On the Evolution of Narrative Mechanics in Open-World Games

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SAME MESSAGE, DIFFERENT BOTTLE

Experiencing and propagating narratives is an essential component of cultural history. Although this process has changed over the course of centuries, its basic principles persist. Regardless of eras or means of transmission, it is a primordial human instinct to want to communicate real or imagined experiences, and experience them oneself. How deeply rooted this can be is reflected in a wide variety of social endeavors, demands and circumstances, which underscore the central importance of storytelling to our social fabric. The value of narrative and performative acts manifests itself in the layout of human settlements, which are oriented towards meaningful landmarks. New narrative styles intertwine themselves closely with the most advanced technologies, which they either advance as a driving force, or rapidly incorporate.

The communication of narrative content may have altered its external appearance, but its essence has been preserved. Printing made it possible to replicate texts, replacing the oral transmission of poems, songs or performances. Contemporary technological innovations further expanded narrative possibilities: today, these range from audiovisual compositions and three-dimensional projections to hybrid performances that fuse real and virtual space. This change of narrative modes distills existing methods down to their core and creates new genres, until they, too, are subject to this process of reduction. At the heart of these continuing cyclical mechanisms lies the moment of narrative transfer. What was once conveyed through interpersonal contact is now amplified by highly diverse forms of media and performative practices. Despite radical changes in form and a tremendous increase in reach, some content has lasted

over great lengths of time: the dramas of the ancient Greek writer Sophocles are still being performed, and German publisher Reclam Verlag presents world literary classics as internet films featuring Playmobil figurines.[1] The continued existence of established content, considering these shifts in the form of communication, proves that what endures is the content, not how the message is conveyed.

BIRTH OF NARRATIVE MECHANICS

The anchoring of video games into mainstream society marks another tremendous change in narrative methods. Some cultural critics today state: "Those who do not play video games … ignore the great narratives of our present." (Hugendick 2020) This level of societal significance was inconceivable and unexpected during the first decades of computer-based game development. At the time, there was a stark division between the fields that would later combine to generate the cultural significance that is now attributed to digital games.

Comparable to the importance of narrative content, rule-based games have always held a prominent socio-cultural status, in the form of competitions, sports, board games, dice or card games. Such concepts were consolidated under the term *ludology* as the result of a factional dispute within the emerging field of game studies. (cf. Frasca 1999) By using this term, 'ludologists' attempted to distinguish themselves from 'narratologists' who explained the phenomenon of computer games from a narrative perspective. The ludologists rejected this perspective; for example, Markku Eskelinen noted: "If I throw a ball at you I don't expect you to drop it and wait until it starts telling stories." (Eskelinen 2001) Jesper Juul (2001) emphasized that: "Narratives may be fundamental to human thought, but this does not mean that everything should be described in narrative terms." Ludological, or strongly rule-based game concepts, in particular represent what was understood as *gaming* before the era of video games. These games primarily differed from narratives in that they consisted of a sequence of rules, yet contained hardly any narrative content. This is in contrast to the way in which the narrative manifested itself other cultural formats, such as literature and poetry, singing, theater or cinema. So what kind of new thinking was required in order to conceive video games such as *Dear Esther* (The Chinese

1 Michael Sommer, "Sommers Weltliteratur to go" (http://sommers-weltliteratur.de).

Room 2012), in which large-scale game worlds are traversed in search of a story, like in a 'walking simulator'?[2]

The first computer games did not yet aspire to renew narrative strategies. Instead, in the 1950s, emerging computer technologies began to reflect analog, ludological games due to their well-defined sequences of rules, which is why digital versions of such games were used for demonstration purposes. As such, the first computer games to result from this were all "transformations of existing games" (Suter 2018: 36). Their rules for gameplay, known as game mechanics, were simple to comprehend. The first graphically visualized computer game *OXO* (Douglas 1952) was a direct adaptation of tic-tac-toe – thus, while it had ludological qualities, its narrative qualities were practically non-existent.

