
SPACEWAR! (1961, O: Steve Russell)