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Gaming is unlikely

A Theory of Ludic Action

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Preface

> A game is a mysterious thing and once it makes its way into the world, anything can happen. (Loosely based on Paul Auster, Leviathan)

This book came about unexpectedly for its authors. One comes from the theory and practice of play, the other from the political economy of work. Both value, that is their scientific bridge, Luhmann's concept of communication as the best approach to understanding social phenomena, including play and work. In familial conversation about ongoing projects, the impression that the player and the worker could learn from each other solidified. And at some point we turned this impression into the decision to practically test what would come of thinking game, communication, and work together.

We would like to be experts for the context. Our ambitions are for the relationships, the "in between." Not the individual object, not an object in itself, not the isolated theme, it is the relations that are the research interest with which we approach the game – primarily systematically, marginally, also historically. In view of the universality of the subject of play, this claim at first leaves one speechless, but a very great one gives courage. "The most beautiful thing we can experience is the mysterious. It is the basic feeling that stands at the cradle of true art and science. He who does not know it and can no longer wonder, no longer marvel, is, as it were, dead and his eye extinguished."[1] We have given the game the status of improbability

[1] Einstein, A. (1953): My view of the world. Zurich Vienna: Europa Verlag [*1931], p. 10. Online https://gedankenfrei.files.wordpress.com/2009/01/mein-weltbild-albert-einstein.pdf (accessed 07 Nov. 2019).

in order to understand why it was ubiquitous in the past and is commonplace in the present.

The Wilmersdorfer Volkspark, where a lot of playing takes place, was our spiritus locus. It was not only the title of the book that came about during our walks and conversations together. We would like to thank Andreas Galling-Stiehler, Olaf Hoffjann, Jürgen Schulz, Jo Wüllner, and Rainer Zech for their criticism and suggestions, be it on individual chapters or on a full version of the manuscript. They pointed out inaccuracies and inconsistencies, all remaining ones are caused by us. We were also greatly helped by an intervention by Dirk Baecker. As an advocate for the readers, Sieglinde Rübel-Arlt defended their right to find not the very first sentences but a text that is as comprehensible and lively as possible.

Berlin, Germany
November 2019

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Introduction

1

Abstract

It is about a theory of play. The work on the concept of play, which has a great tradition, is continued instead of leaving it at that, that basically everything can also be considered as play. An offer is made that, in view of the phenomenal diversity of games, does not cancel the sails of theory, but attempts to explain this diversity. In doing so, it does not follow the path of game studies, whose studies are typically preceded by a marginal note on the concept of games, in order to then devote themselves entirely to the digital world. Nor will it be concerned with a definition of the Ludic. As the one definition is a too simple wish, so *the* theory is a too dogmatic claim. The argumentation proceeds as a loop: the text establishes an idea of how play can be understood, holds on to it, and then turns its back on it in order to observe and describe play in its environments.

Computers, mobile and immobile, are the most important tools of early twenty-first century society and at the same time its favourite toy. With digitalization, play is expanding, not to say exploding. As an activity, as a subject, and as a metaphor, play is gaining prominent social presence: "Play is in great demand, and not just where it boosts it" (Konietzky, 2012, p. 303). Gaming is receiving great public and growing scholarly attention and, despite all warnings of harmful effects, more general appreciation than ever before: "Computer games are the most vibrant art form of the 21st century" (Lischka, 2002, p. 134). People like to write and speak about computer games in superlatives, and for good reasons. "Computer and video games

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are of the utmost importance as a cultural asset, as a driver of innovation and as an economic factor," said the German Chancellor in 2017 at the opening of the computer games trade fair "gamescom", quoting the "father of kindergarten", the educator Friedrich Fröbel (1782–1852), with the words "the source of all good lies in play" (Merkel, 2017).

1.1 "Don't Think, Just look"

Whenever, wherever and however people live together, besides everything else they do, they play. Play is often described, always evaluated and explained in highly different ways. In the "Encyclopedia of Philosophy" it is introduced thus: "'Play' (lat *ludus*) is an everyday language expression with wide margins of meaning. Instead of a coherent philosophical-historical development, one finds, distributed throughout history, different positions of individual thinkers who – each in their own way – have established a way of using 'play' as a philosophical term. At the level of *conceptual labelling*, typical features, structures or functionalities of play are distinguished and demarcated against everything that is *not* play, e.g. against seriousness, the world of work, everyday life, etc. Insofar as a game can generate a specific world of its own, the concept of play is often also used *as a metaphor* that emphasizes the creative character of ludic world construction, the tension between freedom and binding by rules, or the immersion of humans in play"[1] (Gebauer & Stern, 2010).

Adding another explanatory approach to the definitions and conceptions is daring if only because it seems to set Ludwig Wittgenstein's advice at naught: "Don't say: 'They must have something in common, otherwise they wouldn't be called games' – but *look* whether they all have something in common. – For if you look at them, you will not see something that would be common to *all of them,* but you will see similarities, affinities, and quite a number of them. As I said, don't think, but look!" (Wittgenstein, 1984, p. 277). Read in this way, that all theory is grey compared to the phenomenal multiplicity of practice, one can only agree and still

[1] In the original, Spiel is abbreviated as S.

be free to strive for a theoretical approach.[2] Instead of stating that basically everything can also be play, of dissolving the term into boundlessness and letting theoretical ambitions be, instead of flagging up play as theoretically incomprehensible in the face of its magnificent multiplicity, a proposal will be worked out to explain this multiplicity theoretically.

1.2 Incessant Talk about the Game

While terms such as economic or scientific theory promise insights into the economy or science, respectively, the word "game theory" in its usual usage does not mean that systematic knowledge about playing is gained here. Rather, "by means of an incessant talk of play, the humanities and natural sciences attempt to design adequate models of description, calculation, and control for a rapidly changing world of life that is increasingly threatened by fragmentation" (Neuenfeld, 2005, p. 10). What is meant in particular is that decision-making processes in economics and politics (cf. Neumann & Morgenstern, 1967), that the influences of law and chance (cf. Eigen & Winkler, 2010) can be better understood if they are observed as if they were a game. Knowledge about how games work is not acquired under the label of game theory, but assumed. "That is the lure of the game, of the word game. It tempts even the most exact authors into the suggestive course of analogies" (Matuschek, 1998, p. 3).

Our intention to advance the work on the concept of games does not follow the path of game studies,[3] which typically preface a marginal note on the concept of games in order to then devote themselves entirely to the digital world. In their studies, "the outsourcing of the old tried and tested philologies, the disciplines of art and history, with news technology and economics, with questions of communication studies and the history of knowledge meet in an indeterminate mixing ratio"

[2] Especially since Wittgenstein's own scientific practice was guided by it, for he also applied his concept of family resemblance to his understanding of language and number. "Instead of stating something that is common to everything we call language, I say it is not one thing at all that is common to these phenomena, which is why we use the same word for all of them, – but they are *related to* each other in many different ways. And it is because of this kinship, or these affinities, that we call them all 'languages'" (Wittgenstein, 1984, p. 277). "And I will say: the 'games' form a family. And likewise, for example, the kinds of numbers form a family" (ibid., p. 278).

[3] "2001 can be seen as the Year One of *Computer Game Studies* as an emerging, viable, international, academic field" (Aarseth, 2001; in the editorial for the first issue of "Game Studies, the international Journal of computer game research").

(Pias, 2002, p. 8). In this way, Game Studies – even its name indicates that it is less concerned with play – does justice to its research interest; here in this book, the focus is on another, namely to situate play in terms of social theory, to grasp its social function.

Connections to Different Points of View

Nor should it be about a definition of the Ludic, accompanied by the constantly raised complaint that unfortunately no uniform one exists. As if a free science had nothing better to do than to put its research processes into prisons of meaning of generally binding definitions. As the one definition is too simple a wish, so *the* theory is too dogmatic a claim. It is *a* theory of play. Not an ontological version of the essence of play is offered, but a view that makes play distinguishable in its particular way.

Whether mentioned in passing or treated in detail, hardly any social analysis can avoid the topic of play. For centuries, it has been taken up with a wide variety of approaches by an individually unmanageable, let alone receivable – no more comes close to enough – quantity of scholarly work. Our account attempts to remain close to the ongoing scholarly discourse and to classify its findings again and again. The goal is a theory of ludic action that makes its connections to the various perspectives on play transparent, names references, addresses differences, and emphasizes points of agreement.

The Following Six Chapters

The following six chapters intervene in the game discourse from different approaches. Theoretical and methodological implications of the approach are addressed sporadically on the spot, compactly in Sect. 2.2. This second chapter anchors the game in society and chooses no less a point of connection than the origin of sociality, the expectation of expectation, and its primary form, interaction.

In Chaps. 3, 4 and 5, the understanding of play as laid down in Chap. 2 is checked and developed. First, in Chap. 3, it is examined whether and to what extent, starting from the theoretically gained concept of play, it is possible to reconstruct as classically recognized characteristics of play where and to what extent our explanation of play comes into contradiction with other theoretical offers. The fourth chapter serves to elaborate temporally and factually what has been determined as the basic function of ludic action, that is, to describe functional changes

and differentiations of the game. In doing so, we devote a separate chapter, the fifth, to computer games in order to trace the "epochal pull" (Kucklick, 2016, p. 216) that they have triggered. Like hardly any other activity, playing is subject to permanent evaluation and diverse instrumentalization; the sixth chapter takes up both aspects. Its topic is *transitions,* for which the term gamification circulates today.

The concluding seventh chapter reverses the initial perspective, which analysed play from society's point of view, and looks from play to society: on the basis of the developed concept of play, against the background of the inflationary use of the play metaphor and a general "licence for vague uses" (Anz & Kaulen, 2009, p. 6) of the designation play, the question is posed as to which ludic components are also found outside the immediate play event in modern and digital society. What meaning does it have, what is claimed with it, and what is thereby misappropriated when social relations are increasingly flagged as games?

A concept is laid down, developed and tested that understands play as a voluntary, temporally and often spatially marked, constantly new way of dealing with the unexpected in the mode of a non-binding activity as if. To this end, an argumentation path is followed that could be characterized as follows: the text establishes an idea of how play can be understood, records it, and then turns its back on it in order to observe and describe play in its environments. In keywords, see Fig. 1.1:

- Development of a social-functional concept of play
- Classification of the concept of play in the Ludic discourse

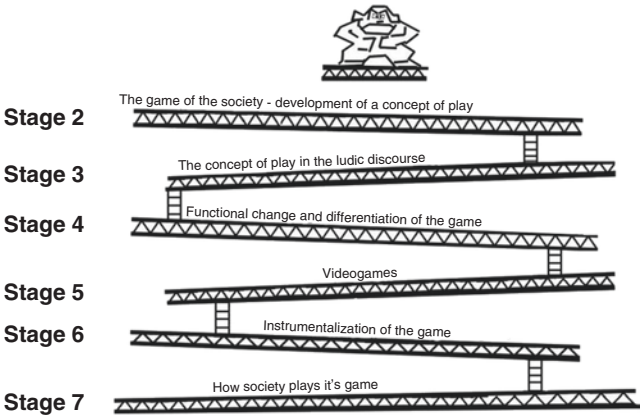

Fig. 1.1 The structure of the book in the Donkey Kong look. (Source: Own representation)

- Historical and systematic differentiations of the game
- Games in digital times
- The game between perfection and corruption
- Ludic structural similarities of modern and digital society

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Function and Stubbornness of the Game

2

Abstract

A concept of play is developed that understands play as a form of action that surrenders to the threats and lures of the unexpected. In doing so, play liberates itself from normalities in its own special way, namely in the mode of a temporary, non-binding acting as if. The aim is to trace the experiential qualities of the game that captivate its participants, as well as the performance character of ludic actions that appeals to audiences. The theoretical starting point of the work on the concept of play is interaction, understood as an encounter in which persons are perceptible to each other and communicate with each other. Interactions are considered the primary form of sociality. As an elementary event, human sociality – insofar as it racks its brains about this, sociology is largely in agreement here – arises from doubly contingent expectations of expectation.

> How then would we explain to someone what a game is? I think we will describe games to him, and we might add to the description: 'this, and the like, are called games.' And do we ourselves know more? Can we not tell the other exactly what a game is? – But this is not ignorance. We do not know the boundaries because none are drawn. (Wittgenstein, 1984, p. 279).

Academically, many disciplines feel called upon to say enlightening things about games: education, psychology and philosophy, politics, media, art, literature and sports science. A separate game science is only emerging under the name of Game

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Studies[1] in the transition to the twenty-first century in the context of computer games. The late timing is striking, but not unusual. Even before economics became established, major studies on economics that are still relevant today were already written in the eighteenth and nineteenth centuries, for example by the moral philosopher Adam Smith, by a mathematician, natural scientist and stockbroker (David Ricardo), by a law student who switched to philosophy and history and worked as a journalist (Karl Marx).

If games were seen and treated as a fundamental, independent phenomenon before the development of game studies, this was usually done with pedagogical intent; sometimes also with a political purpose, condensed in the formula "bread and circuses". The major philosophical perspective was an anthropological one: play as the first and most important contribution to becoming human, as Schiller (2000) made evergreen in his letters "On the Aesthetic Education of Man".

> In the philosophy of play, "a rough distinction can be made between two different perspectives on play: While one is more indebted to pedagogy and developmental psychology and asks about the functional role of play in ontogenic development, the other is more oriented towards cultural philosophy and asks about the function of play in human culture or human intellectual life as a whole." (Deines, 2012, p. 31)

It is not only the fundamentalist approach that makes the approach to play difficult, but also the simple fact that it is unclear to which class of phenomena play is best assigned. Is it a *medium*, as many have come to say, a *form of activity*, as Wikipedia writes, a *phenomenon of movement,* as Hans Georg Gadamer (2012, p. 27) and, following him, not a few others argue, a *social practice,* as Dirk Baecker (1993, p. 152) puts it, a *perspective* "in which we can consider almost everything doing" (Krämer, 2005b, p. 11), or perhaps a *communication* after all, as Udo Thiedecke (2010, p. 18) puts it. Without a doubt, each of these approaches contributes something relevant to the understanding of the game.

We will argue that through the concept of action and the dimensions of experience and action that it opens up, play can be understood in a more comprehensive and multifaceted way. Therefore, we will speak of play as a ludic action, using ludic as the adjective equivalent to the noun play (as angry is to anger and abstract is to abstraction). This is, however, a departure from the usual usage in game discourse, which usually takes the term ludic more narrowly and distinguishes it from the narrative as well as the rule-governed. If one proceeds in this sense and distin-

[1] "The name Game Studies stands for an academic discipline whose analytical focus is on game design, game theory, game philosophy, the player community, and the role of digital games in society and culture" (Wimmer, 2016, p. 543).

guishes, for example, "between a level of spatial, ludic, narrative, and social structure" (Thon, 2007, p. 172), one no longer has a proper word to designate the game as a whole, because "ludic" expresses something else, namely only an impression of the game. Therefore, we would like ludic to be read as the adjective used to denote play and games.

In this second chapter we lay the foundation on which a concept of play is to be justified. Section 2.2 contains general indications of the theoretical framework within which the argumentation proceeds. The function of play is developed from interaction as the primary form of sociality (Sect. 2.3). We check whether the common features of play are covered by the understanding thus gained and locate our concept of play within the general framework of game theory. The chapter concludes with the question of how the unlikely self-liberation through play turns into a welcome self-fettering in play (Sect. 2.4).

2.1 Elementary Sociality: Interaction, Society, Person

The search for a theoretical approach to play cannot ignore the fact that the recognised approaches observed in academic discourse start at an elementary level. Play is described "as the social practice par excellence" (Baecker, 1993, p. 154) and called "a basic anthropological fact of all stages of life, ages and peoples" (Scheuerl, 1990, p. 9). Love and play are presented as "the forgotten foundations of being human" (Maturana & Verden-Zöller, 1994). "We can play this or that, but we cannot *not* play" (Schulze, 2005, p. 150), it is claimed. "That human culture emerges and unfolds in play – as play" (Huizinga, 1956, p. 7), that play is thus to be understood as the "basis for the emergence of culture and its differentiations" (Krotz, 2009, p. 37), is stated and readily repeated.

To the extent that it racks its brains about this, sociology is largely in agreement: as an elementary event, human sociality emerges from doubly contingent expectations of expectation. At the interface between systems and interaction theory(s)[2] this view is well established. We follow it and choose it as the starting point of the theory of play to be developed.[3] The three notions of expectation-expectation, double contingency, and interaction require some explanation.

To be able to expect others' expectations in the situation of direct encounter is considered a condition of the possibility of a social relationship, that is, of the suc-

[2] For a detailed and fundamental discussion, see Kieserling (1999, p. 86 ff.).

[3] Beginnings are not self-explanatory and cannot be: Either one gets on well, that is, with plausible arguments, then the chosen beginning becomes the accepted reason – or not.

cess of sociality, not in the sense of harmony, but of connectivity. "We are in the picture when we perceive that others form a picture of how we form a picture (of them)" (Hörisch, 2013, p. 15). People know what to do with each other, to whatever good or bad end, as soon as their mutual expectations complement each other to some extent, even if it is only that they speak the same language; it does not have to be love, i.e. the mutual expectation of always having one's own unspoken expectations fulfilled by the other. It is not even a matter of factual consensus, but only of the willingness to acknowledge that others may have different expectations.

"You Can't Not Behave"

The primary form in which sociality becomes practical is interaction, understood as an encounter in which persons who are "within earshot and their bodies within reach" become "perceptible to one another and thereupon begin to communicate" (Kieserling, 1999, p. 15).[4] Mutual perception has the effect of observing behaviour, and there is no alternative to behaving: "Behaviour has no opposite, or to put the same fact even more simply: One cannot *not* behave" (Watzlawick et al., 2003, p. 51). If this is so, then once behaviour is observed and understood as communication, the other, more familiar statement also takes hold, namely that in interaction, "however one may try, one cannot *not* communicate. Action or inaction, words or silence, are all communicative in character" (ibid.). Moreover, perception in interaction is potentially holistic, from top to toe, movement, expression, body language, state of mind, everything is on display, whether it is authentic or enacted behaviour. It is the special social quality of interaction that it allows dense perception and direct communication in equal measure. It flows doubly as a source of information because the bodies involved make both nonverbal and verbal communications. "A paradox arises in this context in that the more obedient the body becomes to the will of its 'master' or 'mistress', the less fit it becomes as a source of information 'spilling the beans' about something the latter would prefer to keep secret" (Hahn & Jacob, 1994, p. 153).

[4] At this very early point, we draw attention to the fact that interactions are equally predestined to create violence and to end violence; we deal with the topic of violence in detail in Sect. 5.4. If recipients of violent messages are still capable of acting and reacting, exciting follow-up questions arise; of course also if "avengers" are found.

