

Meaning creation in digital gaming performances. The intraludic communication of Hybrid Reality Theatre

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Abstract

The article provides a perspective on digital games and gaming situations that is orientated towards theatre and performance studies. It applies classic theatre and performance theories to the field of gaming by focusing on the participants that are involved. It takes the bridging of digital and physical spaces through digital gaming activities into account and conceptualizes digital gaming as form of Hybrid Reality Theatre. By that, the paper looks at the intra-ludic communication and discusses the player as active producer of meaning for three different gaming situations: the work with innovative input methods like natural user interfaces and virtual reality technologies, the field of location based mobile gaming and the area of urban gaming.

1. Gaming performances as Hybrid Reality Theatre

“Performances are actions” (Schechner 2006: 1). They can be found in lots of everyday activities as well as in artistic contexts. Among others performances include play activities as well as the performing arts like theatre and dance (ibid 21f.). A performance “takes place as action, interaction, and relation [...]”. Performance isn’t ‘in’ anything, but ‘between” (ibid 30). It is this betweenness that constitutes theatre (Lazarowicz 1997: 97). Grotowski (1964: 30) breaks the phenomenon down into the actions happening between actors and spectators. In this context the spatiotemporal co-presence can be identified as one of the key factors of theatre and performance as well as its liveness (Fischer-Lichte 1997: 218).

The Liveness – according to Georgi (2012) – can be operationalized into five dimensions: (A) Uniqueness, Ephemerality and Disappearance, (B) Presence and Corporeality, (C) Interaction and Audience Participation, (D) Unpredictability, Imperfection and Failure, and (E) Realism.¹ The first dimension focuses on the transitory of the theatrical performance (see Lessing 1767-1769) and emphasizes the fact that even if “a theatre production is [...] put on several times [...] it is created and disappears anew each time so that each individual performance is singular and never completely identical to any other performances” (Georgi 2012: 92). This already explains why presence and corporeality are essential for the perception of the processual artwork that does not leave a product or an artefact to be sensed retrospectively, but only exists in the moment of its execution. This togetherness during the process allows and recalls for interaction and participation, which influences the performance such as by contributing to its unpredictability. Klaus Lazarowicz (1997: 97) introduces the term triadic collusion to describe the specific interdependencies between the multiple participants contributing to a theatrical performance, each of them being in charge of specific parts of the performance. According to Lazarowicz it is the author’s duty to develop a literary sign system. The actor transforms that system into a scenic sign system. Finally, it is only by the part of the spectator that the scenic information is perceived and integrated into their individual wealth of aesthetic experiences (ibid. 109-110). The theatre emerges only in the spectator’s mind, who perceives it each time anew as form of movement in time and space (Fuchs 1909: 60).

Digital gaming continues this liveness and combines physical and digital spaces via the performance. In that way, it is located in the so-called hybrid space, a term introduced by Adriana de Souza e Silva in 2006, who defined hybrid reality as a “mix of social practices that occur simultaneously in digital and in physical spaces, together with mobility” (de Souza e Silva 2006, 265). By locating digital gaming in the sphere of hybrid spaces one has to enlarge the concepts of co-presence and liveness to both spheres, which enables to talk about avatars and players in terms of co-presence and to acknowledge the liveness of the happening – even though it inevitable contains a mediation. Similar to a theatrical performance a digital gaming session cannot be seen as a solitary action, but consists of an (at least inner) conversation between author, actor, and spectator (Adamowski 2000: 66-67). Even in a single-player game, the player not only navigates the avatar but also observes it. She is actor and spectator at the same time (Ackermann, in press). The player’s body is splitted up in a physical body and a data body (Neitzel 2007: 11). On the screen, she sees the mediation of her own actions in a fictional world (ibid. 8). Like in the theatre where the literary basis (e.g., the drama) is in no way an equivalent to the performance (Herrmann 1920: 19), the game as artifact is not equal to the gaming process either. Like the drama that always contains an intersection for the scenic realization (Marx 2012: VII), “[v]ideo games are technical artifacts that attain their aims in the experience of their use” (Venus 2010, 429, emphasis in the original).