In the decades that followed, rapid progress of computing technology made increasingly complex interactions possible; computers were used for an ever-expanding number of fields and range of applications. William Crowther utilized these new opportunities in 1975, when he created a milestone for the future of game design with *Colossal Cave Adventure* (Crowther 1975). In this game, players navigate through the rooms of a cave system using interactive commands, all of which are purely textual. The gameplay was therefore the sum of the individual actions that determined the plot. Crowther thus transposed a concept into the realm of digital games which became popular at the time. Separately but simultaneously in 1975, Gary Gygax continued to develop the role-playing game *Dungeons & Dragons* (*D&D*), in which the participants verbally improvise the actions of the game characters they are assigned. Gygax's developments "made it possible to play D&D in Solitaire[3]", thus "blurring the lines between board games and RPGs" (Arnaudo 2018: 71-72).[4] In this same period, beginning in 1969, Edward Packard sought a publisher for his book *The Adventures of You on Sugarcane Island*, and eventually published it in 1976. The concept of the book was to let readers themselves decide the course the story by giving them the option of following several possible storylines. This became the successful *Choose-Your-Own-Adventures* book series[5]. The parallel development of these three approaches in different media demonstrated a newly emerging narrative practice: "Independently from one another Gygax, Crowther and

2 The term *walking simulator* was originally intended as a derogatory term for extensive game worlds with a predominant narrative element. However, game distribution platforms such as www.steampowered.com use the term today as a genre filter.

3 Solitaire: a board game for one person

4 RPG: role-playing game

5 See: https://en.wikipedia.org/wiki/Choose_Your_ Own_Adventure

Packard came to the same conclusion that stories were something that the audience could co-create, not just receive, and such parallel developments go a long way to show the time was ripe for this type of audience engagement." (Arnaudo 2018: 74)

In Crowther's *Colossal Cave Adventure* and subsequent, similarly structured computer games, a new genre grew out of the narrative principles more closely associated with the field of "narratology" (Frasca 1999), in which the "interactive storytelling constituted the actual mechanics" (Suter 2018: 42). *Colossal Cave Adventure* thus pursues an idea that is fundamentally different to that pursued by *OXO*, so that these two early video games can be regarded as reflecting the often-discussed dichotomy between narratologically- and ludologically-based game concepts. It is fascinating how these once disparate concepts eventually coexisted, and then coalesced with one another over the history of video game development, until they were considered to be the same. As such, one of the most significant cultural achievements of digital games as a medium is to have overcome the historical, fundamental separation of ludological and narratological approaches, uniting them in a new medium and making them accessible to a broader audience.

ENTERING NARRATIVE VISUAL SPACE

This convergence has far-reaching consequences for the visual appearance of computer-based games. As *Colossal Cave Adventure* demonstrates, in principle, narrative games do not require visualization. Narrative aspects of games can be reduced to spoken or written texts[6], for example, leaving it up to the player to flesh them out using their own imagination. Narrative aspects could be envisioned, but sequences of strategic moves, dependencies on resources, situations of competition, and so forth, require dynamic visualizations in the course of the game. It is virtually impossible to control games with a pronounced rule-oriented (ludological) focus without a form of visual representation for the components of the game. Interestingly, it is not narrative, but rather, rule-oriented game forms that are dependent upon visual representation.

6 A number of computer games designed for the blind utilize this approach, as described in "Computer Games and Visually Impaired People" (Archambault et al. 2007).