Interactions as temporary encounters only do not end disastrously if the participants not only allow their own expectations of such an encounter to apply, but also form an expectation of what expectations the others associate with it.[5] Not caring or having no idea whether one will elicit positive or negative reactions, whether one will meet with acceptance, rejection, or outright disinterest, are sure ways to make an interaction a frustrating experience. "Controlling a context of social interaction requires not only that each *experience,* but also that each *expect* what the other *expects of* him" (Luhmann, 1987, p. 33).[6] When I experience the behaviour of others, it is already too late,[7] I no longer have the possibility to adjust to it in advance and to align my own behaviour, as far as I consider it appropriate, with it. Fluid coordination, frictionlessness in interaction, but also dissent and conflict need the expectation of expectation. *From the primary form of sociality, from interaction with its reciprocally interrelated expectations, we want to develop the function and stubbornness of play.*[8] This also introduces perception and communication as basic elements of play. There is no communication without perception, but perception without communication, ludic actions are only possible on the basis of perception, even with self-perception at the centre, for example throwing a ball against the wall and catching it again.

Expectations can be confirmed or disappointed, they are not certainties but assumptions, they are contingent. Since this contingency applies to mutual expecta-

[5] Social systems theory understands an expectation to be selected meaning. "Meaning is the ordering form of human experienc" (Luhmann, 1971, p. 61). In this form, the currently intended meaning and other possible meanings in the background occur together in the foreground.

[6] "One can see quite well from this consideration, moreover, how mistaken it would be to see social order as a restriction of a supposedly natural freedom of the individual. Both, freedom and restriction of freedom, arise in the first place where social contacts have to be ordered and the problem of double contingency has to be solved" (Kieserling, 1999, p. 95). From a non-systemic perspective, Klein (2010).

[7] Again the reference to violence: if it is not only threatened, but exercised, it is the least reversible behaviour, a situation of forced inevitability arises.

[8] The theoretical background framework is provided by the concept of social differentiation. However much the terms vary in social science discourse, it is no longer conducted without a notion of differentiation. For modern society, we subscribe to the notion that understands the autonomy (not autarky) of the major functional fields such as the economy, politics, the public sphere, science, etc. as functional differentiation, and the distinctions between interaction, organization and these very functional fields as social differentiation.

tions, one speaks of double: “All experience and action related to other people is *doubly* contingent in that it depends not only on me, but also on the other person, whom I must conceive as alter ego, that is, as free and as capricious as myself” (Luhmann, 1971, p. 62 f.). Interaction includes a potential of indeterminacy and uncertainty, but also a reservoir of predictability and reliability, otherwise it would have to sink into bottomlessness.

Interactions Are Socially Framed

Expectations do not fall from the sky. They experience a diverse fate in interaction, are surpassed, fulfilled, disappointed, corrected, held in counterfactual. They are invoked and actualized in interaction, but they pre-exist and persist, however modified, afterwards. Interaction is not a presuppositionless event; theoretical work, however, cannot take into account all the conditions of emergence and existence of the object of its observation, because it would then have to explain the whole world every time. From a sociological perspective, there are two presuppositions that are particularly important to consider as environments of interaction, namely society and persons.[9]

Not only in politics, but also in sociology, interaction and society are not infrequently played off against each other, for example in the way that social guidelines (morals, norms, laws) would restrict the possibilities of the interaction partners too much; or, conversely, that anarchically rampant interactions would endanger social cohesion. The important point is, both interaction and society need their difference from each other.[10] Interactions are a consequence of sociality, “society, however, is itself the result of interactions. [...] It is not a god. It is, as it were, the ecosystem of interactions” (Luhmann, 1984, p. 588 f.).

That is, interactions are fundamentally socially framed, yet they can write their own history with the topics they choose or disallow, with the mood they create or do not allow to arise. Interactions enjoy the advantage of allowing their participants to thematize their difference from society and to choose whether to go more their own way and give free rein to their ideas, or whether, for lack of time, convenience, or prudence, to adopt off-the-shelf behaviours, to make broad, conventional messages many times over. “Within the interaction, ego and alter can be more oriented

[9] The argumentation here moves on the systematic level. Historically, the third relevant interaction environment, especially sustainable in modern times, is the organization.

[10] Well informed and more precise on the difference between interaction and society: Meyer (2015).

toward society or more oriented toward the interaction, and both know this about themselves and each other" (Kieserling, 1999, p. 99). It can only be a matter of more or less, not an either/or. The salesperson who succumbs to the attractiveness of the customer in the interaction may not gift her the chosen garment without paying for it out of his own pocket.

Lighthouses of Expectation

There is a social form in which society is particularly insistent in demanding that generally established expectations be met, that is, in asking individuals not to be guided by their own arbitrariness in interaction. It is known as the *institution*.[11] It is not by chance that the formulation suggests itself here, institutions deny interactions leeway. Brought back to its social core, institutionalization means that certain expectations function like a kind of lighthouse to which all, or at least most, orient themselves, without expecting this lighthouse to move, to accommodate divergent or changing individual expectations. "Whoever wants to expect against the institution has the weight of a presumed self-evidence against him. He has to thwart tentatively assumed bases of behaviour that others had already openly embraced. He thus attacks self-representations and becomes uncomfortable, if not dangerous" (Luhmann, 1987, p. 69). Those who want to go further and question or attack an institution must succeed in "occupying the centre of common attention – it is not enough to murmur one's reservations to someone present or to make fun of them after the situation. [...] The attacker must find the right word, the thought that will unhinge the institution. He must procure reasons against it and, in most cases, also provide a substitute proposal. In doing so, he cannot fall back on concrete experiences and probations, but only on abstract ideas, not on lives already lived, but on pale possibilities of otherness" (ibid.). We will see towards the end (under Sect. 7.4) how changed communication relations, in this case due to digitalisation, turn institutions, for example the printed daily newspaper, the mass commodity, the so-called normal employment relationship, conventional financial institutions etc., into "play material".

[11] Other forms of generalized expectations are roles, norms and values, each with different scope and liabilities.

What Is an "Outrageous Person"?

Like the interactions themselves, the persons involved in them are always already *in* society. That is why we also speak of persons, that is, not of people as generic beings, but of their socialized form, in which they prove themselves (rightly or wrongly) as participants in interactions and thus in society. For other persons to expect my expectations, my possible behaviour must not be wholly unpredictable. Interaction requires its participants to limit their behavioural repertoire, to "carefully dose the surprise qualities of their behaviour accordingly," including the pressure to "remain who one had pretended to be" (Luhmann, 1995, p. 149 f.). Being perceived disciplines, it implies social control. Physically, mentally, and socially, much less is possible in the particular interaction than is conceivable in terms of behaviour as a whole. An "outrageous person" fails or refuses to recognize this need to limit their behavioural options; at worst, to the point of insanity.

Modern society, for example, with its individualized persons, is characterized by expanding behavioural boundaries.

> More and more individual behaviour is released, and it is all the more important not to let it be seen that one sees through the other's self-presentation as social cosmetics. Tact becomes the crucial regulative, humor (preferably in self-application) developed and allowed as an outlet. The highest norm of conversation is now to give the other opportunity to please as a person, which the other, one hopes, will repay with appropriate reciprocation. (ibid., p. 150)

The flip side of modern behavioural diversity, which can be lived out reciprocally and must be endured, is a separation into front stage and back stage, as vividly described by Erving Goffman.

> In the service industry, for example, customers whom one treats respectfully during the performance are ridiculed, laughed at, caricatured and insulted when the performers are backstage [...]. Thus, in the kitchen of the Shetland Hotel, guests were given disparaging secret names; their voices, expressions, and gestures were closely imitated for amusement or to criticize them [...]; their requests for minor services, when out of sight and hearing, were answered with grimaces and curses. Their insults were counterbalanced by the patrons, who in their own circle described the staff as slovenly swine, primitive types, and money-grubbing beasts. (Goffman, 1983, p. 156)

The person, as can be pointed out somewhat flippantly, is the socially capable being who, as a human being, may go overboard from time to time, but then finds his

way back to social compatibility.[12] At this point we can already see that a "room for manoeuvre" is opening up here, but before we set our sights on it, it is important to note that before any room for manoeuvre there is a normality as its starting and reference point.

Normality: A "Temporary Solution in Perpetuity"

Interactions occur first and foremost within the framework of normality. The degree of certainty as to what is to be considered normal fluctuates. "'Normal' is not an arbitrary 'everydayness' imagined across time and available more or less at any time, but only the respective result of specific processes of *normalization* [...]" (Link, 2013, p. 359). However differently normality may present itself to others, however differently it may turn out at other times and places, however much it may be "provisional in permanence" (ibid.), without a presumption of normality, sociality cannot sustain itself. As a "signal, orientation and control level" (ibid.) on the user surface of reality, a notion of normality is indispensable, because otherwise no complementary expectations can be built up and stabilized; this can be felt when one moves in a foreign social environment, when one is on the move interculturally.

However, it would be wrong to reduce sociality to its normalities. The very use of the term "normal" points to another side. Without a contrast, without a difference being marked, normality would not be seen either. Whatever may be meant by the other side in the case of normal, it is considered not normal. And it is one of the particularly exciting questions what a society understands by non-normal, how it evaluates and treats it; for example, which non-normals are only visited in institutions or can live as free and equal. Society, one might summarize, is a sum of normalities and non-normalities. How does the game come into play now?[13]

[12] Luhmann emphasizes "that no safe paths of knowledge lead from the person into the depths of the psychic system, but that all attempts not to be satisfied with the person, but to really get to know another, sink into the bottomless pit of what is always possible in a different way" (Luhmann, 1984, p. 430).

[13] We interrupt the development of the concept of play at this point in order to illuminate some theoretical background in Sect. 2.2. Depending on the extent of theoretical interest, the reading can also be continued directly with Sect. 2.3.

2.2 Theory Excursus: The Game, the Players and the Social Form of Action

Markus Rautzenberg draws attention to the fact that for Hans Georg Gadamer (1965, p. 97 ff.) "the game is consistently conceived as independent of the actors involved; a thought diametrically opposed to a theory that thinks of games primarily in terms of interaction" (Rautzenberg, 2018, p. 270). Apparently, as Gadamer proves, one does not need to be a systems theorist to ask about the functional logic of games independent of the motives, intentions, and abilities of the players. That such a view is contrary to the notion of interaction is a statement by Rautzenberg that makes it clear that action theory and systems theory continue to confront each other in an unresolved controversy in the social sciences with relatively little understanding.

Ultimately, the social sciences are always concerned with being able to explain human action. How to better succeed in understanding social action is the point of contention that Niklas Luhmann has proposed to resolve – we do not know a better one.[14] He emphasizes "the limits of the possibility of psychological explanation of action" and says, "Observers can very often foresee action better on the basis of knowledge of the situation than on the basis of knowledge of the person, and accordingly their observation of actions often, if not predominantly, does not apply at all to the mental state of the agent [...] and yet, in the everyday world, action is attributed to individuals. Such strongly unrealistic behaviour can only be explained by a need for reduction of complexity" (Luhmann, 1984, p. 229).

Communication and Action Interact

The theoretical conclusion forms a foundation for Luhmann's observations and descriptions of modernity. "At the end of the 20th century, however, we are in a situation [...] in which we would have to understand the self-dynamics of the social as such, and this independently of the question of what people think and consciously experience in the process in terms of concrete empirical individuals" (Luhmann, 2004, p. 155). Assuming this, Luhmann recommends distinguishing between, on the one hand, the *self-constitution* of sociality, which happens through

[14] While theories of action usually argue with personalizing causal attributions and anthropocentric semantics, systems theories refer to structural logics and treat people as the environment of social systems. "That systems theory excommunicates human beings has been said ad nauseam, refuted, said again, and refuted once more" (Fuchs, 1994, p. 15).

communication, and, on the other hand, *self-observation* as well as the *self-description* of the social, which is expressed in actions (cf. Luhmann, 1984, p. 241). "The most important consequence of this analysis is: *that communication cannot be directly observed, but only inferred.* In order to be observed, or in order to be able to observe itself, a communication system must therefore be flagged as a system of action" (ibid., p. 226). Which is why it is nonsense to position communication and action against each other, "both, then, action and communication, are necessary and both must continually interact" (ibid., p. 233).[15]

It is not only possible, but also appropriate, to start from the action, in our case the play action, to ask about its psychological and physical preconditions and to come to the conclusion that play should be seen *primarily* as a physical and/or psychological phenomenon. Hans Scheuerl (1990, pp. 102–112) describes the widespread tradition of speaking of play as a manifestation of the life instinct, as the "dawning of a first instinct," the acting out of an excess of nervous energy. "The id plays. And it plays a great deal [...]" (Rothacker, 1965, p. 42).

> If one sifts through theories of play, one usually encounters the decision that 'real' play is a psychological function [...]. This psychological setting itself, in turn, is attempted by many theorists to be explained in purely physiological terms: it may be the mere accompaniment of a smooth functional process, it may be based on inherited instinctual impulses or unconscious drive mechanisms, it may also result from certain constellations of situational stimuli and reactions. (Scheuerl, 1990, p. 102)

Such approaches to play remain underexposed from the perspective chosen for this book. Social systems theory is aware of the fact that it requires natural, a sky above one's head and solid ground under one's feet, physical and psychological conditions to act and play respectively. But – this is the prejudice of a sociological perspective – it considers the social function of play to be more interesting and relevant.

[15] In the words of Dirk Baecker: "We can describe actions as simplifications of communications made available in the social system of communication for the purposes of self-description and self-control. [...] The act simplifies the complex, in itself highly reversible, perspective-flexible communication event, which is symmetrical between information, communication and understanding, to a communicative act (speech acts), which on the one hand builds asymmetries between the agents (communicators and recipients of communication) and on the other hand builds irreversibilities into communication through the time binding of acts" (Baecker, 2007, p. 41 f.).

Structure and Plot

Sociality shows itself as an action that is carried out by actors. But one does not sufficiently understand these actions if one only asks about the motives and intentions of the performers, because the actions are based on a social structure that has grown communicatively and which makes specifications.[16] "Observers can very often predict action better on the basis of knowledge of the situation than on the basis of knowledge of the person [...]" (Luhmann, 1984, p. 229). That customers pay at the supermarket checkout is a structural specification that is not interested in the concrete customer, whether he is young or old, poor or rich, man or woman. This structure, in turn, can only come into effect, can only become visible, when actual customers act (pay) at the checkout. Observers can of course be interested in what kind of customers they are, how difficult it is for them to pay, which goods they have chosen and why, observers can ask a thousand other questions about how exactly paying customers act.

Social structures are best thought of as compositions of entrenched collective expectations into which individual action is bound and which are difficult to bypass. In their hardest form, we encounter them as institutions (see Sect. 2.1). Structures stand out when they get in the way. Since they apply collectively (the collective can be, for example, a family, an organisation or even a game), they cannot be changed individually, but in principle they can be changed. In the normal course of events, structures are carried out in the process of action with tacit self-evidence and are thus confirmed. They function like a rope to which one can orient oneself and hold on, but which also binds and restricts the radius of behaviour. The sociological concept of culture is situated in this context of collective self-evidence; this is worth mentioning because "other cultures, other games" is a common topos (see Sect. 4.1).

It Doesn't Depend on Müller and Maier, But It Won't Work Without Them

It can also be explained using the game of chess: How the players move a pawn, a rook or a bishop can only be understood if one knows the structure, the rules of chess. What the players are thinking, what tactics they are using and how they feel about it is irrelevant, but not whether they are clutching their heads or clenching

[16] Anthony Giddens (1997) with his structuration theory and Uwe Schimank (2005) have dealt with this problem constellation constructively and vividly.

their fists. In order to explain which process is going on in detail, how a game actually proceeds, the qualifications and current condition of the participants must also be taken into account. What would poker be without the poker face! The participants have a share in the game, especially in its course in detail, but to reduce a game to the actions of its participants is a view that leaves crucial things misunderstood.

It is also true for interaction that its functioning can be comprehended independently of the interactors and must be comprehensible. It does not depend on whether Mrs. Müller or Mr. Meier is carrying it out – it just does not take place without the actions of actors. This action is what one sees; its structural preconditions are not sensually perceptible, but cognitively analyzable, errors included.[17]

The theory of social systems, from which we draw inspiration, even if we adopt its language only rudimentarily and do not explain its artificial architecture, tries to get to grips with this problem of analysis with the distinction between system and environment.[18] Accordingly, she understands a society not as a collection of people but as a network of communications – of communications that occur in mental, physical, artificial and natural environments: without their environments there is no communication. In the same way, she understands interaction as communication among those present, without having to know who is present where, why and for how long, what Mrs. Müller is thinking and Mr. Meier is feeling. The interest of everyday observation, on the other hand, concentrates on the interactors, whether, when, where and for how long Mrs. Müller and Mr. Meier... and action theory follows on from this, collects data, tries to shed light on matters with interviews and statistics.

[17] The circle closes if we start with Neurolinquistic Programming (NLP): "Every thought, every memory and every imagination consists in its 'deep structure' of sensory information, which is processed in parallel in the different sensory representation systems. With the help of words and sentences, people can communicate about everything they see, hear, touch, feel, smell, taste. [...] NLP thus posits that understanding language without associated sensory representations is impossible on principled grounds" (Walker, 2019, p. 87). Language use refers to how much sense and sensuality are coupled. Words and sentences very often refer directly or indirectly to visual ("it looks quite good"), auditory-sound ("that sounds good"), kinaesthetic ("I have a good feeling", olfactory "she had a good nose for it"), gustatory ("that was top-notch") (examples according to ibid., p. 88).

[18] The designation system theory is actually wrong, because it is a system-environment theory. In this context, the distinction between system and environment is "the same and not the same, depending on whether one, as an observer, sees the system in an environment or the system, which itself is oriented towards an environment" (Luhmann, 2005, p. 85) For the classification of social systems theory, see also Stichweh (2010).

Ludic Action in Their Environment

The game takes place in its environment or not at all. Therefore, the practice of play, every empirically observable game, is always already characterized by a double fit, namely adapted both to the functional logic of the game and to its environment. This double character is usually also reflected in language: just as the ball occurs as a water ball and as a volleyball, so the game occurs, for example, as a board game, a team game and a play. With this approach, the analytical task is twofold: on the one hand, to understand the game as a game, to explain its self-constitution, and on the other hand, to describe the practically executed game in its environments.

The theoretical design we apply is based on play as a form of action. On the one hand, we thus follow Gregory Bateson's consideration, as summarized by Bo Kampmann Walther, "that play is not the name of some empirical behaviour, but rather the name of a certain *framing* of actions" (Walther, 2003). A frame of action excludes more than a single action, but rather – and here lies the particular accuracy of the concept of action for play – sequences of experience and communicative as well as operative action. Experience and action can be understood as the two basic forms of behaviour.

Experience and Action

The way of being present at an event, the participation in whatever event, can be described from these two perspectives, experiencing or acting. The difference between experiencing and acting "is generated by processes of attributing selective performance" (Luhmann, 1991a, p. 68). Behaviour is observed as experiencing when what occurs is attributed to the environment rather than to behaviour; it is conceived as acting when behaviour itself is held responsible for the event. Compared to mere experience, action is considered more meaningful because it is always experienced; in this respect, action is the more interesting, but also riskier behaviour.[19]

[19] On the other hand, in modern society, and even more so in digital society, the possibilities of experience with the help of communication, transport and production technologies have expanded to such an extent that, in comparison, the possibilities of action, including gestures of helplessness and powerlessness, have receded. One could follow this up with the thesis – and this is no more than a feuilletonistic speculation – that play and violence become the two forms of action that make action appear powerful.