Styan (1960: 288) puts it for the field of theatre: “[T]he play is not on the stage but in the mind”.

The principles of the triadic collusion can be transferred to the field of digital gaming by identifying a triadic collusion of digital gaming, containing the game designer, the player/actor and the player/spectator. The tasks remain equal to the theatrical artwork. The game designer creates a (literary) digital sign system that is transformed by the player/actor into a scenic sign system realized in the hybrid space and finally perceived and processed by the player/spectator (Ackermann, in press). To emphasize these intersections between gaming and theatre on the one hand and to appreciate the hybridity of the performance on the other hand, I introduced the term Hybrid Reality Theatre in 2014 to conceptualize gaming performances in Hybrid Spaces (Ackermann 2014).

2. Meaning creation via intra-ludic communication

In concordance to the theatre, for which a form of intra-theatrical communication is described (see Lazarowicz 1997: 97), one can also identify an analogy in the field of (digital) gaming that takes place between the different involved participants (player/actor, player/spectator & game designer) and shall be named intra-ludic communication in this context (Ackermann, in press). It is the duty of the intra-theatrical communication to structure how actors and spectators meet and understand each other during the theatrical performance (Lazarowicz 1997: 97).

Fischer-Lichte introduces the term theatrical code to describe a rule system regulating the production and the interpretation of signs, the various relationships between them and the possible meanings generated by them (Fischer-Lichte 1983: 21). By defining theatre as type of a cultural system, she distinguishes internal and external codes; the former being at the basis of the cultural system and defining what material products should be functioning as signs and how to combine them, the latter, functioning as a form of hyper-code, allowing the interpretation of the meanings – generated via the internal code – in concordance with an over-all culture. In order to constitute the meaning generated via a cultural system comprehensively one must know about the internal and external codes underlying the specific system (ibid. 10-11). This also counts true for the field of digital gaming, where knowledge about the cultural system is necessary such as to recode the players’ verbal expressions (see Ackermann 2012) or to produce meaningful game actions (Ackermann 2013a).

As part of the theatrical code, Fischer-Lichte names several sorts of signs: In the area of visual signs produced by the actor, she finds kinetic signs including facial

activities (mimic signs), body movements without a change of position (gestural signs) and those describing a movement through space (proxemic signs). In the field of acoustic signs produced by the actor, she differentiates between linguistic, paralinguistic and musical signs. Those are accompanied by signs produced via the actors' appearance (mask, hairstyle, costume), signs of space (stage, decoration, props, light) as well as by nonverbal acoustic signs (noises, music) (ibid. 28). As Fischer-Lichte points out, the theatre uses all the mentioned signs not in the way the cultural system – that created them – would use them, but in reference to it (ibid.). This can also be described for the field of gaming: "Play does not come up with innovative actions, but integrates already established ones into the gaming context by disconnecting them from their former goals and meanings" (Ackermann 2013b, 185). In that way it changes the signified that is referred to by the signifiers. This leads straight into the sphere of semiotics (or semiology). Following de Saussure's (1931, 79) distinction of signs into the two separated parts of the signifier (signifiant) and the signified (signifié) and regarding their connection as arbitrary and based on conventions, one can locate the production and interpretation of signs in the sphere of social life (ibid. 19) and see it as relying on alternating rule systems regulating the usage and interpretation of signs. This leaves room to describe games as a specific form of a cultural system having its own rule systems being in charge for the duration of the game. The intra-ludic setting opens up a spatio-temporal frame, in which signifier-signified-relations vary from those in everyday communication. In order to produce and interpret signs that are correctly generated via the ludic code, one must not only know about that code but also about the cultural system the code borrows its signifiers from. The borders between play/performance and everyday life are fluid and the process itself is ephemeral. The whole world can function as a stage (Goffman 1980: 143). That is why, it is very important that the players know about the frame they are acting inside – something that (meta-) communication can provide (Bateson 1955: 184). Only by knowing about the underlying rules and the potential signifiers, one is able to produce and perceive the meaning of the gaming performance. As Jochen Koubek points out, the meaning of a game heavily depends on the way it is played by whom and in which situation (Koubek 2013: 27). The ephemeral artwork of digital gaming is realized in various ways depending on the involved players (Ackermann, in press).