This observation reveals a paradox. The rapidly increasing computing power of personal computers and game consoles led, from the 1970s onwards, to ever-more detailed graphic visualizations. Although rule-oriented game elements in computer games must be depicted, this requires relatively little computing power. The rapid increase in the capacities of imaging calculation methods would therefore not have been necessary to depict the game mechanics at all; as such, this change primarily took the form of creative embellishment, and thus, contributed to the expansion of the visual-narrative quality of games. Accordingly, Stephan Günzel notes that "due to advances in hardware and software development, a general aesthetic change from the symbolic to the representative" (Günzel 2012: 111) occured. Due to technological developments, the two-dimensional representation that characterized early video games became a three-dimensional representation – even if this 'representative' turn often means that "game productions organize their work for the visual plausibility of the supposedly real, and not for the qualities of the fictional in the virtual." (Götz 2019: 207) Thus began a narrative mode of unwritten laws which still dominate the design of digital games today: in the vast majority of cases, progress in the plot of a digital game is equated with progress in spatial environments.

THE WAY WE SEE IT

This new combination of narration and experiential virtual space has allowed games to permeate narrative disciplines that also rely on spatial scenarios to convey stories. In searching for the rules with which to construct a virtual space of high narrative quality, the emerging medium of games embraces many approaches from cinematography. There are remarkable parallels with the development of animated films which matured to perfection at Walt Disney Studios, among others. As in games, the principles developed can be described "as the creation of fictional spaces imbued with seamlessly plausible, self-referential narration" (Götz 2018a: 241). Animated films began to visualize narrative space by first constructing the scenery with background images that shift behind the characters. This spatial model was later expanded by the ability to use a one-point perspective animated camera, in which staggered layers were laid out "similarly to the spatial configuration of theater backdrops" (Girveau/Diederen 2008: 124), to zoom into the background. The spatial representations of animated films imitated the zooming perspectives that had already long been introduced into real films. But also in real films, the complexity of narrative spatial representations increased steadily: spatial expressions transitioned from rigidly

mounted cameras to curving movements along rails, from shots on swivel arms to film sets in which the entire set moved around a permanently installed camera.[7] These increasingly sophisticated three-dimensional film sets corresponded to audacious narrative content. They demonstrated the growing complexity of the relationship between the camera and the staged space, both of which were continually evolving, but also emancipated themselves from one another.[8] The final phase on the path to the independence of camera and set was, however, pioneered by animated films and later adopted by real films: in compositing spatial scenarios whose origins lie in 3D modeling, animation and rendering, hybrids are created through virtual reality, augmented reality, and CGI (computer-generated imagery). Their narrative representations of space are no longer subject to the restrictions of physical film sets.

The cinematic connection between narration and space paved the way for corresponding approaches in the creation of narrative visual space in video games – almost as if video games had to relive the process of cinematic camera development all over again. *Defender* (Williams Electronics 1981), which is representative of similarly visualized games, utilizes a horizontal camera to show the action as if it were in an endless 'tracking shot' on rails. The central-perspective racing games of the arcade era look like time-lapse camera shots of animated backdrops being pulled apart. While the spatial scenarios in games have become more and more complex, their virtual cameras have gained in narrative quality and taken on a life of their own, directly based on the cinematography of real films: depending on the situation, virtual camera angles swivel from wide-angle shots to close-ups, or change their camera lenses interactively to match the action.

Although such cinematic approaches would not necessarily be relevant to the narrative in games, they shape the conventions of how something can be presented in a continuous sequence of virtual spaces, and thus, what can even be told at all. Within this self-imposed restriction, entire game genres have been derived directly from existing film genres. (cf. Rauscher 2014) However, this filtering of what video games visualize based on real filming conventions is not

7 See, for example, the film sets for *2001 — A Space Odyssey* (1968). They were created to realistically depict the crew of a spaceship suspended in weightlessness.

8 There is hardly a more iconic film scene encapsulating such possibilities for cinematic narration than the famous "Copa Shot" in *GoodFellas* (Scorsese 1990) by Martin Scorsese (Director) and Michael Ballhaus (Cinematographer), in which a steadycam floats from the back entrance and through the hustle and bustle of the club's kitchen into the Copacabana nightclub, without any cuts.

only apparent in the final results of game productions. Typically, such constraints are already inscribed in the programs used to produce video games as presets – for example, in the simulation of real camera lenses for virtual cameras. Within these conventions, games such as *Antichamber* (Demruth 2013) remain an exception; in it, non-Euclidean spatial sequences question the construct of game space itself. The potential of narrative space in video games therefore appears to be far from fully exhausted. It remains an open question whether, over time, games will produce their own narrative space constructs which are only possible in the virtual realm, or whether they will primarily adopt spatial-narrative methods from other disciplines.