This understanding of experience and action can be expressed much more easily as soon as one follows everyday perception and does not speak abstractly of behaviour, but personalizes actors who behave this way or that. Then it is easy to understand that it makes an obvious difference whether someone experiences an event, enthusiastically, joyfully, sadly, or whether someone triggers and drives the event by his own action – and thereby experiences his own action as successful, ineffective, failing. This two-sidedness of behaviour can also be found in interaction, but it is more pronounced in actions. In actions, the difference between experiencing and acting becomes more noticeable, because their execution not only allows for multiple changes between the two types of behaviour, but also because in doing so, it separates itself from the flow of behaviour, sets a definite beginning and determines a definite end.

Implementation, Performance, Enforcement

Our impression is that actions as social events are not a sociological topic. There is talk of political and artistic actions, but as a sociological term, action leads a decidedly shadowy existence compared to action and to interaction. One exception that has reinforced our decision to use the term action is the chapter "Where the Action Is" in Rituals of Interaction by Erving Goffman (1986, pp. 149ff). It begins with a play situation and Goffman explicitly refers to play in his definition of the term: 'By the term *action* I mean actions that are momentous and uncertain and undertaken for their own sake'. [...] *Action* seems to be most pronounced when all four phases of a game – coordination, decision, release, and conclusion – occur in a period short enough to be contained in an uninterrupted strain of attention and experience" (ibid, p. 203). Goffman concludes the chapter with this note: "When people go where *action* is, they often go to a place where it is not the risks taken that increase, but the risks of having to take risks" (ibid, p. 292).

We conceive of action independently of actors, namely – parallel to Luhmann's concept of communication (cf. 1987, p. 191 ff.) – as a unity of the three selections participation, execution and completion. Actions can be observed in terms of which of these selections is assigned the leading role in the concrete situation. In each case, the current leadership lies with the one that causes particular problems. Is participation problematic because of a lack of actors? Is there a lack of execution? Is the conclusion threatening to fail, although it should be a crowning one?

Far from possessing the analytical potential of the concept of communication, the concept of action nevertheless offers possibilities for development. Forms of action can be distinguished, for example, according to whether the primary sense

Table 2.1 Classic variations of the social form action

Execution – type	Participation – type	Conclusion – type
Implementation	Voluntariness	Repetition and new beginning
Performance	Qualification	Grand finale
Enforcement	Mobilization	Accounting, fixed

Source: Own representation

of *execution* lies in *implementation, performance* or *enforcement.* This in turn has consequences for the forms of participation and conclusion. For the moment, it is only a matter of justifying the usefulness of the concept of action in the context of play, not of working fundamentally on the concept of action here. Some observations can be sketched in keywords without effort; Table 2.1 provides an overview.

If the purpose of the performance lies in its *execution,* without any further purposes or goals playing a role, it can be assumed that the participation is voluntary and that the execution provides an incentive that suggests its repetition. Obviously, we are on the trail of the game here.

If the execution has the primary character of a *performance,* i.e. if it aims at spectators, it requires a corresponding quality of the participants. Its sequences are staged with the audience in mind, arranging the conclusion as a climax to encourage the audience to attend the next action. The phenomenon of performance characterizes many actions, but it is not action-specific: interactions that are performed have something theatrical about them, sex that seeks an audience is pornography, sport becomes a spectacle.

As *enforcement*, the execution of the action has a goal of success for which mobilization takes place, it can become a campaign, a struggle. The conclusion requires to check to what extent the goal has been achieved. There is reason to celebrate because there has been success, at least because everyone has done their best. The differentiations of the character of the execution show that there are fine transitions and many mixtures, the action therefore exists in manifold variations.

Distinctive Beginning, Defined End

In any case, the action is a social form that is characterized by the fact that its beginning is explicitly marked and that it is precisely not oriented towards arbitrary continuability. The decision to participate implies the willingness to conclude, the knowledge of an end accompanies the beginning, however unwelcome, however externally imposed it may be in individual cases. This commonality of a distinctive

beginning and end is also likely to feed the metaphor of life as a game. Communication is structurally programmed quite differently. Since it imposes a yes or no option following understanding, it drives to continuation; when it began and when it will end is not so easy to see. As a form of action, play is committed to a defined beginning and to termination. A conclusion generally opens the possibility of participating in another, a new action, but it does not necessarily aim at it. The solution that the game offers is called repetition. No other word is heard more often in the context of the game than "again," no hope dies as late as "new game, new luck." This is the connection point for the addictive potential[20] (see Sect. 6.2).

> Repetition, along with movement, is the constituent property of play, and it is in repetition that the phenomenon of play is perhaps most strongly revealed [...] it is astonishing that there is in fact no play without repetition. (Plaice, 2009, p. 364)

However, it is not about the repetitive character alone, but also about the new beginning inherent in a repetition of the action. "The game begins" and "the game is over" are indispensable phrases said about a game. The fact that the end of the play has to be set more often from the outside, while the game, like many other things, has already settled this before the start, makes a difference between the two types of game. In the computer game (see Sect. 5.4), "game over" often lights up when the avatar, the virtual form of existence of the player, loses its last life. But the end is only the other side of the restart.

Play as Part of a Whole

Finally, the way of speaking about the functional theory of the game requires an explanation. Functional analysis is a theoretical technique, "it relates given things, be they states, be they events, to problem viewpoints, and seeks to make understandable and comprehensible that the problem can be solved in this way or in another way" (Luhmann, 1984, p. 83 f.) In very general terms, functional analysis can be characterized thus:

> To raise the question of what function something fulfils is to understand it as part of a whole in which – from the perspective of an observer – it solves a certain task that could possibly also be solved by other elements, which then count as 'functional equivalents' of the analysed partial element. (Schneider, 2004, p. 54)

[20] Breiner and Kolibius (2019, pp. 107–155) provide an informative overview of the topic of gambling addiction with a focus on computer games.

We see the great advantage of the functional method in the special quality with which general statements about the object of investigation are obtained. "Generalities can be trivial. If one wants to control the fruitfulness of generalizations, one must lay out the terms of the most general level of analysis one uses not as feature terms, but as problem terms" (Luhmann, 1984, p. 33). It is not comparing games with each other and looking for similarities and analogies that leads to a viable concept of play, but rather exploring the question of what problems play is a solution to.[21]

Theory, seen in this way, is thus "not the attempt to find *one* explanation for the diversity of phenomena, but quite the opposite, the attempt to identify a principle (understood as a sociological problem) with the help of which a diversity of explanations can also be given for the diversity of phenomena" (Baecker, 2007, p. 19 f.). We relate (in the next section) the social phenomenon of play to the problem of dealing with the unexpected and present it as *a* solution to this problem. "The fruitfulness of the functional method and the explanatory value of its results depend on how the relation between problem and possible problem solution can be specified. To specify means to specify narrower conditions of possibility [...] (Luhmann, 1984, p. 84). Thus the task is formulated. The challenge is primarily to conceive the problem. This was prepared in the previous Sect. 2.1. Now the ludic solution is at hand.

2.3 Self-Liberation: Temporarily Acting Without Commitment As If

"We do not know the boundaries because none are drawn," Wittgenstein (1984, p. 279) says of play, while at the same time all who describe games see the drawing of a boundary as an essential feature, and play spaces are more often characterized "as strictly circumscribed and regulated areas of meaning of social reality" (Thiedecke, 2008, p. 297). How do the obvious distinctiveness of the individual case and the apparent boundlessness of the overall phenomenon fit together?

Interactions take place, this was our last observation before the general theoretical reflection of Sect. 2.2, within the framework of some social normality that establishes itself more or less stably as a "level of signalling, orientation and control" (Link, 2013, p. 359). What falls within the scattering range of normality and

[21] An example of conceptless stringing together of possible characteristics of play can be found in Cermak-Sassenrath (2010, pp. 87–164).

where it is left can be regulated with varying degrees of bindingness and rigour; in any case, it is a matter of a relevant markable difference.

Expect the Unexpected

If normalities can be understood as the generally expected, then the unexpected appears as their other side. To understand the expected and the unexpected as simple opposites would ignore the possibility of expecting the unexpected. So it is about the unexpected in its double meaning, what one does not expect and what cannot be calculated. "Expect the Unexpected" is not only the title of Tomi Ungerer's political cartoons, it has been a well-known as well as normal slogan for several decades, for which the Google search engine displays more than 200 million hits in July 2019. But this normalization of the unexpected is itself a feature of contemporary social conditions (see Sect. 7.4). Integrating the unexpected in some way into society is a general, historically overarching challenge – which on the one hand is nothing unusual, but on the other hand can become a problem in very different ways, as we will show in Sect. 4.2.

We encounter the very ordinary in the unexpected in communication. The information component of communication[22] also needs something unexpected along with the known, which establishes connectivity, whether in the mild form of the not yet known or in the sharp form of the sensational, because without the unexpected the communication would be a mere repetition and therefore without information content. "Information that is repeated in meaning is no longer information. It retains its sense in the repetition, but loses its informational value" (Luhmann, 1984, p. 102). The care generally recommended in choosing what to communicate and what not to communicate points to the fact that here lie potentials and lurk problems that – a right or wrong word at the right or wrong time to the right or wrong people – have factual, temporal and social dimensions.

Dealing with the unexpected is a fundamental social problem that comes in a double version: as a threat, which is its sinister side, and as a promise, which is its enticing side. The game is a solution to both versions.

> Play is a response to lures and threats of the unexpected.

[22] For more detail on the concept of communication, see Sect. 3.1; we take the concept of information from Gregory Bateson (1985, p. 582): "What we actually mean by information – the elementary unit of information – is a difference that makes a difference [...]."

This does not yet comprehend play, but it does capture its central moment. Play reacts to, seeks out and produces the unexpected. This is what makes it closely related to learning, and therein lies the general learning potential of play: the natural closeness between play and learning that is repeatedly emphasized comes from dealing with the unexpected, which is indispensable for ludic action. Where surprises are in danger of being lost because the course and outcome of the game are predictable, for example because very bad players meet much better ones, the game is usually not played. Where games take place in an organized way, precautions are taken to ensure the unpredictability of their outcome as far as possible by regulating participation. Typical in this context is the division into classes with opportunities for promotion and relegation.

Numerous other indications point to dealing with the unexpected: Serious games play through the unexpected in order to be better able to deal with it in normality. In games, the unexpected is created in order to increase the tension or to surprise the opponent. Take such a prominent ludic action pattern as tennis: players intent on "game, set, and match" will try to do the unexpected within the rules. How many pins will fall over,, how many trumps do others have, which moves are to be expected, where will the ball lie and the machine stop, how will the dice fall... it is always the open, the uncertain, the unexpected around which the ludic action revolves. At the same time, the risk involved in dealing with the unexpected remains controlled, because – here we anticipate – ludic action takes place outside normal everyday events, to which it has no direct connection and for which it therefore has no or only very limited consequences. Whether a game ends well or badly remains without consequence – as long as it is not also something other than a game.

A Presuppositional Undertaking

In interaction as a primary social form, the unexpected is initially the improbable because, as shown, it is oriented towards the expectation of expectations. It is unlikely, but not excluded, that interacting persons come up with the idea of creating a free space for the unexpected beyond normal behaviour, with which they seek the encounter or which they generate themselves. It is unlikely, but not impossible, that they will break away from personal habits and social patterns of behaviour, redefine their ways of seeing, speaking and acting and in this way endow them with stubbornness, be it in the light sense of their own meaning, be it in the heightened

sense of self-reliance, be it in the massive sense of resistance.[23] To step out of normal behaviour of one's own accord in such a way that both a problem-free return and the ever new exit are possible – in the repetition lies the repetition, in the new the beginning – is a presuppositional undertaking. Under what conditions can it succeed?

- You can't force anyone to act in a self-determined way. That is why those involved participate *voluntarily* or not at all.
- Insofar as speech and action occur in the self-created zone of abnormality that are also known and practiced as normal behaviour, they must be performed in the mode of acting as if. Otherwise, known factual consequences of such behaviour would occur, a bite would hurt.
- Those involved, if they do not want to be declared crazy, will have to make it clear to the outside world that they are not serious. Their momentary behaviour must be marked as self-contained. It *must* not *be* connected with what happened before, and *must* remain in*consequential* to what will happen after, but it *should be* repeatable. "To play is to be in the present." (Maturana & Verden-Zöller, 1994, p. 159), because there is a before and after in play, but not *for* play. The risky handling of the unexpected takes place, as it were, in a protective zone: The game gets out of control under control. "Games leave no*** traces and thus have no memory. Every game forms a new beginning" (Krämer, 2005a, p. 15).
- Exceeding normal behaviour does not mean leaving society. Non-normal behaviour is also subject to observation and commentary, and must even reckon with both happening particularly intensively.
- A declaration of non-bindingness is always indispensable when the interacting persons *publicly* depart from normality. If they do it secretly, a typical case being the formation of a criminal association, completely different conditions apply. To publicly denounce normal behaviour can only go well as an episode, that is, the beginning must be marked ("the game begins"), for the exit the game itself must find an end or allow itself to be put to an end.
- If it is to be more than a temporary different way of dealing with oneself or with materials, that is, if it is to be interactive, the participants will not be able to get past the elementary prerequisites of sociality. They will have to build up expectations. If stability and repeatability are to be guaranteed, structures will emerge, even rules will be created. These are then invented rules based on free decisions, which the participants either agree on themselves or find and follow of their

[23] In this third meaning, Negt and Kluge (1993) dedicated a three-volume publication to Eigensinn.

own free will. Establishing patterns, adopting action formats, being able to start anew but not having to reinvent everything every time, makes it easier and more comfortable even in zones of abnormality.

By fulfilling these conditions, interacting persons agree – to play. A game, a ludic action, takes place if voluntary participation, non-commitment, acting as if, dealing with the unexpected, a temporal, often also local marking are always given anew.

> Playing means, in the mode of a noncommittal acting as if voluntarily, temporally, often also spatially marked, to deal again and again with the unexpected.

A game only comes into being when these components come together. The ludic action proves to be a sophisticated composition, see Fig. 2.1.

In the words of Huizinga (1956, p. 20), much of this composition can be found: "Viewed in terms of form, then, play may be summarily called a free action, felt as 'not meant that way' and standing outside ordinary life, and yet capable of completely engrossing the player, to which no material interest is attached and with which no benefit is acquired, which takes place within a specially determined time and space [...]." What remains underexposed in Huizinga is how to deal with the unexpected. Section 4.2 explains how the change in the function of the game can be seen precisely in the way it deals with the unexpected: protection from the unexpected in tribal society; flirting with the unexpected in the well-ordered cosmos

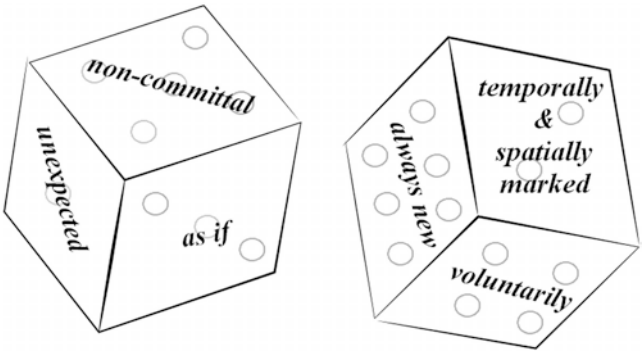

Fig. 2.1 The components of a game, shown in a cube shape. (Source: Own representation)

of the upper classes of class society; invitation to deal with the unexpected in modern society; escalating realization of the unexpected in digital society.

In the social conditions of the early twenty-first century, which have a conspicuously expanding occurrence of play, the statement that play is improbable must reap contradiction. It should therefore be emphasized once again, and in part repeated, how little it can be taken for granted that ludic actions can take place.

- In addition to everything else that needs to be done, there needs to be time free for noncommittal acting as if.[24]
- It requires an understanding with others, or at least with oneself, to engage in a certain noncommittal doing-as-if that goes beyond expected normalities.
- A particular way of performing the ludic action must either exist as a pattern (Game) and/or be created in the game itself (Play).
- A beginning must be set, an explicitly marked end found, a possibility of repetition opened up as a new start.

The concept of play, as it now stands and guides further analyses, is based on the distinction between play and normality. "Obviously, the counter-term colors the side of the distinction that is at the center of attention" (Luhmann, 1991b, p. 70), which is why science finds itself called upon to observe its distinctive signifying for what other side it is operating with, knowing full well that in doing so it gets caught up in a never-ending story. The operation of distinguishing could only reach a stopping point if a unity of the distinguished could be found that is not itself again a distinction. But because even a unity can only be designated via distinction, there always remains – at least from the perspective of operational constructivism – a "blind spot" "presupposed in every observation as a condition of its possibility" (ibid., p. 65). To designate the other side of the proposed concept of play can be no more than a scholarly invitation to critics.

[24] A manager of the Lego company: "The biggest competition we are experiencing, however, stems from the fact that children's time is becoming more and more scheduled" (quoted in Kaminski, 2010, p. 221).

2.4 Self-Restraint: Qualities of Experience in the Nothing-Is-Impossible

So far we have described what is liberating about the game. But what is the captivating thing? No one will turn their back on the normal course of things, no one will move from the normal conversation of an interaction into a ludic action without expecting something from it. The possibility of freeing oneself from social ties without abandoning them, of shutting out expectations, demands, impositions of others, and then re-engaging without anything having changed except the time that has passed, can be quite promising. But temporary exclusion is also known by other names such as break, time off, vacation. The exclusion aspect alone – even if it is usually strongly emphasized by critics of the game – cannot explain the attractiveness of ludic communication.

To play is to deal with threats and lures of the unexpected in the mode of acting as if temporarily voluntarily, this is how we have summarized our analysis. To reconstruct what is captivating about play requires more than looking at its individual components; it must be understood as a composition.

Suddenly No Cat Is a Cat

Communication about living beings, events and things differs from perception primarily also in that it can speak about living beings, events and things in both a yes and a no version. Where there is nothing, perception has no chance, while communication can quite naturally speak about no cats. One can assume "that this yes-no coding is related to the continuability of communication and is one of the essential ways to guarantee this continuability in any situation" (Luhmann, 2005, p. 100). To make an existing cat out of no cat, to conjure up a cat's body where none can be perceived far and wide, however, communication does not succeed either – unless it takes place as a Ludic one. Then we can pretend that a cat is suddenly in our midst and that we have to pay attention to how it behaves. The game is free to decide what it accepts as realities and what it does not. The game can say yes to everything and no to everything, turn the toy poodle into a man-eating monster, land bicyclists on the moon, make the dead come alive or let them continue to participate as the active dead.

In the game, a space of possibility is created that, with the consent of the players, is open to everything that the players are capable of mentally, communicatively

and operatively.[25] And, this is an overriding point of view, it is the players themselves who determine which possibilities are played and on the basis of which criteria they decide for or against possibilities.

Experience Orientation

Voluntary participants and self-determined agents practice non-binding action in an open horizon of possibilities as if – what will they do? What they feel like doing. Experience orientation determines the choice of possibilities. Experiencing life happens to everyone at all times. Gerhard Schulze has explored how it becomes an experience. "Experiences are not received by the subject, but made by him. What comes from outside becomes an experience only through processing. The notion of receiving impressions must be replaced by the notion of assimilation, metamorphosis, formative appropriation" (Schulze, 1993, p. 44).