Like in the theatre that tends to generate meaning by producing perceivable elements (like sound, actions, objects) (Fischer-Lichte 1983: 8), the game player also produces meaning via the generation of signs by transforming the digital sign system into the scenic sign system. To the same extent that the sign context produced by the theatre in the performance situation cannot be separated from the actors (ibid. 15), it cannot be isolated from the player either. It only exists in the moment of its creation. Production and reception of a theatrical/gaming performance happen synchronously. In the very same moment, the actor produces a sign, to create a certain meaning, it is perceived by the spectator, who generates

meaning out of it (see Fischer-Lichte 1983: 15). Applying Krämer's (2004: 17) idea of an corporealising performativity allows to regard the performance as exceeding representational semiotics. The concept of corporealising performativity assumes that a definition of theatricality inspired by the experience of performance might be a model for the creative metamorphosis of the world, perceived in the interplay of actors and spectators (ibid. 18). In this context the term corporeality – as a way of enabling the exchange between actors and spectators in the field of creation and perception – cannot be reduced to a shared sign supply of actors and spectators but rather includes the corporality of the humans, the objects and the signs as equal parts of a continuum of materiality (ibid. 21) that is available for the process of meaning creation during the performance. Acknowledging digital games as performative media necessitates to not only see the player as a producer of pre-coded media content, but also as the generator of meaning by their game actions (Koubek 2013: 27). This includes the production and perception of signs as well as experiencing the corporeal specifics of the gaming performance.

The next sections of the paper present and discuss three types of gaming performances as hybrid reality theatre, in which the process of meaning creation as part of the intra-ludic communication, is realized in different ways: the use of innovative interfaces – mostly in the private sphere – as one way to emphasize the connection between player/actor and player/spectator in the triadic collusion of digital gaming, location based mobile gaming as an example of hybrid reality theatre that transfers digital gaming to the city streets via mobile devices, and urban gaming that seizes a whole town with playful activities.

3. Innovative Interfaces

According to Jäger/Kim (2008: 45) human-computer interfaces are able to “mediate ‘meaning’”. Manovich (2001: 66) describes them as the “key semiotic code of the information society”. Human-computer interfaces define the “character of interaction and perception” (Grau 2003: 198) with the digital sphere and “it becomes common to construct a number of different interfaces to the same ‘content’” (Manovich 2001: 66). With regard to the participation of the player in the process of meaning generation via transforming the digital sign system into a scenic sign system, different interfaces allow for various intensities of player integration. This section concentrates on two ways to include the player's physical body in the hybrid reality theatre performance: first the field of natural user interfaces (NUI) and second the work with virtual reality technologies. Both technologies predominantly operate with kinetic signs, but generate and process them differently. In the field of NUI- Technology, the player's body (including its appearance) is mediated into the

digital world as sort of a mirror image; the player's physical body becomes her avatar in the visualization. The hybrid practices of interacting with a digital game via natural user interfaces refer to the interweavement of corporal and media practices quite distinctly (see Ferrin 2013: 115). Inside the visualization and in reference to it arises a simulated space, in which the corporal movement meaningfully connects with the mediated movement. The body's displaying function performs meaning creation inside (ibid: 137). This "establishes a radically new type of relationship between the body of the viewer and the image. [...] [T]he spectator actually has to move in physical space, to experience movement in virtual space" (Manovich 2001: 109). This breaks with the classic notion that the action inventory of the player typically is reduced to a limited repertoire of fine motor skills in the domain of finger, hand, arms and head movement, while the avatar's motion sequences are much broader (Compagna 2013: 109). The parallelization of player- and avatar-actions results in what Krämer (2008: 34) calls a doubling of the player's body into a physical and a semiotic one: "[T]he body of the user has to be transformed into a purely physical body. The coordinates of the moving physical body are transferred to its semiotic double in electronic space" (ibid). In this way, "'Flesh- body' and 'sign body' are distinguishable but correlate" (ibid 40). The technology of Microsoft's Kinect for example can distinguish "human figures from everything else in its viewing frame, break [...] them down into a set of twenty joints, and track all twenty joints continuously at 30 frames-per-second" (Rieder 2013: 4-5). With this technology the player does not even have to be equipped with a specific technical device (like for example the Wii Remote and the Nunchuk of Nintendo's Wii or the Move Motion-Controller of Sony's Playstation) to support the medialisation as well as the interaction. This leaves the player more freedom to act beyond the scope of the game and enrich the scenic system for example with improvised motion sequences – something Melanie Fritsch (2012) describes for the field of music games. As the interface seems to disappear "the illusionary symbiosis of observer and work progresses [...] [and] the distance from the work vanishes" (Grau 2003: 202).