THE DOUBLE AVATAR

As far as other aspects of narrative mechanisms are concerned, the interactive nature of video games has engendered at least one crucial innovation. For protagonists, actors, mediators or other narrative entities, gaming invented a new vessel: the avatar. Whether in first- or third-person perspective or in axonometric view, the gaming avatar has become a universally applicable, omnipresent tool of narration. The avatar is a representative proxy whose appearance can be adapted according to personal preferences. It provides a surface upon which to project from a necessary distance, allowing the narrative experience to emerge. The avatar is the shield with which negatively connotated action can be endured in the course of the game, and the disguise with which such actions will be carried out. Thus, it functions as armor, ambassador and scout when venturing into the realm of fictional portrayal and experience.

The construction of an interactive avatar transforms the role of the audience. Before the era of video games, an intensive experience of narration was expressed through admiration for actors or authors, and it turned the audience into fans. Experiencing narration intensively through a gaming avatar means controlling the action of the role play itself. Interestingly, controlling an avatar seems to generate such high-quality experiences that it not only ensures participation in interactive narration, but also sustains the passive role of the audience. Watching other players play publicly has long been a mass phenomenon, with millions of

followers on the internet.[9] In so-called *Let's Plays*, the Double Avatar is created: the audience follows and interacts with players live, who in turn control their avatars through virtual game worlds.

OPEN WORLDS FOLLOW LIMITING PRINCIPLES

The combination of narrative and rule-oriented systems in gaming represents a novel construct. It combines features of existing narrative disciplines with the rule mechanics from the fictional environment of game space. Narrative actions occur only at defined positions in the virtual sphere, and are therefore clearly located. At the same time, narrative and rule mechanics are intertwined in such a way that conditions must be fulfilled in order to experience the narrative, or narratives will follow different paths when conditions are altered. *Fable 2* (Lionhead Studios 2008) explored such sophisticated possibilities of storytelling in one of the first ever reputation games: the "system is directly tied to the character development, such that actions that are evaluated by the game from an ethical perspective" defining "how the NPCs react to the protagonist" (Christen et al. 2013: 73).[10]

As a result, this association means that "a video game is a set of rules as well as a fictional world" (Juul 2005: 1). The radical nature of this statement deserves consideration: In games, the action is structured, but in contrast to other narrative disciplines, it is not performed. Rather, it is deliberately concealed by the mechanical constraints of the game. The motivation thus awakened by games creates an incentive for players to experience the plot individually. In this way, rule-based functionality, interactivity and narrative are merged – and narrative mechanics emerge as a result. These narrative mechanics essentially prevent, in carefully metered degrees, a general accessibility in terms of the narrative. In fact, the narrative is only revealed to those who strive particularly hard to find it. Sometimes games take this to the extreme: well-hidden and almost undetectable 'Easter eggs' contain additional gameplay that is withheld from most gamers and only discovered by the most tenacious players.

9 Although this may initially seem surprising, it is ultimately nothing new: the observational role of a public audience in analog, rule-based games, such as in team sports games, is commonplace.

10 NPC: non-player-character or non-playable character

Nowhere are the manifestations of these prerequisites and the successes of narrative mechanics more evident than in the comparatively young genre of open-world games. With its vast, free-to-explore open environments, this genre represents a tentative culmination of what can be told in games, how it must be visualized, and which spatial settings are suitable to do so. To provide some context: the size of the playable open world of *Read Dead Redemption II* (Rockstar Studio 2018) is estimated by fans to be 75 square kilometers[11]; other comparable worlds extend to several hundred square kilometers. The implications for storytelling in virtual worlds of such dimensions are that connections of the highest complexity are required between rule-based concepts and narrative strategies.