Experiences, Schulze argues, are not simply impressions that experienced situations leave on a person, so that only pleasant-exciting circumstances have to be provided. The provision of situational ingredients – he mentions consumer goods, travel, events, contacts – is usually not enough (ibid. p. 42 f.). However: the impression theory of experience is one-sided, but not absurd. In order not to become one-sided itself, the processing theory of the experience must also leave room for the meaning of the situation.[26] Subject (consciousness and body) and situation work together. As subjective as experiences are, and the huge variety of games bears witness to this, everyday aesthetic schemata are also formed. Schulze identifies three schemata that shape patterns of experience and thus also have consequences for what is played and by whom. Schulze distinguishes between the high culture, trivial and suspense schema (ibid., pp. 142–157), whereby it is important to him that the three schemata do not stand in opposition to each other as alternatives, but rather offer possible combinations from which individuals form their personal style.

> Because of its long tradition, the high culture schema is particularly clearly socially carved out. [...] Words like 'educated citizen', 'intellectual' or 'cultured' have a colloquial meaning that can best be described by what corresponding people do: read

[25] Hans-Georg Gadamer in particular points to the "elementary surplus character" of play (2012, p. 38). Donald Winnicott (1987) has elaborated play as a space of possibility (for the child) with particular thoroughness.

[26] Schulze's theory of experience reformulates at its core the recipient turn of communication theory, which places understanding at the communicative centre.

> 'good' books, think and discuss, write, listen to classical music, visit exhibitions and museums, go to the theatre and the like." (ibid., p. 142 f.) Beautiful experience takes place highly culturally mentally, not physically. Psychological qualities of experience are in the foreground: "transfiguration, immersion, internalization, consternation, meditative calm, being gripped, and the like. (ibid., p. 143)
>
> At the same time, a bundle of everyday aesthetic tendencies can be observed, which knows cosiness as a beautiful experience in the first place and "which can be interpreted as an indication of a 'trivial scheme'. [...In Germany, the traditional symbolic cosmos of the trivial schema includes the roaring stag and the gypsy woman, the songs of the singing club, the traditional costume parade and brass band music, the swaying beer revelry at the Schützenfest, the embroidered sofa cushion, the crocheted toilet paper roll in the back of the car, Lore novels, princely house gossip, souvenirs of all kinds, round trips to the castles of the Bavarian king, the autumn forest wallpaper, the relief of a horse's head on teak wood chased in copper." (ibid., p. 150)
>
> Tension is most clearly expressed in musical styles: rock, funk, soul, reggae, pop, blues, jazz and others. The audience of this music does not only let others show them dynamics, but also practices them themselves. It populates the discotheques, pubs, arcades and cinemas. Going out, being on the road late into the night, changing scenes and people brings movement into everyday life. [...] In the beautiful experience of the tension scheme, the body plays a central role. The physically measurable intensity of stimuli has increasingly become its own stylistic device. Volume, speed, light-dark contrasts, and color effects are often heightened to an intensity where the mere sensory experience already demands one's full attention. (ibid., p. 154)

Beyond such schematizations with quite considerable informational value and orientation content, the question of enjoyment of the game is, on the one hand, easy to answer: "For the enjoyment of the game has – as is known from research on the experience of entertainment, for example in reading or watching television – a great deal to do with the subjective construction of meaning of the recipients or players". (Klimmt, 2006, p. 65 f.) On the other hand, this simple fact that it depends to a great extent on the sensitivities of the respective players makes it so difficult to be concrete and to grasp the experiential qualities in detail, which cause the motivation and the not-being-able-to-let-go-anymore. Scientific research, a compact overview of which can be found in Vorderer (2006), is making great efforts, spurred on not least by the massive economic interests of the games industry.

Entertaining Success

Among the better known explanations are "4 Keys 2 Fun" by Nicole Lazzaro (2004), which she summarizes on her blog as follows: "The 4 Fun Keys create games' four most important emotions: (1) Hard Fun: Fiero – in the moment per-

sonal triumph over adversity. (2) easy fun: curiosity. (3) serious fun: relaxation and excitement. (4) People Fun: Amusement." The four keys open the door to the two key experiences of succeeding and being entertained. "We are motivated to play when it is 'about something'" (Juul, 2015, p. 24). Even when dealing with the familiar, one can fail, but experience it as a nasty surprise. Dealing with the unexpected, on the other hand, raises the exciting question of whether it will succeed or fail from the very beginning. Exposure to this question is a source of Ludic engagement. Intrinsic interest, Zech and Dehn (2017, p. 19) argue, depends "not on success or an external reward, but on the experience of being able to make a difference. Success, therefore, involves the subject in terms of his or her experience of self-efficacy, is a happiness, a faculty of human agency that has set self-determined goals and can realize them." Contrast this with the fact "that success in modern society is nothing more than 'being for others' (Theodor W. Adorno)" (Neckel, 2004, p. 64). Infatuation with success means external dependence, joy in success inner satisfaction. In order for this to arise, it must not be hopeless, but also not too easy.

> It's easy to tell which games my husband likes best. If he yells 'I hate it!' then I know he'll finish it and buy the second part. If he doesn't scream, then I know he'll put it down in an hour. (quoted in Juul, 2015, p. 23)

The second central concept that is explicitly introduced or at least resonates in the background is entertainment. This is hardly surprising, since entertainment has two basic characteristics that also emerge in the context of play – albeit in different ways for participants and audiences – on the one hand, non-commitment and, on the other, an orientation towards experiential qualities. Entertainment, like play, does not aim at connecting action, it is self-sufficient. As a mode of communication, entertainment is concerned with the experiential quality of understanding, with the pleasant experience of the recipients (cf. Früh & Stiehler, 2003). Not only laughing, but also crying or having goose bumps can make one feel well entertained. "'Instructive and entertaining' – 'instructiv et amusant' – became the slogan and selling point of the newly emerging games industry in the 19th century" (Strouhal & Schädler, 2010, p. 15). Nevertheless, the difference remains considerable, whether it is about the ludic experience itself or about the entertainment of an audience. Once the entertainment of the audience becomes the externally imposed purpose of the game, the fun can quickly stop for the players (see Sects. 6.2 and 6.3).

Play creates optimal conditions for positive qualities of experience in three respects. Self-exclusion with the temporary liberation from ties, the opening of a nothing-is-impossibility space, and self-determined action allow unrestricted orientation to one's own experience. These prerequisites enable immersion, the complete absorption in the game, the repeatedly cited flow experience (Csikszentmihalyi, 1965), which makes *World of Warcraft* so much more attractive than, for example, World of Schooling. Experience orientation and emotionality will have to be discussed in a more differentiated way in connection with computer games (see Chap. 5).

Captivated Audience

From the point of view of immersion, both the actor and the spectator role can be observed. Games also captivate audiences. Its representational and performance character is not external to the game. "Play is thus ultimately self-presentation of the play movement" (Gadamer, 2012, p. 39). There is initially nothing special about this representational effect, for in principle all behaviour invites to be observed as a performance, perhaps even to be perceived as a staging (see Sect. 2.2). For "in acting, a representation of the acting person is involved [...]" (Gebauer & Wulf, 1998, p. 10). The staging character applies in a special way to communication among those present. It characterizes interaction that the participants "have both the possibility of representing something (performance) and the possibility of watching it". In every interaction, the individuals are both performers and spectators, and in doing so, they must also "perform watching and, as performers, watching how long the others are likely to accept what he is offering them" (Baecker, 2005, p. 110).

The fact that "staging society" (Willems & Jurga, 1998) could become a scientific descriptive category indicates the importance of this performative aspect (especially for modernity).

The audience question is which behaviour gets attention, whether it seeks it or seeks to avoid it. Because it deals with the unexpected, the game's chances of finding attention are much better compared to normal behaviour. In games, uncertainties, surprises, moments of tension occur more reliably, and the experiential value that excites the players also attracts spectators: Ludic actions are predestined to be presented. Their performative impression may be very strong or only weak, but it

is always there.[27] "The word 'play' seems to act out and perform its meaning, it plays with the speakers and at the same time serves the speakers as play" (Deuber-Mankowsky, 2015, p. 35 f.).

The critical question is when it tips over. The economisation of the game (see Sect. 6.2) is also triggered by its attention value, because it makes both the audience willing to pay and the audience participation saleable to advertising. The effect is that games are trimmed to increase attention, with health- or even life-threatening consequences for participants. The game gets caught in a maelstrom that the French situationist Guy Debord (1978) analysed in the 1960s as the "société du spectacle". "With his insight that sensual spectacles, performed in front of others and eagerly received by gazes, have moved to the center of contemporary society, Debord strikes at the heart of the restructuring of public and private life that has taken place from the 1960s to the present" (Gebauer, 2002, p. 1).

What Kind of Society Are We Actually Playing in?

The attractiveness of the game for participants as well as for spectators comes from the experiential value of the game event, which is fed not least by differences from the expected normal behaviour. For this reason, it is always necessary to reflect on the society in which the game is played and which expectations dominate the respective social normality. In the sense of a kind of compensation theory, this is often pointed out selectively, though not infrequently primarily in a moralizing manner. We do not know of any consistently elaborated analyses that describe such connections.

For modern society, for example, the question arises as to whether it is not precisely the regularity of games that exerts a strong attraction. If (as discussed in Chap. 7) the unexpected is part of social normality, is constantly reproduced in everyday life and thus generates uncertainty throughout, it can be attractive to have simple and clear rules of conduct. "Unlike a football game, for example, where the rules are fixed before the game begins, in the games of 'entering into a love relationship', 'parenting', 'doing one's job', etc., which we have to play every day, it is

[27] "To sound out the family resemblance of 'play' and 'performance' remains a research task; but one thing at least is becoming apparent: from the perspective of a reflection on 'play', constrictions in the concept of performance come to light, which can then also be corrected 'in the name of play'. For the demiurgic privileging and distinction of making, producing and bringing forth associated with the idea of the performative, with which the figure of thought of the 'homo generator' is established precisely for our sign action, can be broken by the experience of play [...]" (Krämer, 2005a, p. 10).

by no means clear which rules of the game are to be applied; they are more often neither overt, nor are they or the criteria for good or bad moves universally binding or unchangeable." (Simon, 1991, p. 144) Straining the game metaphor, however, fails to recognize that the ease of play certainly comes also, but not primarily, from the clarity of the rules of conduct: It is only in play that the behaviour thus directed is allowed to end badly without any problems, because it is *non-binding*.

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The Game Discourse: Consensus, Contact, Counterpoints

3

Abstract

From A for adventure to M for movement to Z for Zero, there is a large number of words that are interrelated with play. This richness of relationships of play is reflected in a colourful abundance of scientific approaches to play. The task now is to anchor the concept of play developed in the second chapter in this ludic discourse, to identify points of connection, to note points of agreement, to name differences, to justify dissent: For example, why the play of waves is not a play of waves, and why a screw does not play even if it has clearance at the expense of its fastening function. Ludic action is described as a pragmatic paradox. Here the triad of the real, imaginary and fictive is augmented by the ludic, a form of reality in which a kiss is a kiss and not a kiss. Against the background of the observation that play is increasingly becoming the last word in both the humanities and the natural sciences, it is argued: Play is a secondary phenomenon; only established normality triggers motives to break free from it.

We understand play as voluntary participation in a temporally marked interaction with the unexpected in the mode of non-binding acting as if. The question is whether there is room under the umbrella of this understanding of play for the characteristics of play that may be regarded as generally accepted in metaludic discourse. For some, such as voluntariness, it is obvious because they are explicit in the definition of play favored here. For others, such as the rule-like nature of many games, special reflection is required. In addition, this chapter will also take up individual lines of

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discourse, most prominently Ludwig Wittgenstein's "language game", and marginally also Theodor W. Adorno's negative view of rules of play.

The aim is to anchor the functional theory, as developed in the second chapter, in the discourse on the game,[1] by identifying points of connection, noting points of agreement and naming differences. Insofar as this is possible, it should also be possible to understand the reasons for dissent.

From A for adventure to M for movement to Z for Zero, there is a greater number of words that are interrelated with play. They are mentioned when there is talk of play, or a reference to play is made as soon as they occur. Without claiming to be exhaustive, such a word cloud surrounding the game can be sketched (see Fig. 3.1).

Fig. 3.1 Word cloud of the semantic game field in Pacman look. (Source: Own representation)

[1] An overview of Buytendik's (1933), Plessner's (1934), Huizinga's (1956), Scheuerl's (1990), and Fink's (1960) game theories is provided by Kolb (1990).

Some of the words from the semantic field of play have already appeared up to this point, others will be added in this chapter, and others will be mentioned in the following chapters. To assign them to the understanding of play as a voluntary, temporally, often also spatially marked, always new way of dealing with the unexpected in the mode of a non-binding activity as if and to classify them theoretically is the task to be accomplished throughout.

3.1 What Does "Acting As If" and "Without Obligation" Mean? With an Excursus on the Language Game

Noncommittal and acting as if certainly form the two features that not only regularly but prominently appear in descriptions of the game.

> Playing is regarded as a behavior characterized by a certain 'non-seriousness' and an 'inauthenticity', is regarded as a 'doing-as-if', as a neutralized doing which [...] does not bind us in our deed, which remains 'non-binding', is, as it were, a mere trying out of possibilities without leaving behind consequences of an inescapable kind. (Fink, 1960, p. 77 f.)

In most cases, non-commitment and acting as if are used synonymously, or at least merge smoothly. Noncommittal acting as if, however, is not a pleonasm; they are two different qualities, which are also found in Gregory Bateson (1985, p. 248) when he names "two peculiarities of play", "a) that the messages or signals exchanged in play are in some sense untrue or not meant; and b) that what is signified by these signals does not exist". These two specifics can easily be read as noncommittal and acting as if.

The As If Is Rooted in Communication

The scientific classic on the subject of "As if" is Hans Vaihinger's 800-page work "Die Philosophie des Als Ob" (The Philosophy of As If), the outlines of which were "quickly written down" in the winter of 1876/1877, as he himself said, published in 1911.[2] The book (Vaihinger, 1982) is so interesting in our context because

[2] A good classification of the "philosophy of Als ob" in the discourse of fictionality can be found in Andreas Galling-Stiehler (2017, pp. 127–131), who sees the figure of Als ob as shaped by Immanuel Kant and emphasizes with Vaihinger that, expressed with "als", it is based on a comparison. "This 'as if' then leads to fiction" (ibid., p. 129).

the subject of play does not appear in it. If it were not obvious anyway, Vaihinger's text would be a strong indication that the significance of "as if" ("als ob) in experience and action extends far beyond play and, together with "like when", is an indispensable element of scientific thought, but also of everyday speech. "When one thinks about *as* and *as if,* the meaningful structure of the social world soon becomes a jungle. This world is teeming with all kinds of surprisingly ambiguous *Als'* and *Als Obs,* on which we shimmy like vines across the swamp, but without knowing which will hold us and which will tear us [...]" (Ortmann, 2004, p. 29). We see the roots of Als ob in communication and therefore want to go into Luhmann's concept of communication in more detail at this point, especially since it is also informative for other aspects in the context of play.

To communicate means, formulated on Luhmann's level of abstraction, to understand the difference between information and communication (cf. Luhmann, 1984, p. 191 ff.).[3] Sensory perception and communication both take place in the medium of sense, whereby in the long run only shared sense is useful; anyone who insists on idiosyncratic meanings is suspected of "not having all his cups in the cupboard". Whether a cow is primarily perceived as an animal for slaughter, a milk producer or a sanctuary depends on the horizon of meaning, on the cultural context.[4] Perception, in turn, operates without the difference between information and communication. What is sensuously perceived can become information without a communication intervening. Looking up at a dark, cloudy sky is informative. Sensory perception may be deceiving while still (believing it to be) true, but it is not deceiving anyone else. Communication, on the other hand, can use the difference between information and communication to, roughly speaking, spread lies and rave about the glorious holiday weather during heavy rain.

Sincerity Is Not Communicable

Communication, that is the second important distinction besides the difference to perception, of course does not come about without consciousness, but *experienced* thoughts and feelings are something different than *communicated* ones. After all,

[3] Communication only comes about when the difference between information and communication is "observed, assumed, understood and used as a basis for the choice of connecting behaviour" (Luhmann, 1984, p. 196).

[4] In the USA, Cow Appreciation Day has existed for several years. On the occasion of the International Day of the Cow on July 12, 2019, a Bavarian PR agency has presented the card game "Cow Appreciation Day". Online https://www.wortundspiel.com/66-kuhle-kuehe-von-game-factory-zum-internationalen-tag-der-kuh-am-12-juli-2019.

there is no guarantee that communicated thoughts correspond to what is actually thought – sincerity cannot be communicated. "One need not mean what one says (for example, when one says 'good morning'). One cannot, nevertheless, say that one means what one says. One can carry it out linguistically, but the affirmation raises doubts, thus works against the intention" (Luhmann, 1984, p. 207 f.). Nor is it guaranteed that communicated feelings will be or have been experienced. Without being carried off the field, players in the opponent's stadium with their cry of pain have little chance of credibility with the home crowd; they are under general suspicion that their cry represents an as if instead of real pain. In the psyche, thoughts connect to thoughts, feelings trigger thoughts, and thoughts trigger feelings. In communication, on the other hand, thoughts and feelings are reported, they are communicated or not. Communicatively, messages connect to messages, thoughts and feelings occur as topics, they are expressed, sometimes strongly emotionalized, yet they are only messages, not the thoughts and feelings themselves.

The Four Letters B a l l Don't Roll Nor Bounce Not

How does the information (of the senders) become a message? How does the communication become information (of the recipients)? If ego's information is to be perceived by age, it must be transformed into a communication, and behind this difference there is no turning back. Communications bridge the difference with information by means of signs; the signs are now the perceived. "The importance of this sign technique can hardly be overestimated" (Luhmann, 1984, p. 220). Signs make it possible to thematize what is really absent in the medium of meaning, i.e. to draw attention to it and to stimulate that what is really absent also becomes present in the consciousness of others as an idea via the understanding of the signs. In this way, despite its absence, it can become a common theme. The four perceived letters BALL do not roll and bounce, but, assuming a shared sense, they can evoke the idea of a ball, thus allowing an as-if-ball to take the place of a real ball. For this, it is necessary to convey the signs by means of a medium into the perceptual realm and thus into the sense horizon of addressees,[5] so that sign, medium and theme combine in the communication to form a composition (for more detail, see Arlt & Arlt, 2013).

[5] In an inadmissible short-circuit, communication theories have therefore regarded information services as transport services and attributed to media the task of transmitting information from A to B with as little interference as possible.

Analytically, we find ourselves here at a crossroads that offers the course of argumentation several branch-offs, which are signposted with directional signs such as language, meaning, imagination. The problem is that these side roads also lead to points of view that play a considerable role in metaludicdiscourse. We therefore embark on each of these paths in turn, if only for a few triple steps at a time. We then return to our line of argument.