To the same extent, it is the idea of virtual reality to intensify immersion, but the "disappearing act" (Bolter/Grusin 2000: 21) performed by the natural user interface "is made difficult by the apparatus that virtual reality requires" (ibid.). In fact, by optimizing the immersive experience the VR-equipment often is expanded and creates interesting hybrids with the physical body. This becomes quite evident in the case of the installation *Birdly* recently developed by Max Rheiner and others at the Zurich University of the Arts. (III.1 and 2)



Virtual Reality Installation Birdly (San Francisco 2014).
© Myleen Hollero, San Francisco USA

“Visualized through HMD (Oculus Rift) the participant is embedded in a virtual landscape where his body is the body of a Red Kite. The whole scenery is perceived in the first person perspective of a bird.”² While the player gets a sensory feeling of the experience of flying via the apparatus and perceives the digital world as reacting to her, she is not able to see her physical body that is initiating the movements inside the digital sphere at the same time. The head mounted display does not allow the parallel registration of digital and physical sphere – in terms of visibility. Despite of that or maybe because of it the physical body that is equipped with such extraordinary technical components obtains a performance quality in itself, reminding of Fischer-Lichte’s (1997: 217) remarks about the theatre of Robert Wilson that declares the actor’s body to be the artwork, just by exhibiting it, instead of utilizing it as a complex of signs representing something else. Both ways of interacting with the digital game support the idea of the corporealising performativity (see Krämer 2004: 17) in multiple ways: Both interfaces render the player’s movement operative in the symbolic: her physical motions alter the visualizations in the spatial arrangement (Kaldrack 2011, 239). Furthermore, they generate similarities between bodies and visualizations through the parallelization of physical and digital actions (ibid. 247). By that, they give rise to the construction of a subjective as well as a technical-media world at the same time (ibid. 251). These hybrid space practices contain the potential to encounter one’s own body in its medialisation via the visual and tactile body techniques (Ferrin 2013: 119).

By working with the physical body of the player, the discussed human-computer interfaces support the idea of uniqueness and ephemerality of digital gaming as form of hybrid reality theatre. Each gaming performance is inevitably bound to its participants. Even if one person is playing a game alone, the real-time medialisation generates liveness inside the specific event. The discussed input methods enable the body to become the interface connecting digital and physical spaces (see Obermaier 2008). This is accompanied by a new intensity of body experience (Angerer 2001:182). Thinking of the human-computer interface as being able to mediate meanings, this contains lot of potential for the corporealizing performativity. Leeker (2001, 287) introduces the term interactive theatricality functioning as a medium between digital and physical world, by merging the data body and the physical body, which results in the omission of the separation into actors and spectators (ibid. 266). Like in interactive installations “the body of the performer [...] is outsourced to the audience looking for its implicit body, with political and semiotic consequences” (Simanowski 2011, 120).