In the construction of such worlds, there are systems in place that are rarely apparent to the player. The combination of ludological and narratological concepts optimizes the structure of these virtual environments in order to maximize their playability. For example, the depiction of medieval Florence in *Assassin's Creed II* (Ubisoft Montreal 2009) only follows the historical city map in a few places and otherwise distorts it for dramatic effect: "In this case, form does follow function – but it is reality adapted to the necessities of the game." (Gerber/Götz 2019: 15) The interactivity of the medium requires specialized storytelling strategies to guarantee a dramaturgical narrative, even though the players exercise their own free will. In what order are the main strands of the narrative structured, when are alternatives or multilinear variants possible, and in what way is this main framework supplemented by freely selectable secondary missions? And how does the individually experienced story add up to what is known as emergent storytelling, which is based on rule-based actions (such as those involving the game's resources)?

The scenography of the virtual is conceived to maximize the narrative effect of events, even if their occurrence is not entirely predictable. The overall attributes of play are derived from the set of rules, because "the prevailing rules in games govern the nature of virtual environments – and not the other way around." (Götz 2018b: 260) As a consequence, "such virtual landscapes are precisely scaled to bridge the distances between one event location and the next" (ibid: 262). To foster gameplay, a racing game thus provides drivable surfaces; a hidden object game involves bewilderingly detailed environments; some conflict-based games require arenas, and others hideouts. It is not possible to clearly assign the specific details from the design of such worlds to either narrative or

11 "How big EXACTLY is the new map? A detailed analysis", August 2019 (https://www.reddit.com/r/reddeadredemption/comments/9rgmbp/how_big_exactly_is_the_new_map_a_detailed_analysis/).

rule-oriented logic. The forms of cover in a shooting game – are they narrative or rule-oriented elements? As this question demonstrates, it must be acknowledged that design elements in games combine different tasks. They simultaneously assume functions for narration, rules, information, usability, and so forth. This amalgam serves to advance the game and motivation to play.

Successful patterns of design in open-world games culminate in typologies that are regularly applied. While the narrative content varies greatly from game to game, the construction of the worlds follows such universal strategies that they sometimes seem interchangeable. The similarities between these virtual spaces can be traced back to effects that serve to enhance narration and usability. They manifest themselves in virtual worlds that include features such as high points for a better overview, spectacular landscapes underscoring dramatic storylines, prominent locations serving as obvious landmarks, regularly distributed settlements justifying the next resources to procure or missions to execute, and labyrinth-like forests or towering high-rises. In order to make the boundaries of these worlds as plausible as possible, a creative canon of rock chains, gorges, islands, and isolated plateaus in mountain ranges is created. They are perforated with cave systems, subway lines, and tunnel entrances by which the depth of the worlds is extended without having to provide spatial continuity (for example, one enters a tunnel system and emerges at another location).

The design of open-world games involves typological set pieces of natural or artificial landscapes which act as the basic spatial structure for gameplay. They guarantee not only the usability of a particular place, but most importantly, a sensible transition to the next section of a game world, corresponding to the continuation of the plot. In her study on "Nonverbal Guidance Systems", Francine Rotzetter (2018) explains typical guidance systems of open-world games in detail. Apart from distinguishing between different methods of guiding players through virtual worlds, Rotzetter's study shows that the construction of such worlds follows common, comparable design strategies.

NARRATIVE CONTAINERS

The megastructures of open-world games present unprecedented possibilities for narration. However, their spatial designs also inherently introduce both restrictions and problems. Gigantic virtual worlds raise questions about the relationship between storytelling and space, which other narrative disciplines have already long resolved.