Excursion

Animal symbolicum

Language as a basic medium of communication is more than a succession of signals. Just as single punctual steps do not make a dance, signals do not make a language.[6] Language is bound to two flexible networks that have to be produced and continuously reproduced: on the one hand, called grammar, a rule-governed network of signs; on the other hand, called culture, a network of shared meanings, which in sign theory falls under semantics.[7] The signs usable for language cannot be (more correctly: only exceptionally) signals, because their meaning is strictly limited; which becomes decidedly impractical as soon as something changes, because then the signal no longer fits. A red traffic light loses its meaning in the case of an earthquake; it already undergoes a change of meaning in the case of a siren and blue light. If connectivity is to be given despite changing situations, the signs must function as symbols that leave room for interpretation and are open to changes in meaning in changing contexts.[8] The transition from individual signals to language makes homo sapiens an "animal symbolicum" (Cassirer, 1996, p. 51) – and profiles him as a social being, because only meanings shared with others make sense.

Sense encompasses actual and potential

Their meaning is not attached to the perceived signs like a price tag to the goods. The ability to imagine, which is practiced with communication, can

(*continued*)

[6] On the possible connection between dance and language, see Steinig, (2006).

[7] Pragmatics means the situational practical use, so that, very simplified, these three dimensions arise: Grammar, how do I correctly join signs together? Semantics, what meaning do the signs have? Pragmatics, what is to be done in view of the signs used?

[8] The concept of symbol is elaborated in the theory of action of symbolic interactionism, which is associated with names such as Herbert Blumer, George Herbert Mead and Erving Goffman.

(continued)

also be used to form ideas that do not follow the usual meaning, but produce their own meaning. This becomes *practically* clear in misunderstandings, *theoretically* it becomes understandable if one understands sense with Luhmann as the unity of the difference of actuality and potentiality: "integrating the actuality of experience with the transcendence of its other potentialities" is exactly what sense does (Luhmann, 1971, p. 31). As soon as this quality of meaning, being open to other meanings in any case, is taken into account, one feels the weight of the question of how it is socially regulated and enforced what finds approval as the currently valid, "normal" meaning of both perceptions and communications. It becomes visible that power is not only expressed in the access to the word, while the others have to remain silent and listen; but that "the decisive question in communication is: who can/can attest to whom in which situation that he/she has 'understood correctly'?" (Schmidt, 2003, p. 117)[9]

It becomes comprehensible how relevant it is to be able to play with meanings, and how incompatible it is with ambitions of power when validity is claimed for other, competing and conflicting meanings. To imagine a stick as a sword, a cap as a royal crown, a bucket of sand as stolen treasure, is possible in principle; it can be accepted with a smile, as long as it happens only noncommittally and temporarily limited – nevertheless it is practically improbable, because meaning, we repeat ourselves, can be used communicatively only as shared. If one does not want to play only with oneself, the necessity arises that such peculiar formations of meaning are shared and maintained by others, because otherwise the game does not come about or collapses.

There are open borders between familiar meaning and ludic obstinacy. Therefore, each individual game must distinguish itself recognizably, if it does not want to encourage the possibility of not being recognized as a game at all.

> Children are the grand masters of fiction, like the little girl who offers me a portion of sand as ice cream on the playground, whereupon I pretend, with a look of pleasure, that these two balls of sand are the pinnacle of ice cream enjoyment. After a while, the girl gets impatient, wants to refill the ramekin. She gives me to understand that I should empty the contents. I retort that I

(*continued*)

[9] Cf. Michel Foucault (e.g. 1978).

(continued)

can't just pour out this wonderful ice cream after all, to which she says with a smile, 'It's only sand.' (Schulz, 2014, p. 174)

Imago, Latin for image

Due to its use of signs, communication makes imagination an everyday phenomenon and binds experience and action to imaginations. With the development of the media and communication society, it is becoming an everyday experience how imaginations are increasingly taking the place of realities. The French media theorist Jean Baudrillard reacted to this with critiques that appeared under titles such as "Kool Killer or the Revolt of Signs" (1978a) and "Agony of the Real" (1978b).

The concept of imagination accurately captures the fact that sign-based communication requires an image of the signified to be called up in consciousness, both on the sender's and the recipient's side, including divergent ideas and misunderstandings of all kinds. The as if, which represents what is really absent, appears as an image! Its expressiveness comes from an – imperceptible – visualization. One recognizes here the great importance of pictoriality for the ludic action. "An object is an object of play only in so far as it possesses *pictoriality.* The sphere of play is the sphere of images and thus the sphere of *possibilities* and *imagination*" (Buytendijk, 1933, p. 129). This will have to be remembered in the context of computer games, because they transform imaginations not only into perceptible and communicatively shared events, but even into events open to intervention and participation.

Wittgenstein's Language Game

We return to our line of argument, which we left with the statement that the communication is a composition of sign, medium and subject, and try to trace Wittgenstein's language game. Signs stand in a double relation, namely to the designated (significate, for example, some ball) and to the signified (signifier, for example, the four letters ball). The signified is what is meant whose place is taken by the sign. The (audible or visible) designation triggers an idea of what is meant.

Despite the fact that there are different languages, the idea that Wittgenstein describes with reference to Augustine at the beginning of the "Philosophical Investigations" as follows: "Every word has a meaning. This meaning is assigned to the word. It is the object for which the word stands" (Wittgenstein, 1984, p. 237). It was assumed that between the signified, in our example the ball, and the designation "ball", not only a convention has become ingrained, but a firm bond exists. The other view, which Wittgenstein also follows, is most clearly formulated by Ferdinand de Saussure: "The bond which links the signified with the designation is arbitrary" (Saussure, 1967, p. 79). Linguistic signs, he argues, are conventional but arbitrary.

> The word 'arbitrary' requires comment here. It is not meant to suggest that the designation depends on the free choice of the person speaking [...]; it is meant to say that it is *unmotivated*, i.e. arbitrary in relation to the thing designated, with which in reality it has no natural affinity whatever. (ibid., p. 80)

This liberation of language in the sense of its independence from everything it addresses is an important precondition for Wittgenstein's concept of the language-game, but not the only one. The other no less important one is that he links the meaning of linguistic signs to their use. "The meaning of a word is its use in language" (Wittgenstein, 1984, p. 262). To stay in his image: It is only through the moves of the game, as practiced in everyday communication, that meaning is condensed into a current meaning, which may shift in the next moves of the game and be a different one in other games. The non-committal nature of signs is accompanied by a tendency towards the unpredictability of their respective meanings.

As is so often the case, the game of chess serves as a reference. "For Wittgenstein as well as Saussure, a great attraction emanates from the game of chess in order to explain linguistic connections" (Neuenfeld, 2005, p. 124).

> Each individual piece may only be moved according to certain rules, from which a certain value of the individual pieces results before the start of the game, so that the rook appears to be more valuable than a pawn because of its greater radius of movement. But it is only in the game itself that the concrete significance of the individual piece arises from the respective position. Thus, within a game of chess, a pawn may become the piece that decides the game, since it may transform into any piece in the game if only it reaches the opponent's baseline. (ibid.)

It turns out that the concept of language play does not inform us about play, but with the help of commonly known ludic features, namely non-commitment and unpredictability, about language in particular and social relations in general.

> In his philosophical investigation, Wittgenstein opens up with the language-game concept nothing less than the boundless field of human action in connection with language. The a priori of the language game becomes the foundation of social systems [...]. Since language establishes the social context and at the same time presents reality to us as a meaningful, since interpreted, we are caught up in the play of language from the very beginning. And since social systems are fundamentally structured through communication and built on communication, every single subsystem, however small, can henceforth be understood as a game. (ibid., p. 121)

The generalization of the game metaphor already implied here is discussed in the seventh chapter.

Flamingo Bottles and Bottle Squares

We continue to be preoccupied with the communicative roots of the as if, which can produce linguistic blossoms. Language (like a picture) can detach itself not only temporally but also factually from the sensually perceptible. On the one hand, communications are possible that do not take the place of sensory perception, but abstract from it to form concepts such as fruit, weapon or Rhinelander. On the other hand, ideas can be communicated that have been spun beyond what is sensually perceptible and recognized as realistic, that have stripped away references to reality and developed fictions.[10] With imagination comes a scope to transform them into the fictional, including the possibility of pretending that fictional is real. Even more, "with the help of language something can be said that has never been said before" (Luhmann, 1997, p. 215), just as pictures can show something that has never been seen. Language can not only produce reality in the forms of the narrative and the fictional, it can even give birth to designations that have no social reference (yet), that is, are not understood by anyone, and speak of a clarinet ball, flamingo bottles, and bottle squares. With this we enter the playing field.

[10] In his "brief history of humanity", Harari (2015, p. 37) speaks of a "cognitive revolution" that makes it possible "for us to exchange ideas about things that do not exist. As far as we know, only sapiens can speculate about possibilities and invent stories. [...] Only humans can talk about something that doesn't exist and believe six impossible things before breakfast. In any case, you would never in your life get a monkey to give you a banana by painting out a monkey heaven and promising limitless banana treasures after death."

Triad of the Real, the Fictive and the Imaginary

The ludic action implies firstly communication with all its potentials. Secondly, we say with Udo Thiedecke that "with play, own communications emerge within the communications of society" (Thiedecke, 2010, p. 18). Ludic communication is characterized by the fact that it cannot be grasped with the simple opposition of reality and fiction.[11] Play refers to realities, but allows itself the freedom to associate other ideas with them, for example, to see and use a chair as a railway carriage. Play refers to fictions but takes the freedom to see and treat them as realistic ideas. In relation to literature, Wolfgang Iser has argued for "replacing the common oppositional relationship with the triad of the real, the fictional, and the imaginary" (Iser, 1991, p. 19). As narrative, both the actual event and the invented story, as well as any mixture of the two – become imaginary. Ludic communication mixes its own reality from realities, imaginations and fictions in variable mixing ratios. Serious games mix the proportions differently than simulation games and quite differently than action adventures.

It does not require the experience of virtuality to arrive at Natascha Adamowsky's critical inquiry into old patterns of distinction.

> It proves questionable whether the attempt to draw a line according to the old pattern between 'being' and 'appearance', 'fictitious' and 'real', 'true' and 'false' can still be successful at all. Rather, it is necessary to consider whether greater possibilities do not lie in descriptions of phenomena that replace the opposition of 'virtuality' versus 'reality' with degrees of blending of what is respectively taken for one and the other in changing contexts. (Adamowsky 2000, p. 44)

From the perspective of fictionality, it is easily neglected that play takes place within its social environment, despite all the illusory nature of the as if and all the non-committal nature of the action. Play is able to assert its obstinacy against its environment – but *within* its environment, it cannot detach itself. Where should the execution, where should the doing of the acting as if come from, if not from the social context in which play takes place? Where should the fund of information of ludic communication lie, if not in the social household of knowledge? How could play be "the children's path to knowledge of the world" (Maxim Gorky) if the world were not present in it? Therefore, play will always be a mirror of society[12]

[11] See also Bateson (1985, p. 251).

[12] Drawing a parallel to science fiction seems obvious: "Anyone who thinks science fiction has anything to do with the future is naive," reads the back cover of William Gibson's novel "Idoru" (Gibson, 1999).

(see Sect. 4.2). “Acts of play reveal the way society organizes itself, makes decisions, constructs its hierarchies, distributes power, structures thought. They take up elements and structures of the social order, make them visible, change them and have an effect on them” (Gebauer & Wulff, 1998, p. 192). However much the game may take currently valid meaning lightly, twist it, turn it upside down, it remains its point of departure and anchor. The non-binding acting as if unfolds in *the* social horizon of meaning.

Non-binding: As If Nothing Had Happened

Outside the game, there are as many transitions between binding and non-binding behaviour as there are shades of grey between white and black. The extent to which individuals and organizations feel bound by what they face as expectations from outside and what they themselves have said and done before varies greatly. “The binding of noncommitment” (Sander, 1998) is becoming a major social science topic in modernity because behavior can – and must – be chosen far more frequently than in traditional societies. In the process, existing ties are loosened or cut and new ties are forged; social relations become more flexible (see Sect. 7.2). But this kind of non-commitment creates bonds, because with the choice, with the decision for one and against the other, one commits oneself. Dirk Baecker has illustrated this aspect using the example of the dandy George Brayn Brummell (1778–1840):

> The story has become famous of Beau Brummell, who one day was driving his carriage through the Scottish loch country, got out at a vantage point, took a survey, and turned to the servant standing behind him and asked him, ‘Which lake do I prefer’, ‘Which lake do I like best?’ To make such a decision, to commit oneself to a preference, did not befit a real gentleman. After all, one would be committing oneself, losing room for manoeuvre, becoming recognizable to others, and thus no longer master of oneself. (Baecker, 2010, p. 36)

The non-committal nature of play offers the opportunity for socially inconsequential experience *and* action – although the fact *that* someone is playing can become a socially marked circumstance. In the last instance, bindingness in social interaction arises from habitual meaning, from shared meanings: A chair is a chair, not a railway carriage. It is an artefact that, like chairs and benches, was made to sit on, not to transport. For that purpose, its construction is functional; it is a means that hosts can offer, so long as their goal is to have their guests sit down. The game, as the host’s children may be demonstrating, need not concern itself with habitual

meaning; converted into a freight train, the chairs are in use elsewhere. The game is not bound to the common understanding – it would, however, not exist without the common understanding, it lives from its "alterity"[13] –, its actors, however, usually return to the accustomed meanings at the end of the playing time, as if nothing had happened.

Broken Clubs Are Broken Even After the Game Is Over

Socially inconsequential does not mean that gambling cannot be harnessed for purposes external to the game, for example to learn, to do something for one's health or to earn money. Hybrid forms can emerge (see in detail in Sects. 6.2 and 6.3), the most widely discussed case being gambling, which has all the characteristics of a ludic action – except for its non-committal nature. The fact that its social consequences are so obvious makes its control an ongoing (political) issue.

Socially inconsequential means above all not without consequences for physical, psychological, artificial environments of the game. The racket that breaks is also broken after the game. The computer gamer who lets it come to an RSI syndrome[14] will find himself a patient in a doctor's office. Pupils who sit in class overtired and inattentive after late-night video-gaming risk special pedagogical measures. Effects on those playing the game preoccupy game research more than anything else, because the follow-up question immediately arises as to what consequences the physical and psychological effects of the game have on the subsequent behaviour of the players outside the game. But one does not get a grasp of its stubbornness if the game is not first understood independently of the players, independent of its environments in the first place – even if it could not take place at all without them.

[13] We adopt the term from Freyermuth (2015, p. 304 ff.), where, however, it is only used for digital games and, above all, is only understood in a binary way, as if there could only be a single One to an Other – whereas we argue precisely for dissolving this binary thinking in plurality and thinking of the game as an Other among diverse Others. Tobias Unterhuber (2013) hints at a similar consideration in a "sliver of thought" on "Heterotopia and play – an approach".

[14] Repetitive Strain Injury, or RSI Sydrom, from "mouse arm" refers to discomfort in the hand, arm, shoulder and neck area due to repetitive strain and stress.

3.2 Common Characteristics of the Game in a Theoretical Light

The most common characteristics of the Ludic that are mentioned again and again are purposelessness, unpredictability, regularity and fictionality. They have already been briefly addressed in the context of the development of the concept of play (especially in Sect. 2.3); in the following, we will relate them more thoroughly back to our theory of ludic action.

On the one hand, *freedom of purpose* opens up directly. Non-binding action cannot bind itself to a purpose; like walking or splashing about in water, it must be self-sufficient. The non-committal nature of ludic action is easily reconciled with the fact that goals are frequently and quite naturally pursued, even strategies developed, within the course of the game. The general label of purposelessness, if it is not classified under the aspect of non-commitment, creates a need for justification in view of the commitment, even the doggedness, with which players not infrequently try to achieve their goals.

On the other hand, for purposelessness to become as particularly conspicuous as it is in the case of play, purposes and goals must be accorded a general status of self-evidence. If it is regarded as completely normal that purposes are pursued, then actions automatically become means to achieve them.

> When ends are thought of as imagined effects, this perspective makes action a means. Action, if it is regarded as rational at all, can then only be a means. (Luhmann, 1973, p. 16)

In the face of this normality, one then wonders and stands somewhat perplexed before actions that are obviously not means, are self-sufficient, are "purposeless". The fact that playing doesn't get rid of a taste of the miraculous, the suspicious, is also related to this difficulty (which deeply characterizes the working society) of being able to take purposeless actions seriously.

Unpredictability, that is a basic modern experience, is one of the unavoidable consequences of free decision-making. Freedom and predictability cannot be had at the same time, no matter how hard mathematical game theories and Big Data glass bullets try. Not only participation is based on free decision, but also the execution of the game depends – within the framework of the rules – on free decisions.

> We can speak of a game only when the player has autonomous freedom of decision. He and he alone decides [she also; author's note] which card to play, which pawn to move where, or on which number to place his bet. (Buland, 2008, p. 10)

That's why you can't know how it's going to go and how it's going to end, that's why the same action pattern can result in a different game play every time. Unpredictability is not a unique feature of the game, but in ludic actions the unpredictability of the course and outcome is particularly striking. Unpredictability is in fact a program for promoting risk, an invitation that is difficult to refuse, to engage in unpredictability, even to deliberately build in coincidences as an increase in uncertainty and to savour the moments of suspense until it has been decided how the dice have fallen, whether luck or bad luck, success or failure will result.

Rulefulness, like unpredictability – in comparison to normality – only stands out more strongly in the game, which is why it is so emphasized as one of its characteristics. Rules of the game lose their conspicuousness when the game is understood as a field of meaningful experience and action among others. For then it is clear that ludic action cannot be an expectation-free space, that the expectations of the actors must be aligned if play is to be possible. But it must be said about rules at the same time that they do not guide play but only regulate it, "that they do not prescribe essential parts of ludic action. They do not define the game" (Gebauer, 2002, p. 90).

> According to the rule book alone, "a picnic in the countryside, provided it took place on a piece of grass at least 90m long and 45m wide with certain chalk marks and two goals, with 22 guests and three hosts and a spherical leather ball in the middle, would be indistinguishable from a football match." (ibid, p. 89)

One would be very surprised if anyone considered it a conspicuous feature or even remarkable that there are rules in the economy, in law or in medicine. Differences between ludic structures and those considered normal consist in the fact that structures in other social fields are experienced as more deeply anchored, in some cases as immutable, even tending to be invisible because "normal". The decisional character of rules of the game, on the other hand, is openly apparent. The freedom of decision, together with the non-binding nature of the game, allows a sovereign handling of the rules and their validity. The players can agree together at any time to play differently, to interrupt or to stop the game, unless the game is subject to external purposes that would be disregarded by this (see Sect. 4.3).