With regard to the production of signs for meaning creation purposes, both technologies apply different strategies. Though the focus lies on kinetic signs in both fields, they operate with signs of the actor’s appearance very differently. While in the field of virtual reality there is lots of specific equipment to be found in the physical sphere (cf. head mounted displays) it is omitted in the medialisation of the

player's body – that in addition most times does not result in a simulation of the actual appearance but rather in a bodiless integration into the game (cf. first-person-perspective). That way, the digital environment reacts to the player, but she does not have a separated avatar, to avoid the risk of interrupting her immersion. In the field of natural user interfaces instead the physical body of the player becomes a part of the digital sphere by way of a mirror image. She is able to see and perceive herself in the digital world in a different way than in the field of virtual reality. This emphasizes the perspective of the spectator and highlights the interconnections between the digital and the physical movements by their parallelism. Both fields transfer a strong feeling of liveness, supported by the haptic experience and the high visibility of the user as essential part of the performance. Furthermore, the creation of meaning is facilitated as the frame game emerges very distinctly in these settings and the participants of the gaming performance and the intra-ludic communication are usually predefined.

4. Location Based Mobile Gaming

Location based mobile games provide a different setting for the hybrid reality theatre as they enlarge the players' activities in the physical sphere, but reduce the actions in the digital area at the same time. The latter is of course partially because gaming with small mobile devices opens up only limited opportunities for the human-computer interaction. But the equipment of smartphones with programs for location determination, mobile web and cameras enables them to "overlay a fictitious narrative as well as virtual game elements onto urban spaces" (de Souza e Silva/Hjorth 2009: 603).

Google's successful augmented reality game Ingress for example declares physical objects to energy portals inside the game that have to be possessed according to the plot. This calls for the interaction with physical objects via smartphone and questions familiar movement and judgment schemes related to space. "Mobile experiences that take place in public settings such as on city streets create new opportunities for interweaving the fictional world of a performance or game with the everyday physical world" (Benford et al 2006: 1). This way they allow the enrichment of the perception of the physical space and can alter movement in it (see Frith 2013). As a result the places one passes are seen and experienced in a new way (Gazzard 2011; Pape 2012).

Thinking of the public (urban) space as containing overlapping spatial and temporal subspaces, one can identify different functions and meanings for each of them, exceeding the everyday use (Marschall 2012: 176-177). In this way, public spaces also allow, among others, the emergence of other spaces, so called (chronic)

heterotopias (Foucault 1992) that last a certain time and follow self-referential rules. As location based mobile gaming is not limited to a certain time and space designated to playful events only, the concept of the magic circle (Huizinga 1938: 18) is challenged in several ways for the actors and the spectators. The game narrative opens up for contingencies and by that emphasizes the ephemeral of the gaming process. This might lead to problems in maintaining the frame game (see Bateson 1955; Goffman 1980) and supports the idea that play is “not on the stage but in the mind” (Styan 1960: 288, cf. section 1).

“When the subject participating in a mobile narrative has her perception interrupted – by people entering the train or obstructing her path – that interruption necessarily punctures an immersive experience that is at once technological and phenomenological. The subject supposedly in control of her imaginative experience thus becomes compelled to regard her body as open and responsive to external influence. She also becomes compelled to consider the relations between text and environment” (Raley 2010: 313).

As the digital sphere is not visible for an audience that is not actively participating in the game, it is the signs produced by the actor in the physical space that rise people’s attention at first glance. When the game activities take place in a setting that is not coded as playful this leads to uncertainties by passersby in how to understand the produced signs. The intra- ludic communication first needs to be established. That is why the identification of play behaviors necessitates a certain effort by the possible audience at that moment (Ackermann 2014: 120). They need to develop the awareness that the public playing field means and visually reproduces another locality than the one, it normally signifies in everyday life (Frey 1946: 494). Like Styan (1960, 285), who defines playgoing as an art, puts it: “It demands an active enthusiasm to join in an act of creation, the skill to interpret stage action, and the discipline of an artist to fashion the play in the mind.” Still this constellation of hybrid reality theatre restrains the spectator of perceiving the performance in whole. As Joffe (2007: 224) explains by the example of the Japanese location-based game MOGI, these kind of games “explore[] new ways to interact with both space and time and, in doing so, generate[] an eerie sense of being in an augmented world only shared by Mogi users.” The digital sign system is not visible for non-participants and in addition, the scenic system is perceivable only in parts (limited to the actions in physical space), unless they start to actively interact with the players.