Open-world games all too often equate an avatar's movement with the experience of action, which leads to the fallacy that a lot of virtual space also means a lot of storytelling. The opposite assumption would be more logical: that narrative density decreases in relation to the size of virtual worlds. Thus, open-world games have acquired the reputation of requiring players to cover long distances on their way to the next stage of the story, while nothing much actually happens. This fundamental problem of combining space and narration is countered with a number of tricks. Avatars rush through vast digital spaces at absurd speeds on foot to prevent boredom. As soon as any kind of exciting initial exploration is over, shortcuts are revealed to bridge distances more quickly throughout the rest of the game; transport stations, flying objects, fantastical animals, teleportation spells or portals become accessible. These devices aim to support the underlying idea of narrative progress by a change in location.[12]

Other narrative disciplines devised elegant tricks for such matters a long time ago. In order to increase narrative speed, written narratives established a change of scene or narrative perspective; cinematic narration perfected the tool of editing. These fields demonstrate that spatial progress need not be a precondition for coherent narration. In order to negotiate particularly important topics in a concentrated manner, theater developed the *Kammerspiel* – presenting the great questions of humanity in the smallest possible space. In this sense, some open-world games could be described as the opposite of the *Kammerspiel*: simple content in an infinite space.

To depict architecture and virtual landscapes in open-world games, the most advanced technologies are utilized. In comparison, the implementation of storytelling follows relatively simple principles. Action sequences are conceived for NPCs at specific locations and positioned there, as if they were invisible containers activated upon entry. When all the options of the events that can be triggered are exhausted, these virtual counterparts shift into a meaningless, idle state that signals the end of this section of the plot – the narrative containers are now empty. When open-world games promise hundreds of hours of gameplay, this refers to the time needed to experience all narrative events. Once this is achieved, a game world continues to exist, but only as a shell of empty game

12 *No Man's Sky* (Hello Games 2016) pursued this idea to an extreme and was correspondingly controversial. Does the possibility of visiting 18 trillion procedurally generated planets really lead to a more interesting plot?

space, in which no further specific action can be expected.[13] Revisiting an 'empty' narrative container reveals a strange side effect: if NPCs remain frozen in a meaningless, Sleeping-Beauty-like state after their action has been completed, this state also applies to the game space itself. Thus, it becomes apparent that, although open-world games are characterized by an immense abundance of sequential or parallel narrative strands, a strange absence of time prevails within these game worlds. Despite all the perfection of their audiovisual appearance, the worlds do not age, but gradually release their prepared contents instead. In place of passing time, a controlled sequence of predetermined events reigns supreme. As a result, the worlds often appear animated rather than alive.

FREEING THE NARRATIVE

Such narrative containers with ready-made content present a sharp contrast to the practice of emergent storytelling, that is, narratives evolving out of a set of rules. A prime example of emergent narration is *Dwarf Fortress* (Adams 2006), which is predicated on the procedurally generated interplay of related processes used to build a fantasy world (cf. Adams: 153, Figure 1). The dynamic entanglements of the physical, historical and social events simulated are so complex that their effects on the game plot are not even foreseeable by the game developers themselves. As an explicit goal for creating *Dwarf Fortress*, Adams (2006) names "the ability to surprise yourself with the game doing things that you did not anticipate", which he achieved by programming "all these little procedural elements to bring out this perpetual state of surprise."[14] To a certain extent, this narration runs autonomously, controlling itself without requiring any further input. In order to pursue their own goals in *Dwarf Fortress*, the players brace themselves against the freewheeling dynamics of the game world and try to maintain an overview among the complexity of interactions and coincidences. At the same time, players adopt the role of observers, and are entertained by these

13 In order to ensure that players have experienced all elements of the prepared narrative, the gaming platform www.steampowered.com, for example, reports the status of "Steam Achievements".

14 "Dwarf Fortress: What Happens When It Becomes A Game? The Zach and Tarn Adams Interviews", April 5, 2018 (https://www.youtube.com/watch?v=HtKmLciKO30, min. 9:11-9:40).