"To Be Pleasured Means to Agree"

Julia Christ (2017) has traced how Theodor W. Adorno rejects the rule-like nature of games as false play. "The practice of play, which Adorno positively posits, is

clearly directed against playing according to rules" (ibid, p. 285). Those who play according to given rules are guilty of merely repeating what is already there.[15] Because what is already there was "the wrong thing" for Adorno, even following the rules of the game becomes its confirmation. In the well-known text "Kulturindustrie. Enlightenment as Mass Deception" from the "Dialectic of Enlightenment" published in 1944, for example, it reads like this:

> *To be pleasured means to agree*. It is possible only by sealing itself off from the whole of the social process, by dumbing itself down, and from the outset by contradicting the inescapable claim of every work, even the most trivial: to reflect the whole in its limitation. [...] It is indeed escape, but not, as it claims, escape from bad reality, but from the last thought of resistance that the latter has left. (Horkheimer & Adorno, 1991, p. 153)

Behind Adorno's critique lies a good sense of the fact that games, i.e. rule-governed games, do not express the will to play in the same way as play does. Participating in games serves more the consumption side of the game. A ready-made game pattern is executed, certainly with commitment and imagination. Play establishes the difference to normality: "In the beginning, one makes a distinction. This is done in order to play" (Walther, 2003) and play has much to do with maintaining this distinction. "Nothing is more disturbing for play than the aggressive intermission of reality which at all times jeopardizes play *as* play or simply threatens to *terminate* the privileges of play. Then it's back to normal life." (ibid.) Games exploit the difference and expand it, they form the second step that forgets that the first was needed. In essence, the two poles between which Caillois located the game return here. Sybille Krämer (2005, p. 2) has characterized them particularly well, as we understand it:

> He calls one pole *'paidia':* this is the principle of anarchic pleasure, free improvisation, exuberant joie de vivre and uncontrolled imagination. The other pole he calls

[15] Walter Benjamin is also interested – in addition to the technical reproducibility of the toy (cf. Benjamin, 1972b) – in the inner tendency of play to urge repetition. "Not a 'so-doing-as-if,' an 'always-doing-again,' transformation of the most harrowing experience into habit, that is the essence of play. For play, nothing else, is the womb of every habit. Eating, sleeping, dressing, washing, must be inculcated into the little twitching brat playfully, according to the rhythm of accompanying little verses. Habit enters life as play, and in it, in its most rigid forms, a remnant of play survives to the end." (Benjamin, 1972a, p. 131)

> *'ludus'* and understands by it the imperious conventionality, the strict regularity, the trainable competence in execution, the obstacle-seeking and -overcoming mastery in play.[16]

By levelling the difference between the first and the second step, i.e. between play and game, and by abolishing it in the word game, the German language makes it particularly easy for gamers to consider the boundaries to normality to be fixed and to settle into the game world. Role-playing games make it possible to understand the effort that has to be made when both steps are taken at the same time, when a story, characters and skills for non-binding action are invented as if, spun on and maintained against all temptations to swerve into the normality of space and time of the game environment, even though one is currently stuck in the ludic action. "Play the game!"

Fictionality feeds on the as if. Play can be characterised as "a fictional activity accompanied by a specific awareness of a second reality or an unreality that is free in relation to ordinary life" (Caillois, 1960, p. 16), because it is performed in the mode of acting as if. The as if offers the possibility of leaving realities behind and letting the imagination run free (see Sect. 2.3).

Such features of play discussed here apply generally. However, it must be remembered that the behaviour of persons and the practice of interactions *in society* take place *on the basis of expectations of normality,* and play has its starting point in this. That is, in other societies with other normalities, other games are played. We can grasp the basic function of play in general terms in terms of social theory, but we cannot say what ludic practices are engaged in and how they are evaluated without knowing what society we are dealing with. In Chap. 4, Sect. 4.2, we address this question in more detail.

[16] George Herbert Mead uses the distinction between play and game to describe the process of identity formation in children. He understands play as "imitative play. A child plays 'mother', 'teacher', 'policeman'; we say that he assumes different roles [...] If we compare such play with the situation in an organized game, a competition, we recognize the crucial difference: here the playing child must be prepared to assume the attitude of all the persons involved in the game, and these different roles must have a definite relationship to each other." (Mead, 2013, p. 192 f.)

3.3 The Ludic Action as a Pragmatic Paradox

After the disciplined working off of common features, we open the thematic corridor for freewheeling thoughts. The function of the game, as we have put it in a nutshell, is to create a social space for action that allows for temporary and spatially limited non-binding action as if in dealing with the unexpected. Or reformulated in the dimensions of meaning: The stubbornness of play lies in the fact that it takes place in a *temporally,* often also spatially clearly marked way, is *socially* voluntary and non-binding, *factually* revolves around the unexpected, and is done as if. It says too little about play to capture it as "the medium whose achievement is to open a corridor into the extra-ordinary" (Szabo, 2018, p. 100). As much as it is good humour to subsume play under a theory of pleasure and equate it with Oktoberfest and Disneyland, a contribution to better comprehension is rather not. One can get a clearer sense of the stubbornness of play by understanding ludic action as a pragmatic paradox. What is meant by this?

The Rubicon Is Not Crossed

There is nothing at all to suggest that all ways of thinking, speaking and acting that occur outside the game should be omitted. For that to happen, the players would have to completely reinvent themselves and their world for the duration of the game. On the contrary, everything points to the fact that the material games are made of is first taken out of the usual horizon of meaning and experience and reshaped for the game. Where normal behaviour is taken over into the game and simulated there, it must be transformed into the mode of noncommittal acting as if: "As long as we only 'play,' we do not cross a Rubicon – neither in war nor in love" (Fink, 1960, p. 78).

> Within the framework of the play, an action occurs that *is* and *is not* what it represents. A kiss in a play is a kiss, but it is still only a play-action – it is on the one hand an action of love, on the other hand an action of non-love, namely as an action of a play. (Gebauer & Wulf, 1998, p. 193).[17]

[17] Jo Wüllner wants to know how it is "that so many lovers in movies have gone back into reality mode after simulated sex." Ludic reality doesn't have to be the best of all realities. Apparently, there are cases where reality is more fun than play.

A played kiss does not bind, a played bite remains without consequences, it does not cause a wound. Gregory Bateson has analysed this transformation that takes place in play particularly thoroughly and reformulated it in terms of semiotics. What is said and done in play functions as a sign that stands for something specific and at the same time does not stand for it, because what is signified is not understood as it is normally understood: Played biting is both biting and not biting. The statement "this is a game" thus "takes on something like the following appearance: 'These actions in which we are now involved do not signify what those actions for which they stand would signify.' The playful pinch denotes the bite, but it does not denote what would be denoted by the bite" (Bateson, 1985, p. 244).

Where Kissing and Not Kissing Is the Same Thing

Fritz B. Simon has explained the concept of pragmatic paradox: "A paradox arises when a proposition is true precisely when it is false, and false precisely when it is true. A pragmatic paradox arises when that proposition is a call to action. It is obeyed precisely when it is not obeyed, and not obeyed when it is obeyed" (Simon, 2007, p. 70). In ludic communication, the request to kiss means simultaneously to kiss and not to kiss; by performing the request, it is not performed, and by not performing it, it is performed. Players do not have a problem with paradox, they solve it with the help of time by defining a period of time within which paradoxical behaviour is considered normal. Instead of considering only an either-or possible, to kiss or not to kiss, or to retreat into a neither-nor attitude and freeze into inaction, they create a framework in which both kissing and not kissing are the same thing, and this framework is called: we play. For actors, pragmatic paradoxes are everyday occurrences: the passionate kissing scene they perform on stage has not been one once the curtain falls.[18] With the help of the play frame, the difference, which normally only allows for an either-or or a neither-nor, is eliminated.

> One who does not distinguish between left and right, but categorizes both as directions, will have no difficulty when told to go right and left at the same time. What appears to others as a contradiction, he understands as a tautology: 'Go in one direction and go in one direction at the same time.' (Simon, 2007, p. 73)

[18] The colorful magazines do not live badly from speculations whether the involved ones find perhaps so much pleasure in it that real love relations develop, and how much danger for existing relations from the love game with other partners and partners comes.

Pragmatic paradoxes that are so difficult for observers of play and so easy for players may be one of the reasons why play is more often described as a "between", as "a holding oneself in between" (Plessner, 1961, p. 104).[19] Jesper Juul (2005) has come up with the term "half-real". The pragmatic paradox is also the connection point where the devil comes into play. He is a "super-player," "he is, in the divine plan of salvation, the necessary accident, the organized chaos which moves at all speeds in all directions – and in no direction" (Villeneuve, 1991, p. 93). As for what we "wish at the devil," "among those things we cannot properly grasp and therefore sometimes want to get rid of (especially when confronted with them) are the vicissitudes of chance, contingency" (ibid, p. 83).

Delimitations in the Boundless

It is now easy to see that boundlessness in general and clear demarcation in the concrete case are two sides of the game. The everyday use of the term boundary puts the accent on the aspect of separation, neglecting the fact that there is no need for the drawing of boundaries where there are no connections. "Boundaries cannot be thought of without a 'beyond'; they thus presuppose the reality of the beyond and the possibility of crossing it" (Luhmann, 1984, p. 52). The function of the boundary is precisely to interrupt existing connections that can otherwise be walked on and used. Because of this, it is temporally, factually, and socially generally possible to shift into the behavioural mode of noncommittal acting as if. There may be more suitable times and less suitable times, there may be more suitable topics and less suitable topics, there may be more willing and less willing people – in principle, there is nothing to prevent non-binding acting as if. However, in each individual case it must be made recognizable as such, the boundary of meaning must be perceptibly drawn.

The Magic Circle Dispute: Disenchanted

The discussion about the so-called "magic circle" fails because of this problem constellation: "A broad strokes definition: The magic circle is the idea that a boundary exists between a game and the world outside the game" (Zimmerman, 2012).

[19] "To this ambivalence of a double in-between: between reality and appearance, between being bound and being bound, man reacts – with laughter." (Plessner, 1961, p. 105)

The image of the magic circle has sparked larger debates in the context of game studies. Relying on Huizinga[20] it was not only, but especially Katie Salen and Eric Zimmerman (2003) who made this metaphor strong.[21] In our view, magic circle is a successful, albeit attention-grabbing, term for the simple fact that a game would not be a game without exclusion from what is considered normal and without containment of its own corridor of meaning. In the controversies about the magic circle, on the one hand, the fact is problematized that play actions, activities such as biting and kissing, types of movement such as running and jumping, linguistic habits such as vocabulary and sentence structure, come from normal contexts and therefore one should not speak of a magic circle. On the other hand, it is argued that non-ludic meaning can interfere with games (the topic of Chap. 6), as when Castranova (2005, p. 151) writes, "the existence of external markets makes every good inside the membrane just as real as the goods outside of it". In sum, there is nothing new to be learned from the Magic Circle controversy.

The Play of the Waves Is Not a Play of the Waves

Play may allow itself to overcome the limits of normality because and by setting limits for itself or by having a limit drawn for it from the outside. Now there is an approach in play research that is less interested in the boundary marked by play than in the playful overcoming of normal limitations. From this perspective, it is not so much the limited ludic activity that is seen, but above all the playful movement. To have play and to make a play, from this linguistic scope of being able to use the verb play transitively and intransitively, the conclusion is drawn (not only) by Scheuerl:

[20] The relevant passage reads: "Even more striking than its temporal limitation is the spatial limitation of play. Every game moves within its play space, its playground, which has been marked out materially or only ideally, intentionally or as a matter of course in advance. Just as there is no difference in form between a game and a consecrated act [...], so too the consecrated space is formally indistinguishable from a playground. The arena, the gaming table, the magic circle, the temple, the stage, the movie screen, the court of justice, they are all playgrounds in form and function, that is, consecrated ground, set apart, fenced off, sanctified territory, where special rules of their own apply." (Huizinga, 1956, p. 17)

[21] "I regularly get emails from budding game critics asking me if I think the magic circle 'ultimately truly' does actually exist. It seems to have become a rite of passage for game studies scholars: somewhere between a bachelor's degree and a master's thesis, everyone has to write the paper where the magic circle finally gets what it deserves." (Zimmerman, 2012)

> Only the centuries-long habituation of calling certain forms of activity of subjects 'games' tempts one to overlook the view of a pure phenomenon of movement that resonates at least as 'actually' in the sound of the word. (Scheuerl, 1990, p. 118)

The improvisational possibilities that unfold in play – "it plays", "something has clearance " – are interpreted here as the very essence of the Ludic, which is shifted from the vita activa to the vita contemplativa and is conceived as "a pure phenomenon of movement", "whose freedom and inner infinity, ambivalence and closedness, hovering in apparent plane, is accessible in time-distant presentness only to contemplation" (ibid., p. 126).

Always under the condition that playing is appropriately understood as voluntary dealing with the unexpected in the mode of a non-binding acting as if, the understanding of play that primarily determines it from (seemingly) arbitrary movement sequences is to be countered: The play of waves is not a play of waves, rather an observer describes the movements of waves as a play. The counter-question would be, what are waves doing when they are not playing? In order to experience the binding nature of the wave movements, a tsunami is not needed; a rising storm is sufficient. A screw does not play, even if it turns and has clearance at the expense of its fastening function. The smile that plays around the lips may be feigned, but it is not the smile that plays. Nevertheless, we are dealing with two faces of the game, which, as mentioned above in Sect. 3.2, are also named in English on the basis of the distinction between play and game. There is no doubt that play is based more on freely chosen movements, whereas game is based more on free decisions: Winners decide the game for themselves, the others are eliminated. Whether moving or deciding, both are based on voluntary participation. To call a "pure movement phenomenon" a game mystifies – or, and we owe this perspective to a conversation with Rainer Zech, it expresses the recognition that an understanding of science that wants to see nothing but causalities and, in its search for the causes of causes, hopes to advance to an Aristotelian motionless mover, may not be the last word after all. Play seems to take its place.

Glass Bead Games

When read from this point of view, there is no lack of examples of play serving as the final reference point of scientific knowledge. A prominent case is the use of the term game by Jaques Derrida (1989), when in the chapter "The Structure, the Signs and the Game in the Discourse of the Sciences of Man", due to the absence of any centre, he refers to "a kind of non-place in which an infinite exchange of signs

takes place" and thus "everything becomes discourse" (p. 424) – and declares precisely this non-place to be the place of the game. Stefan Matuschek says something comparable about Martin Heidegger's concept of play when he writes:

> In the innermost part of his fundamental ontology, there, where Heidegger, in order to overcome metaphysics, wants to put the right understanding of Being into his own, new words, which are to free it from the wrong thinking of metaphysics, there he comes upon the word play. How being is to be thought correctly is told at the end of the lecture on the *proposition of the ground by* a swirl of variations of the formulations 'bring into play', 'put into play', 'remain in play', 'play along' and 'submit to play'. [...] In analogy to the mystery of faith, Heidegger speaks of the 'mystery of the game'. The one word becomes the emphatically invoked mystery. (Matuschek, 1998, p. 7)

The really exciting thing lies beyond the horizon of the split between the humanities and the natural sciences. Albert Einstein, among many others, is credited with these two quotes: "Play is the highest form of research" and "He does not throw dice": research is supposed to adjust to the random, to the unexpected, while the world it explores is assumed to be ordered, following causalities and laws. There seems to be a growing willingness on all sides of science to resolve the obvious contradiction between method and object – in favour of throwing dice or playing with glass beads, not to forget Hermann Hesse's novel (2002), which is thematically appropriate here.

For Children Everything Comes Unexpectedly at First

> Back to everyday terrain: the question to developmental psychologists is justified, from when a child plays and until when it just does what it does ("Donot play with food") as a moving creature that has not yet had to learn the difference between playing and binding-unambiguous doing.[22] "And one must acknowledge the child's rattle of Archytas as a good invention, which is given to little children so that, occupied with it, they break none of the household utensils," writes Aristotle (1968, p. 279) in the fourth century BC.

[22] Weh (2010, p. 102 f.) argues similarly.

The fact that children and games are mentioned in the same breath is due to the aspects of dealing with the unexpected and non-commitment. Children are not socialized at first, they form expectations only gradually, practically everything hits them unexpectedly at first. Their behaviour is to the highest degree dealing with the unexpected[23] and from an ex-post perspective in fact proves to be trial action that unfolds in spaces of possibility, just as Donald Winnicott has analysed and described it. In general, as Andreas Galling-Stiehler has pointed out to us, Winnicott vividly described the child's "play space" in his analyses of the mother-child relationship. "The playing child lives in a space which he simply cannot leave and into which he cannot simply allow encroachments. [...] In playing, the child makes use of external phenomena in the service of the dream, and occupies selected external phenomena with dream meaning and feeling" (Winnicott 1987, p. 63).[24]

From an adult's everyday perspective, children's behaviour is often perceived as non-committal, as "immature", as not serious. Pedagogy instrumentalises play (see Sect. 6.2) in order to get children out of the habit of the unexpected by encouraging them to imitate and simulate practices, initially without obligation, to align their behaviour with normal expectations and then to learn to distinguish between play and normal behaviour.

3.4 Without Play No Normality or Without Normality No Play?

We began (in Sect. 2.1) by referring to the elementary approach to play. This approach is radicalised by some authors to ideas that give play the status of being human in and of itself. How does this view present itself when play is conceived as dealing with the unexpected in the mode of a non-binding doing-as-if? In the light of this concept of play, an over-interpretation is expressed in the attribution that

[23] "The first main division in the following account now results from the fact that I distinguish between such drives by the practice of which the individual first of all gains mastery over his own psychophysical organism, without the consideration of his conduct towards other individuals already being in the foreground, and such drives which proceed precisely from regulating the conduct of the living being towards other living beings." (Groos, 1899, p. 6)

[24] Winnicott also generalized this space of possibility: "I think it useful to assume in human life a third realm which is neither in the individual nor in the external world of experienceable reality. This third realm of life is, in my view, given by a creative field of tension" (ibid, p. 127). Here psychology moves very close to sociology.

amounts to crowning play the actual meaning of life, which allows itself to be enchanted by the fact that play emancipates itself from everyday life, breaks the boundaries of normality in a self-determined way, gives room to utopias – but only in a non-binding way and in the mode of as if. Labels and evaluations of play that make it the basis of being human, the basic fact of life, the primary expression of life, ignore the fact that a sociality that is understood as normal is a prerequisite, not a consequence, of play. For example, Friedrich Krotz (2009, p. 37) formulates: "Play is, as Huizinga postulates and justifies in detail, the basis for the emergence of culture and its differentiations – it is here that systems of action are tested, problems are solved, meaning is produced, habits and traditions are created."[25] But solving problems, producing meaning, creating habits and traditions, these also take place beyond play everywhere and at all times in all social spaces and, taken together, contribute not less but far more to the emergence of culture than play alone. Peter Schnyder argues more strongly:

> Huizinga problematically absolutizes a historically contingent concept of work and utility. He contrasts work and play, and utility and play. At the same time, he argues that play is at the origin of all culture. For him, culture arises from play. This gives rise to a contradiction. One cannot, after all, base the definition of play on a demarcation of usefulness and work and at the same time go back to an origin where the whole is obviously still unmixed. (Schnyder & Strouhal, 2010, p. 170)

On a higher level of abstraction, Dirk Baecker formulates: "In play, sociality is constituted as a reflection on itself as the other of itself. In play, sociality is experienced as itself, namely as contingent, which means as much as: neither necessary nor impossible, or otherwise; given, but avertible" (Baecker, 1993, p. 154). If what is meant is not that sociality is avertible, but rather that sociality in its respective forms is changeable, then this can be well followed. Sociality in any normal form, we want to make this position strong, is presupposed to the possibility to play.

[25] This is how Huizinga's understanding of play is typically summed up – a perhaps too one-sidedly pointed account. "Play is not 'ordinary' or 'actual' life. It is rather the stepping out of it into a temporary sphere of activity with a tendency of its own" (Huizinga, 1956, p. 15). One can only step out of something that is already there, that is, play is described here not as a primary but as a secondary phenomenon.