The kinetic signs produced by the actors are not suspicious at first, as the technical devices used for location based mobile gaming are mainly smartphones that are not coded as toys, but rather as working or communication tools. Hjorth/Pink

(2014) introduce the term digital wayfarer to refer to the “perpetually moving mobile media user” (ibid, 40), who has become a regular figure in the urban setting. Still when looking at the elements produced as part of the scenic system, one finds that kinetic signs, more precisely proxemic signs, are most likely to raise people’s attention. As a certain proximity is required for the game to recognize that one is located at the right place, players sometimes render conspicuous by moving nearer towards certain objects, than it is normally the case for a city visitor (see Ill. 3).



People playing Ingress in the streets of Siegen, Germany
© Daniel Biel, Siegen Germany

In addition, they might rest in a certain position longer compared to the typical duration of regarding a monument or the like. They might also move back and forth several times to find the right position to have their location registered by the system – a movement pattern that is not typical for wandering through the city streets. When working with mobile devices, the human-computer interface only allows for very few actions by the player to be medialised into the digital world. Still her body movement is necessary to uphold the game narration. She has to carry the device to certain places in the town, to obtain certain effects inside the game. Much more body movement is required than in the field of natural user interfaces. Still the enormous number of motions in the physical sphere go along with relatively few movements in the digital world. The connection with the physical movement is

decisive, but it is not as visibly emphasized as in the field of natural user interfaces and virtual reality technologies described in the previous section. The movements in the physical space are orchestrated by the digital game narration (the digital sign system). Still the occupation of the single places done by moving through the city streets and realizing the scenic sign system, leaves the player total freedom about the elaboration of her performance in the physical space – oscillating between conspicuousness and inconspicuousness and by that (at least in part) being self-responsible of increasing the participants of the intra-ludic communication and the field of meaning creation in the gaming performance.

5. Urban Gaming

Urban Games provide a more radical shift from the digital to the physical sphere. "These games are usually large-scale multiplayer games that involve physical activity and face to face social interaction. They often take place in urban settings or other public spaces" (Lantz in Ruberg 2006, n.p.). They "mix digital, electronic, and virtual elements with some form of real-world presence" (ibid). That way the narration of the game is outsourced towards the physical actions in the urban space. Digital media still might be needed to fulfill tasks or coordinate the orchestration of the happenings in the city streets, but the performance highly concentrates on the physical stage. By using the city as "the canvas for the playful activity" (De Souza e Silva/Hjorth 2009: 612), urban games question everyday routines in the city streets as well as interpretational sovereignties related to space utilization. They take a lot of borrowings from the so-called Environmental Theater (Schechner 1973) and often work with ambiguity, for example by using passersby as unwitting actors (Flintham et al 2003: 174). While location based mobile games subtly gain the attention of passersby, urban games mean to get noticed by them reminding of the art forms of performance art or happenings. To create curiosity in the environment urban games work with the production and combination of signs very extensively. As again the digital sphere by working with mobile devices is not visible to non-participants, they primarily create signs in the physical sphere – including signs in the field of the actors' appearance that communicate the idea of the digital very obvious, for example by equipping the players with artefacts that are immediately associated with the sphere of digital media (see Ill. 4).



Performer in the hybrid reality game "Can you see me now?" (Blast Theory)
© Blast Theory, Brighton UK

Even if those sorts of games do not necessarily require a connection to the digital sphere, they frequently transform digital games into urban performances or are inspired by them. In addition, they often contain a digital part, that orchestrates the actions in the city and are constructed as transmedia phenomena. They "mix[] elements of pre-programmed game content with live performances (Flintham et al. 2003: 168). Still the corporal performance in the city streets gains attention in the first place and mostly the digital serves as a layer that does not have to be perceived in order to get an understanding of the game performance. Other than in the field of location based mobile games discussed in the previous section that are not understandable by only watching the actions of the physical bodies, the scenic sign system of urban games functions for itself.