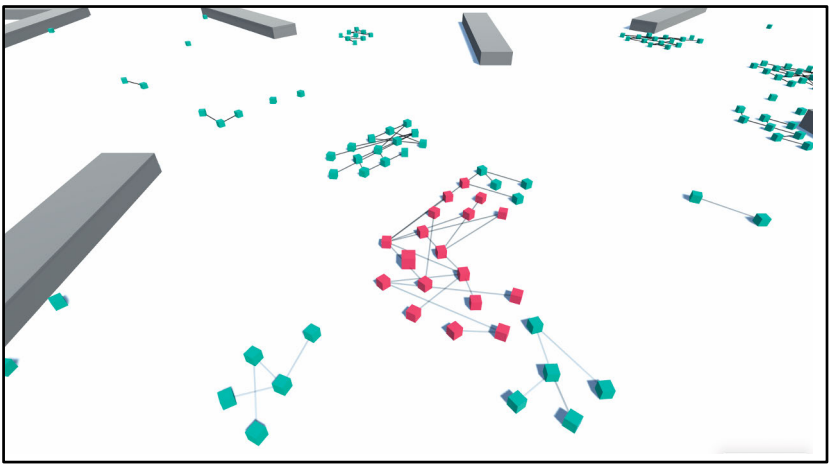
unpredictable processes. Although many situations escalate dramatically, the narrative does not follow an intentional dramaturgy.

The much-praised design of *Dwarf Fortress* provides valuable arguments for the discussion of the inherent weaknesses of open-world games. Given the complexity of combining space and narration, it seems advisable to reduce the spatial dimensions of future open-world productions and increase their narrative density. To achieve meaningful narration in games, the exploration of unknown territories should not be the leitmotif. In high-quality narrative video games, virtual spaces should instead act as framework for the plot. In fact, game spaces themselves sometimes seem to be the most important part of the games. Furthermore, game spaces can only unleash their true narrative potential if they change over time. The plot can ultimately evolve at the same location, and the simultaneous change of the place itself can facilitate this process. However, this central narrative technique is undermined by the lack of significant time-based processes in narrative containers.

Many open-world games provide their fan bases with Downloadable Content (DLC) or the possibilities to create their own mods[15], in order to be able to expand game worlds even after they are released. Fallout 4 (Bethesda Game Studios 2015), with its DLC release Far Harbor (2016), included the expanded content of an additional island with more scenery to explore, as well as a variety of other major and minor missions. Instead of such modular world enlargements, the lasting appeal of Dwarf Fortress lies in the dynamic interaction of its narrative agents: the headstrong, free-spirited dwarves. It is therefore worthwhile, when developing strategies for open worlds, to consider shifting narration from the exploration of scenographic locations to narrative agents such as NPCs. The virtual locations of open-world games are by no means exhausted after a single narrative iteration. On the contrary, they could provide the chance of a complete renewal of content, for example, if familiar settings are reinterpreted by the new generations of narrative agents. Would it not be fascinating to witness how the same virtual place is later populated and transformed by newly implemented, intelligent NPCs? Narratively speaking, it would be particularly effective to introduce agents that are not stationary, but move throughout the entire game world in order to ally, exchange, persuade or attack when they randomly encounter each other (Figure 1).

15 Mods: modifications of existing games, usually created by fans.

Figure 1: Study by Anna-Lena Pontet at Zurich University of the Arts on group dynamics – mobile agents competing for membership of a given faction.



Source: Anna-Lena Pontet

The inner life of open-world games would benefit considerably from this form of emergent narrative because the unforeseen dynamics and singular events create meaningful – and epic – game experiences.

Through the fusing of different disciplines, a transmedial boom in narrative content is emerging. Video games are able to integrate the contributions of performing, narrative and audial media and arts. The development of open worlds has paved the way for making these elements more interactive and experiential in compelling spatial scenarios. It is now up to the games to follow the example of other narrative disciplines, and to create stories that are worth preserving for generations to come.

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