No Cake Without Brown Bread

Sociality may come from the free spaces its nature allows humans and which they use to condense their coexistence into culture. Understood in this way, the assertion that human beings, helplessly wriggling and incomprehensibly screaming creatures at birth, are born free makes sense. But this process of condensation is by no means mere play; it is trial action, but highly binding, continuous, and by no means voluntary. Only established normality triggers motives to free oneself from it, limited in time and place. Without grey bread no cake, without (any) normality no game. Only those who stand on the solid ground of a normal life, whatever this familiar and inhabited may look like, can begin to play. Once this has been clarified, we may begin to ask about repercussions of play on social evolution and to argue about the explanatory power of different answers. The fundamental reversal of the relationship that ascribes social primacy to the ludic, on the other hand, appears as a transfiguration of play by those who want more than the just-given possibilities of a normal life. We see ourselves on their side, but do not share their functional description of play. Certainly, with Dirk Baecker, play can be understood as the *earliest* form of reflexive sociality; if it were the *only one,* sociology would be better off moving out of the universities and into kindergartens.

The philosopher Helmuth Plessner took the view of placing social primacy on play to its logical conclusion: “Science does not ask: why is life serious, it asks: why does it play? And it does not take seriously the rare attempts to take play as its basis and to understand the depressiveness of existence as the loss of its original lightness, of a freedom of play that is still possible at bottom” (Plessner, 1934, p. 8). Not to reproach science for this does not mean, at least not necessarily, to issue a guarantee of existence to the real existing seriousness.

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Functional Changes and Variations of the Game

4

Abstract

The task is to do justice to the boundless range of variations in games from both a historical and a systematic perspective. In the historical dimension, orientation notes on the functional change of the game are given, underpinned with individual examples. In doing so, it adopts the construction of dividing social history into the four formations tribal, estates, modern, digital. In its handling of the unexpected, the game in tribal society functions primarily as *protection.* For the upper class of tribal society it is a *flirtation* with the firmly established order, for the lower class a *place of retreat.* In modernity, play becomes an *invitation to* deal with the unexpected. In digital society, it *escalates* the virtual *realization of* the unexpected. In a systematic perspective, three basic differentiations of ludic actions are elaborated, playing with oneself, with others, and with themes, signs, and media, distinguishing between thing-media, natural and artificial, success-media such as power and love, and dissemination-media such as language, writing, and radio. Excursions on sport, art and technology complement the systematics.

> Since play can appear in par excellence all areas, in order to gain an outline of all human play possibilities, one would have to draw an outline of all human life. (Scheuerl, 1990, p. 126)

If one tries to imagine the repertoire of actions of a human life in Central Europe at the beginning of the twenty-first century, if one then realizes that in principle every action could also be transformed into a ludic action, i.e. charged with unexpected-

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ness and carried out in the sense of non-binding action as if, and if one finally also takes note of the fact that far more actions are possible in play than within the framework of normal behavior within the various social spheres – then one gets an idea of the potential diversity of play.

For the range of variation of ludic actions, the mammoth task arises of doing justice to it both in a historical and in a systematic perspective. For this purpose, *orientation hints* can be given on the basis of the presented concept of play, which models it as a voluntary, temporally, often also spatially marked, always new way of dealing with the unexpected in the mode of a non-binding doing-as-if. An overall account, whatever that may mean, is not to be given. Historically, the change in function of the game is to be traced on the basis of a construction that divides social history into the four formations tribal, estates, modern, digital. Subsequently, three basic differentiations of ludic actions will be systematically elaborated, namely, firstly, playing with oneself, secondly, with others, and thirdly, with themes, signs, and media; in the case of playing with media, a distinction will be made between success media, perception media, and dissemination media.

4.1 Ludic Action Diversity, Historically and Systematically

> No cat has two tails. A cat has one more tail than no cat. So a cat has three tails. (Much-quoted Logelei)

At the level of abstraction at which the function and stubbornness of ludic action have been developed from social interaction, one learns nothing about the diversity of play, only something about the fact that the spectrum of action tends to be unlimited. It is not yet possible to see at this level of analysis what is possible in terms of play, in what variations it occurs, what can be participated in and what can be performed. Diverse possibilities of participation in play were also offered in premodern times. There are numerous historical descriptions of which games were popular, for example, in the Oriental cultural area, in Greek and Roman antiquity, in the Middle Ages, in the Renaissance, Baroque and Rococo.[1]

"For game theorists, the question of how to classify the plethora of phenomena has always been a core methodological problem" (Scheuerl, 1990, p. 126), how-

[1] Groos (1899), Hagemann (1919), Väterlein (1976), Fittà (1998), Hartung (2003), and Puk (2014).

ever, "a certain resignation to all attempts at classification is noticeable among more recent game theorists" (ibid., p. 129). The empirically observable game actions are distinguished by *extended families such* as analogue or digital games, such as "paida, which is tumult and exuberance", or "dem ludus, which is calculation and combination" (Caillois, 1960, p. 41); moreover, they are divided into *genres* such as games of movement, games of performance, games of representational character, games of creative character (Scheuerl, 1990, p. 131 ff.) or, with Caillois (ibid., p. 19 f.), into four main categories, "depending on whether within the respective game the moment of competition, chance, masking or intoxication predominates. I call them agon, alea, mimicry, and ilinx"; and they are listed by *types* such as word, guessing, card, board, ball, patience, dance, hopping, hide-and-seek, magic games (cf. Göödk, 1964).

Games in Transition

More detailed justifications for the choice of categories on the basis of which distinctions are made are usually omitted. "In one case, the instrument of the game is taken as the criterion of classification; in another, the principal characteristic required by the game; in a third, the number of players and the atmosphere of the game are taken as the starting point […]" (Caillois, 1960, p. 18). Nevertheless, the categories somehow make sense, a certain plausibility is obvious, real existing games can be assigned.

In the literature, there is the frequent and consistently accepted view that other games occur in other cultures (Huizinga, 1956, p. 166 ff.; Sutton-Smith, 1978, p. 103 ff.) and that the same game patterns are adapted and modified. For "the revolution of card games," for example, Thierry Depaulis recommends "a handy periodization: from 1400 to 1600, simple combination games based largely on betting; from 1600 to 1800, the emergence of a significant number of more strategic trick-taking games; from 1800, increase in types or classes and increasingly complex rules" (Depaulis, 2010, p. 162; see also Sackson, 1986).

There are many historical examples of adaptations in particular, which, from a theoretical point of view, demonstrate the asymmetrical relationship between normality and play (see Sect. 3.4). All the delimitations of ludic action take place *within* the boundaries of the society in which the game is being played. Ethnography and cultural sociology know how much this can be seen in the games in "dense descriptions" (Geertz, 1987).

> In ancient times, the millboard is a labyrinth on which you push a stone, that is, the soul, towards the exit. With Christianity, the drawing stretches and simplifies. It reproduces the plan of a basilica, because the idea is to make the soul reach heaven, paradise, glory in the form of the stone […]. In India, chess was played with four kings. The game was adopted by the Occident. Under the dual influence of the cult of the Madonna and courtly love, one of the kings was transformed into a royal or a queen, who then became the most dominant piece, while the king confined himself to the role of the ideal, but for the game irrelevant, as it were passive existence. (Caillois, 1960, p. 91)[2]

The normalities, which are transgressed by the game in the mode of non-binding action as if as well as enriched with the unexpected, catch up with the game again and again by adapting ludic patterns of action to changed normalities – this constellation very much encourages to pay scientific attention especially to the process of adaptation.

Patterns: From Trictrac to Backgammon

Exploring the evolution of often very old game patterns and relating their changes to normalities of the respective society opens up many possibilities for description and interpretation and provides revealing information. For example, when Ulrich Schädler traces the decline of Trictrac,[3] "this highly respected game in the 17th and 18th centuries", and the parallel rise of the closely related game of backgammon, from the perspective of game history. "This phenomenon highlights the fact that the political, social, and economic upheavals that transformed Europe between 1770 and 1830 also affected the sphere of the game" (Schädler, 2010, p. 35).

> Not insignificant for this might have been that the Trictrac was especially connected with the supporting social class of the Ancien Régime. […] Whereas] the backgammon is opposed to the now pioneering economic-rational way of thinking, generally called 'bourgeois', to which the qualities of the trictrac are almost diametrically opposed. Like the thinking of the modern capitalist acquisitive and achievement ethicist, backgammon is characterized by values such as efficiency, rationality, and economy of time. (ibid., p. 49 f)

[2] Chess is more often presented "as a mirror of culture" by comparing design and rules in, for example, India, China, Japan, and Europe; see Petschar (1993).

[3] Game instructions can be found at https://www.gamedesign.de/trictrac.

*Blind man's bluff*Dorothea Alkema (2010) traces the transformation of the game of blind man's bluff, which "belongs to an extensive group of 'blindfolded games'" that have dealing with the unexpected as a direct game idea. Blind man's bluff is one of the "oldest and most familiar" games, writes Sigrid Metken, it is known not only in Europe, "but also among the Arabs, Persians, Japanese, and even some primitive peoples" (Metken, 1991, p. 53). Blindfolded games "document a revealing fascination with darkness and disorientation, deception and error, missteps and mishaps, disorder and confusion" and the "pleasure of the sighted in the helpless, deceptive missteps of the 'blinded,' who are presented with very specific tasks at which, without orienting vision, they must almost inevitably fail" (Alkema, 2010, p. 183). The author interprets the transformation of the blind man's game in the context of Enlightenment.

> In the blind man's game, then, not only sensible-considerate and foolish-unreasonable behaviors meet, but also a world characterized by distanced perception and the perceived distance between subjects and things, in which cognition and objectivity are possible, and one in which this distance is diminished, in which the perception of distance is difficult and uncertain, and in which perception depends on touching and mixing with what is perceived. (ibid, p. 191)

The examples illustrate the action variety of the Ludic. For distinctions and classifications, the two categories of meaning are temporally and factually obvious. On the basis of the presented functional theory of play, do historical and systematic criteria of classification offer themselves?

4.2 Play in the Tribal, Stratified, Modern, Digital Society

If the person as the social form of the individual and society form the two relevant environments of the game, then in other societies with other persons, one suspects without any theory, other Ludic actions also take place. Now, however, one owes an answer as to how one society can be distinguished from another. Without going into alternative conceptions of order, a division tried and tested in social systems theory is adopted which identifies three formations of society, the tribal, the ancient and the modern. "To be able to place the variable of society more sharply" Dirk Baecker (2018, p. 11) speaks "of the tribal society held in orality, the ancient written culture and the modern letterpress culture".

It is more difficult to answer the question of whether and how things will continue after modernity (see the introduction to the seventh chapter). Baecker speaks of a society 4.0 or of the "next society".

> The next society is a good hundred years old since the first appearance of electronic media with the telegraph (from 1837 on railway lines to make information faster than trains), the telephone (from 1900), radio (from 1919/20) and cinema (from 1926), but the invention and implementation of the computer (from 1941), television (from 1950), the personal computer (from 1976), the Internet (from 1989), the smartphone (from 1994) and the Internet of Things (current) have once again changed the state of affairs so fundamentally that it would be too early to write a theory of this society. (ibid, p. 12)

Perhaps it is still too early to give the next society, if it is not just a variation of modernity, a more specific name. Digital society suggests itself, so that tribal, antique, respectively estates, modern and digital will be used as distinctions in the following.

Udo Thiedecke (2008, 2010) has outlined the explicit assignment of play to the four aforementioned social formations. We are not aware of a consistent elaboration of this approach – as presented by Baecker (2007, pp. 28–55) for organizations and meanwhile (2018) for several other topics ranging from politics to morality to wit. What follows is an attempt to capture, at the previous level of abstraction, the functional transformation of play in the context of the four forms of society. Such an overview overlooks all subtle and most gross differences-"historians who rightly insist on differentiation can only be asked to understand" (Baecker, 2018, p. 10)-it comes across as "gray theory" indeed, when measured against multicolored real life; its offering is orientational knowledge.

Wizards and Shamans

Tribal

The person in tribal societies belongs throughout his life to a family that inhabits a certain territory, or he is excluded, does not belong to society.[4] Tribal society is segmentally differentiated, largely equal and similar families live together, al-

[4] This and the following statements about person and society are to be understood in the context of social systems theory.

though the dominance of kinship and territorial principle may alternate. "Segmentary societies are […] set to remain as they are. […] A different order is unthinkable for them, and approaches to it must appear to them as wrongs, as deviations, as dangerous, as to be avoided and fought against" (Luhmann, 1997, p. 654). The unexpected comes upon them. The unfamiliar, the unanticipated, which confronts them as a force of nature – "prehistoric humans were inconspicuous animals who had as much or as little influence on their environment as gorillas, dragonflies, or jellyfish" (Harari, 2015, p. 12) – already begins outside the small inhabited territory and can burst in at any time from outside, above, below.

Magic as pre-religious thinking, or in the words of Claude Levi-Strauss (1973) "wild thinking," is the way tribal societies attempt to become comfortable with unfamiliarity, to perhaps wrest some predictability from the unexpected, including by personalizing animals and spirits. Tribal societies invent cultic, ritual actions, limited in time and space, which they perform outside their normal behavior in the mode of as if. The as if is evident in ritual, for example, "in the example of the Gahuku-Gama of New Guinea, who have learned to play football, but who play as many games as are necessary for several days in succession, so that those lost and won by each camp exactly balance each other out" (Levi-Strauss, 1973, p. 45); it is also evident in the use of masks: "The mask is not meant to mislead, it is meant to enchant. In a sense, the mask redeems us from the inescapable solidity and fixity of our life situation […]. The magic of the mask is the oldest prop of human play" (Fink, 1960, p. 159 f.). Not everyone is trusted with dealing with the unfamiliar; it requires magical powers. Those who are able to give the impression of having them at their disposal can act as medicine men, sorcerers, shamans.

> The demarcated space of our shaman is that which is originally a *templum: It is* in this temple that the cult play now takes place. Called is the spirit, which is represented by the shaman. It is not the shaman who 'plays' the spirit – that would be a modern idea – no, the spirit plays the shaman, just as the musician plays the violin. In the original understanding, the cult community attends the performance of their gods and demons, who show themselves in the medium of the shaman. Whether this will happen is entirely uncertain. How it will happen, no one knows. The game is exciting, unpredictable. Especially since no one knows what the spirit or the god will have to say either. (Hüther & Quarch, 2018, p. 135 f)

Along with other practices, such as making sacrifices, ludic actions in tribal societies have the primary function of building protection against the unexpected. This function appears in carnival customs to this day, while carnival tends to revisit the estates' play tradition of flirting with authority.

Jesters and Jugglers

Stratified societies occur in different historical forms from Asian caste systems to Greek and Roman antiquity to the European Middle Ages, "centralized political rule and a religion administered by a priesthood" (Luhmann, 1997, p. 680) characterize them throughout.

The person has first and foremost a rank in the stratified society. He is also a member of the family, but the families in turn belong to a higher or lower class and inherit this affiliation. Socially, rank blocks kinship – to this day it is considered worth mentioning when commoners marry into royal families – unequal rank and unequal relations characterize class society. Within the upper or lower classes, relations and behaviour show a certain homogeneity, but between the classes there are unalterable physical, mental and moral differences. "The physical qualities of a person are, in the sixteenth century view, a possession handed down to the body by way of heredity through seed. […] The noble body is first biologically superior and, because of this superiority, morally superior" (Gebauer, 2002a, p. 695).

The hierarchical order, embedded in a religious horizon of meaning that rigidly prescribes what is good and evil, true and untrue, beautiful and ugly, blocks everything unexpected, but allows it as arbitrariness of the rulers. Stratified societies assume a cosmic order in which everything has its destiny. What may seem unexpected to people, they just have not yet recognized as part of the great order. One does not know the future, but since it is predetermined, there is no need to try to influence it. Voluntary participation in a non-binding activity as if does not seem to be an obvious option in a society of status, but as a possibility to bring the unexpected into this society in a non-binding way, the game is attractive and at the same time provocative. The game takes place, but with very different accentuations in the upper and lower classes. "The stratified society plays games of order or chance depending on the perspective of action (above or below) – where one determines the fate, e.g. the game of order chess, in order to practice socially relatively consequence-free rank struggles" (Thiedecke, 2010, p. 32).

> Already the courtly love literature of the Middle Ages and various mirrors of chivalry saw in it [chess; author's note] precisely an ideal and honourable skill to be mastered alongside riding, fencing, tournaments and dancing. (Kuster, 2016, p. 11)

For the upper class, however, play also helps to create a space that allows for more than the highly ritualized behaviors "at court." As court jesters, jugglers and comedians reveal, in the upper class it is primarily a flirtation – noncommittal and therefore acceptable as fun – with order, the customary and the expected, which is ex-

pressed in ludic actions. Transitions to offending, heresy, witchcraft are fluid, executioner and funeral pyre within reach.

A History of Prohibition

For the lower class, from which there was no escape, the unexpected came across above all as the arbitrariness of the rulers. For them, playing was retreating into a protective zone where the unexpected had a friendly, cheerful face, where one could even hope for unexpected happiness. Even when money and good are not at stake, therein lies an experience worth having.[5] Only those who have money can gamble for it. This incentive to gamble is matched by the authoritarian reaction to indulge in it themselves – quod licet iovi, non licet bovi – but always to discriminate against it morally, and often legally, for the lower classes.

> To be an aleator – a dicer, a hasard player – was an invective with which Cicero attacked opponents such as Verres, Catilina and Mark Antony in public speeches. Accusations of being addicted to gambling, like accusations of alcoholism or deviant sexual behaviour, were part of the common repertoire of defamation in the political life of ancient Rome. (Hattler, 2008, p. 29 f)

The official history of gaming in general, and gambling in particular, is written in a society of estates primarily as a history of prohibitions. This is not surprising, since a society that so strictly orders social action, including thinking, and attributes this order to a superhuman will, also wants the transgression of normalities to be properly regulated or even prohibited. "No sooner was a betting game invented and spread than it was forbidden. Secular and ecclesiastical rulers agreed on this point. […] The Protestant churches were particularly hostile to gambling. They would not be satisfied with mere prohibitions of gambling, they resorted to stronger means and created the gambling devil" (Buland, 2008, p. 11).

In the transition to European modernity, from the late Middle Ages to the Renaissance and Baroque,

> the gaming sector picks up speed. Alongside licences for public gambling establishments, some of which were used for fiscal purposes, new forms of gambling […] expanded: from around 1370 playing cards, almost simultaneously the first lotteries (first in Genoa, then in Flanders and Brabant, in towns in the German-speaking world,

[5] We don't really buy lottery tickets to win a stuffed smartie as a keychain; we buy lottery tickets because we love the moment when we open them and luck holds us fully in our hands (Adamowsky & Quack, 2005, p. 32).

> etc.) and soon organised betting. In the 16th century, the economic importance of this dynamic is evident. […] Trade and gambling came together in the 16th century at the Antwerp Stock Exchange, where merchants bet on lists for the election of the pope and on exchange rate differences between the Spanish and Flanders fairs. (Zollinger, 2016, p. 19)

The seventeenth century saw the beginning of the heyday of casinos, whose architecture made the separation of gambling from normal life visible.