Looking back at Fischer-Lichte stating that theatre produces meaning by generating signs, one finds a lot of work in this field in the case of urban games. First of all lots of kinetic signs are produced: the players move through the city at a pace that is not regularly taken (Ill. 5). They stand pretty close to others or buildings – in a way that is not consistent with regular whereabouts in the city (Ill. 6). The actors' appearances differ from that of passers-by (Ill. 7). The games work with specific signs of space (Ill. 8) as well as with nonverbal acoustic signs (cf. a noise to set a starting point).



People playing "Citydash: Storm" in the streets of London, UK.
© Lana Hersak, Gwyn Morfeý/ Fire Hazard.



People playing "The eight human circles" in the streets of Siegen, Germany.
© Daniel Helmes / Playin' Siegen.



People playing PacManhattan in the streets of New York, 2004.
© Doug Jaeger (doctorjaeger.com).



People playing Real Life Snake in the streets of Hamburg Germany (Play 14 Festival, 2014). © Bente Stachowske / Initiative Creative Gaming.

In relation to the playfully occupied space even mimic signs can gain attention, something that becomes obvious in the example of Tombstone Hold 'Em (Ill. 9), an urban game designed by Jane McGonigal in 2005 transposing the idea of the poker game Texas Hold 'Em to a cemetery as playground, taking tombstones as its play material:

The players of the game inhabit the cemetery in a manner that consciously opposes traditional use patterns of such places (for example by running, touching the graves and most obvious by laughing and smiling during the activity). The example shows how urban gaming can alter ones perception of the physical space. In addition, it shows and rehearses alternative ways of utilizing physical spaces.

"The central activity of Tombstone Hold 'Em poker is learning how to 'see' a playing card in any tombstone, based on its shape (the suit) and the names and date of death (the face value). Once you can read stones as cards, you can spot 'hands' all around you. The game works in any cemetery, as long as there are clearly marked tombstones" (McGonigal 2011: 198).



People playing Tombstone Hold 'Em (Graveyard Games San Francisco 2005).
© Jane McGonigal, San Francisco USA (Avant Game)

In generating complexes of multimodal signs that are highly visible (also for non-participants) urban games fulfill a distinct and conscious break with the regular connection of signifier and signified in everyday life. By their reference to the normal use of signs in the over-all culture they ignite a critical reflection on daily routines.

This is supported by the corporealising performativity that enables the experience of meaning generation via space utilization in a new way. This again includes the players as well as the spectators. Urban games call for the extension of their audience. Spectators are actively transformed into players. In that way urban games head towards a flexible number of participants, keeping the frame game and the intra-ludic communication in a fluent state. As the players actively integrate passers-by into the performance, they negotiate the process of meaning creation each time anew. By that, they also reflect their corporeal experience and can contrast it to that of non-participants.

6. Conclusion

The paper has shown how digital gaming performances can be conceptualized as hybrid reality theatre and that they are accompanied by an intra-ludic communication, resembling the intra-theatrical communication in the field of theatre and ensuring that actors and spectators understand each other during the performance. The intra-ludic communication not only relies on a shared knowledge about the use of signs in the cultural system “game” but also includes corporeal elements to create meaning. The central key to the understanding of a game performance is the realization of the scenic sign system by the player and its parallel perception by the spectator (be it the same or another person). It was shown for three gaming scenarios how the emergence of the scenic sign system varies according to the participants, the interfaces in use and the location of the game setting. Consequently, the process of meaning creation depends on the way the gaming performance is executed. While gaming performances in private spaces mostly come along with a high visibility of the frame game and a predefined number of participants in the intra-ludic communication, hybrid reality theatre in public spaces is confronted with a fluent number of participants in the intra-ludic communication and a certain effort in maintaining the frame game. As shown, this influences the process of meaning creation during the performance in many ways and makes hybrid reality theatre an interesting field for investigating the generation and the negotiation of meaning in cultural systems.

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Notes

1. Georgi's fifth criterion, the realism, is relativized by the author herself, who claims that "realism (...) is erroneously mistaken for a parameter of liveness because realism is not a question of the medium or its liveness but instead depends on whether a medium is used unobtrusively or in a hypermediate way and whether the fictionality is acknowledged or concealed" (Georgi 2012, 111).
2. <http://birdly.zhdk.ch/about/> (30th October 2014).