> Casinos maintain a distinctive relationship with their natural or built environment. Their architecture and geographic location radically distinguish them from the landscapes or cityscapes that surround them: Consider the themed architecture of Las Vegas, in which each casino offers up its own world, aesthetically and symbolically distinct from the others – or historic Monte Carlo […]. (Boer & Sattler, 2010, p. 315)[6]

The Unexpected: Problem and Solution at the Same Time

Modern

The modern person is a free and equal individual. Their freedom is a freedom to do; whether they can do what they are allowed to do is something for which individuals are ultimately held responsible. Their equality is a legal equality that cares little for the inequality of available resources. On the missing list from the beginning is "social justice", well evident from the fact that there are parallel cheap and convenient offers for practically every commodity and service. At the end of the day, what remains as a normal experience of life is that one has to deal with risks and opportunities, that each person has to see for himself how he gets along: one has to have something to offer, preferably more and better than others, in order to get something.

Socially, interactions are embedded in two predominant, diverse social forms, the organization and the market. In organizations, hierarchy dominates; in markets, commodity-, labor-, real estate-, marriage markets, the free choice dominates. Competition shapes the relationships both between organizations and between

[6] We discuss how digital normalities approach ludic actions in Sect. 7.4. Here a reference to "casino capitalism" suggests itself. "Summarising transactions in all types of financial markets and in all regions of the world, the following picture emerges: In 2007, the volume of financial transactions was 73.5 times higher than nominal world GDP, compared with a ratio of "only" 15.3 in 1990 – so since then, financial transactions have expanded almost five times faster than the global economy" (Schulmeister, 2009, p. 8).

persons; functional differentiation, i.e. simultaneous autonomy and dependence, determines the relationship between the major social fields of performance such as the economy, politics, the public sphere, science, law, education.

In sum, a polymorphous normality emerges, characterized by heterogeneous, often contradictory expectations, in which the unexpected occurs simultaneously as a problem and as a solution; as a problem due to the intransparency and unrest of the markets, as a solution in the form of new, innovative offers. They all try to do both at the same time, to read off reliable expectations from experience and to surprise with news, i.e. to come up with the unexpected. (More on modern conditions can be found in the seventh chapter).

In modernity, ludic actions find themselves in an environment that subjects them to a permanent test of usefulness on the one hand and allows them to flourish on the other. The invitation to deal with the unexpected emerges as the basic modern function of play, namely under the two perspectives of learning and creation, i.e. to practice dealing with the unexpected and to create the unexpected.

The consequences of modern social relations are a devaluation of parlour games: "Towards the end of the nineteenth century, parlour games among adults are often regarded only as a sociable stopgap, as an unfortunate means of replacing an embarrassing stagnation of conversation with an even more embarrassing compulsory activity" (Kühme, 1997, p. 289). Competition is valorized, the alternative of winning or losing moves to the center. Overall, heterogeneous normality opens the doors to a plurality of play.

Ludic Actions Realize the Unexpected

Digital

"Theory must not appear more conclusive than the society to which it applies" (Baecker, 2018, p. 12). What will turn out to be the social normalities of a digital society can today only be sketched impressionistically, as a snapshot of a development process.

Under the conditions of digitality, the person belongs to networks, his social quality is connectivity. The digital society is much more of a communication society than any before it; its social relationships are thus more numerous, more fleeting, more non-committal. Compared to organizations that clearly regulate inclusion and exclusion, networks are experienced as a dissolution of boundaries: one is in and out much more quickly; what one can expect becomes more uncertain. Participation, taking part, takes on an intrinsic value "because more and more people (have to) actively inscribe themselves in the negotiation of social meaning in

more and more fields and with the help of increasingly complex technologies. They thus respond to the challenge of a chaotic, overflowing information sphere and contribute to its further spread" (Stalder, 2016, p. 203). (Digital relations are discussed in more detail in the fifth and seventh chapters).

It becomes more difficult to distinguish between normalities and games, especially since they have a common medium in the computer. For the persons it becomes unclear in which realities they are currently moving, real, imagined, fictional, virtual, ludic. The digital ludic action realizes the unexpected, it means a – desired – escalation of the unexpected, which the virtual world, whether one likes it or not, continuously produces anyway, because the improbable becomes very probable.

In Summary

Play as a temporary free participation in a non-committal doing-as-if, dealing with the unexpected, transforms its function in the context of social evolution. Table 4.1 provides an overview: In relation to the unexpected, play in tribal society functions primarily as *protection*. In corporate societies it has something provocative, which can be characterized as *flirting* with the unexpected in the upper class and as *withdrawal in* the lower class. In modernity, play becomes a general *invitation to* deal with the unexpected. In digital society, it appears as an escalating *realization of* the unexpected.

4.3 Playing with Oneself and with Others

> Out of the struggle with others, we create rhetoric; out of the struggle with ourselves, poetry. (William Butler Yeats, Anima Hominis, quoted by N. Myers, 2017, p. 169)

Table 4.1 Functional change of the game in different social formations

Type of society	Realities of the unexpected	Ludic handling of the unexpected
Tribal/segmental	Uncontrollable force of nature	Protection
Stratified	*Above:* Breaking out of order	*Above:* Flirting with order
	Below: Arbitrariness of sovereignty	*Below:* Retreat from arbitrariness
Modern/functionally differentiated	Ubiquitous risks and opportunities	Invitation to all
Digital/functional networking	Improbability is part of social normality, gets probability	Escalations in all variations

Source: Own representation

What might serve as the criterion of distinction for a factual-systematic ordering of play? "The more we believe that the motives of a distinction are in the thing that makes it visible, the more inconspicuous becomes the observer who makes the distinction" (Baecker, 1999, p. 220). The following proposed order does not come "from the thing itself"; it draws on functional game theory as developed from interaction, in which alter and ego freely adjust their mutual expectations to deal with the unexpected, choosing the mode of noncommittal acting as if. Perception and communication were found to be constitutive of interaction and, by virtue of this, of ludic action. The person and society – society is always the others – form environments of play. Moreover, it is to be included that when one plays, one plays with something. "It is always a playing with something, and not just fpleasure-oriented movement" (Buytendijk, 1933, p. 79).

> Playing is always playing with something that is also playing with the player, an antagonistic relationship that entices attachment without yet becoming so entrenched that the arbitrariness of the individual is entirely lost. (Plessner, 1961, p. 102)

The sum of these specifications leads to a proposed order that differentiates the play with oneself, with others, and with themes, signs, and media.

Even noncommittal acting as if, does *something*

- with itself – with the body, the consciousness, the identity of the person playing; ludic action knows many "play forms of the self" (Strätling, 2012).
- with others – with humans, animals, gods, computers, whether cooperatively or competitively;
- with themes, signs and media – with themes in the sense of arbitrary choice; with material and immaterial signs in the form of texts, numbers, pictures; with media in the form of dissemination media such as language, writing, print, radio media, and computers, of success media such as money, power, truth, love, attention, as well as of thing media, natural and artificial, including specially manufactured "toys".

Making such distinctions includes the call not to lose sight of the possibilities of practice, to go its own way and to ignore all the boundaries that observers draw. Every classification is confronted with the fact that hitherto unknown compositions, shifts of accent, other weightings take place constantly and in abundance.

Already the proposal to distinguish between playing with the body and playing with consciousness pretends that one can play with one's body unconsciously. Playing with one's identity, as playing with oneself, is also a construction, because

a personal identity cannot be had without other persons. Nevertheless, we think it is informative to analytically take apart such compositions of ludic actions, to observe the relationships of the components for leadership relations and changes of meaning: one gets to see more. Juggling, for example, is a game with one's own body with the aid of things. Categories, like chess against a computer, is a game with others, the one (with people) requiring, moreover, characters, the other (with an automaton) in the moving image format of the pieces and the board. The theatrical play unites all three components, primarily its text tells a story, but only the interaction with others and the physical representation of a role make it a ludic event. The computer is already conspicuous here, because it occurs both as a player and as a medium of dissemination of the game – and this although it does not play at all, but only calculates, no matter what; thus it becomes an ever-ready player.

There is no doubt that the general development towards a media and information society is directing the attention of games in particular to the use of signs and media and thus also to topics, to content. The use of signs and the technical level of the dissemination media have reached their highest stage to date with digitalisation. It is fascinating to experience fantastic moving image worlds not only as a viewer in front of the screen or monitor, but to immerse oneself in the audiovisual event thanks to the computer. "Immersion" is a term that is making a new career in the wake of online games (cf. Schweinitz, 2006); it is related to the game's basal power to captivate (see Sect. 2.4).

Unimpressed by such topicality, we place the game with itself at the beginning. Which differences become important in current debates, which points of view are currently in the foreground or in the background, just think of polemics between so-called ludologists and narratologists in the context of computer games (cf. Sallge, 2010), cannot be decisive for a theoretical-abstract approach.

Bounce, Daydream, Transform

"One cannot deal with oneself as if it were a natural fact" (Schulze, 2003, p. 52) – an impossibility that holds playful potential. To test the strength, mobility and dexterity of the body beyond its routine use, to experience extraordinary states of consciousness as well as to take on roles from dreams as well as from nightmares in masks and costumes, to become another person in the process, to assume changing identities – ludic actions make great use of the possibilities of pretending to be noncommittal with oneself.

If, on the other hand, a person takes his or her own space for *binding* action, he or she may be considered ingenious or innovative, but also disturbed, insane or criminal, and in the negative case risks social excommunication.

Playful self-activation can express itself physically, for example, jumping, running and dancing, consciously speculating, daydreaming and fantasizing, and identitarian as self-transformation. Corporeal play figures range from the carnival princess – digital role-playing games are a kind of carnival forever and for everybody – to the circus performer to the shaman, the "man of obsession, intoxication and ecstasy" (Caillois, 1960, p. 114), who lets gods and spirits play with him.

Sport, Movement and Simulation

Even if the first association with sport is play with others, as a physical activity that engages in the unexpected beyond expected sequences of movements, sport is (also) a play with oneself. It has its climax in the Olympic Games. Sport begins as a play with oneself, continues as a play with others and unites in team sports with and against each other. The non-committal acting as if and the engagement with the unexpected can be seen in it even if strength, speed and agility are not shown in unusual proportions. Sporting movements and simulations stand out. "In sport, movements are performed; in doing so, the ideas and feelings associated with them are summoned into the presence of the performance. Whatever else is ascribed to them, properties such as tension, symbolisms, beauty, are put into them by the interpreters of sport." (Gebauer, 2002b, p. 135). The simulation character of factual combat is tailor-made for many sports disciplines such as javelin throwing, wrestling, boxing, fencing. Even the football match is reminiscent of the military battle.

> In a football match, two teams fight each other, there are forwards (attackers) and defenders, it is played on a field, there is victory and defeat. The football teams are followed by the 'battle goers', which name recalls the custom, widespread in the 17th and 18th centuries, of following armies and watching the open field battles, common at that time, from a safe distance. (Herzmann, 2006, p. 17 f)

The performance of sporting activities has the character of a performance and follows cultural patterns, well recognisable in new sports such as free-climbing, paragliding, snowboarding (cf. Stern, 2010). We had already observed both in play as a whole. "In performances of dance, gesture, and sport, movements realize cultural patterns. They are never wild movement. Their cultural formativeness situates it-

self on a spectrum that ranges from ritual forms to free creation" (Gebauer & Wulf, 2010, p. 12).

From a Ludic perspective, sport (not only) as a competitive sport suffers distortions of meaning that lead it towards a profession and away from free movement that is not subject to work constraints. Winning becomes so overpowering that voluntariness basically ends with the free decision to participate, and liabilities, including the criminal practice of doping, become rampant. The Olympic idea that taking part is more important than winning remains within the game's horizon of meaning. Sport as a functional field, which is what it developed into in the twentieth century, surrenders leadership to victory, the importance of which makes participation a mere means. The joy of free movement here, hard, scientifically refined training there, playful competition here and the professional fight for a hundredth or thousandth of a second difference between winners to celebrate and losers to forget, have about as much to do with each other as a poem and a shooting order. There is no reset button for the ski racer who suffers fatal injuries in a fall on the Kitzbühler Streif, unless it is e-sport. Even so-called recreational sports are so heavily loaded with medical meaning that the *as if* is marginalized and the health benefits take over. To equate sport with play without further ado is a cosmetic glossing over of the "physical exercises" that actually exist and a (probably deliberate) misunderstanding of play.

Gambling: Invitation to Fate

Even if it is seldom understood in this way, it is so difficult to get away from gambling because gambling is, above all, a game with oneself, or more precisely, against oneself: One pretends to know what one cannot know, and perhaps even bets that one at least knows better than others. One sees oneself at the mercy of fate, but on the basis of voluntary participation. It doesn't just strike unexpectedly either, it is challenged. Gamblers are challengers, they open the door to chance, they flirt with the fact that things can turn out one way or another. After all, it is a matter of non-binding fate – as long as it remains pure play. In the form of gambling, the ludic action acquires binding force and thereby loses one of its central characteristics. In the name of gambling, profits are made with the hope of winning money (cf. Bronder, 2016).

> Globally, the Handelsblatt Research Institute calculated gross gaming revenues of €367.9 billion in 2016, with "the volume of global gross gaming revenues almost tripling in the last 10 years in the online sector from €15 billion in 2006 to almost €40

> billion in 2016. Over the same period, gross gaming revenues in the terrestrial offering have increased by less than a third, from around €250 billion to around €330 billion." (Handelsblatt Research Institute, 2017)

The luck/unluck distinction is universally useful, almost everything can be observed under this difference. Accordingly, gambling also knows inexhaustible variations,[7] not only betting. Even if it is primarily a game with itself, it uses object-media like dice, cards, tickets, it knows – quite socially differentiated – places that are more suitable like pub and fairground, casinos and turf. "Gambling on the Internet" (cf. Sfetcu, 2016) has meanwhile been added to this: "The superiority of the arcades with their many different one-armed bandits and other machines has long been yesterday's news. For reasons of space alone, even the top casinos can no longer keep up with their online challengers," raves the industry (www.zocken-im-internet.de/). The economisation of the ludic (see Sect. 6.2) has its counterpart in the gamification of the economic.

Duality of Cooperation and Competition

Since the duality of togetherness and antagonism is formative for interaction (cf. Lange & Dreu, 2002), we can assume that we find it again in play, not as an accessory, but as the centre of play with others. While recent social research is discovering "dilemma theory" (cf. Lanwehr & Ameln, 2017, p. 1) with a view to simultaneous cooperation and competition, ludic action has always savored these tensions. It cultivates the quality of its own interplay as well as the ability to disrupt that of its opponent in equal measure; the relationship between interplay and individual action is important to it because the balancing of such potentially contradictory behaviours can be game-defining. Forms of cooperation on the one hand, of competition and struggle on the other, as they are shown in general conceptual definitions (cf. e.g. Zentes et al., 2003; Held, 1997), are practiced by the game in colourful mixtures. Figure 4.1 shows it in a Tetris look.

- Altruism, the support of others that puts one's own disadvantages at risk;
- Solidarity, the help of one for others, which aims to ensure that in the end everyone involved is better off, or at least not worse off;
- Exchange, an equal give and take based on indifference to the other;

[7] Cf. Gizycki and Görny (1970); for modernity, cf. for example Zollinger (1997). Utensils and places of gambling were presented by the Badisches Landesmuseum (2008) in the exhibition "Volles Risiko! Gambling from Antiquity to the Present Day".

- Contest, the pursuit of an advantage which, if attained, is thereby denied to others;
- Competition, the assertion of advantages even by means that disadvantage others;
- Fight, the willingness to harm oneself in order to defeat others.

Such social patterns are realized by the ludic action on stage and in the arena, on playgrounds and in game shows, on the fairground and in the garden, at the living room table and on the Internet. Why it practices some behaviour patterns more often and others less often is less a question for the game, more for the society in which it takes place, because it depends on its normalities which surprises and tensions seem suitable for non-binding action.

One of the more familiar forms of ludic action is role-play, in which play with oneself and play with others merge. Ron Edwards' (2004) GNS theory distinguishes three different modes of play at role-play: *Gamism,* performance-oriented play that wants to win; *Narrativism,* the game unfolds narratively along a task that

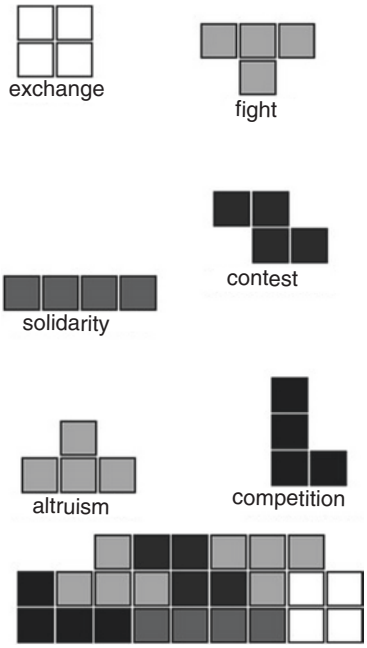

Fig. 4.1 Relationship pattern in Tetris look. (Source: Own representation)

invites creative solutions; *Simulationism,* means a type of imitation that is concerned with experiencing and discovering, not reenacting.

Pretending to play with and against each other in a non-binding way – on the basis of voluntary participation – makes contacts and ways of dealing possible that do not need to adhere to binding-normal boundaries of meaning. When humans had more natural contact with gods and animals, they were also more involved in games with others.[8] There is no temporal, spatial, physical, chemical, biological, technical, cultural boundary that is not up for grabs: Anything the playful accept as meaningful can take place between them. There is no need to wait until Easter for resurrections. Playing with the computer is the theme of the fifth chapter.

4.4 Playing with Themes, Signs and Media of All Kinds

Themes, signs and media of dissemination form the fundus of every communication; for the ludic they mean a treasure trove. As components of communication (see Sect. 3.1), they combine to form the visible, connectable element of communication. What can it mean to use themes, signs and media in the sense of non-binding action as if?

The first answer must be to the communication as a whole. How to describe a non-binding communication that only pretends? How the pretended bite is both a bite and no bite (see Sect. 3.3). Messages, whether understood or misunderstood, normally raise the question of a connecting behaviour on the part of the recipients, who can choose between yes and no, between acceptance, rejection, and all the intermediate stages of a perhaps, however meant. In the context of binding action, even binding action as if, it makes no sense to communicate something without being in any way interested in what happens afterwards; likewise, it would be highly unusual to pay attention to a communication without asking oneself how one is going to deal with it, even if only to dismiss it as inconsequential. The non-binding as-if communication does not ask precisely this question of yes or no, of acceptance or rejection.

Unlike communication *in a* play, communication *as a* play does not ask for a connecting behaviour on the part of the recipients; unless, as is often the case in theatre, a further play frame is drawn in within a ludic action and a play within a

[8] Gladiator, bull and cock fights, are not games, but bloody seriousness. Money bets associated with them pretend (they know the outcome of the fight), but are overlaid with economic meaning and take a binding course, fortunately for the winners and unfortunately for the losers.

play takes place. The ludic communication remains indifferent to its possibilities of action – which upsets some recipients very much. This is where analytical precision is helpful, for it can prevent the ludic communication from being imputed, which is merely the reaction of recipients who are unwilling to acknowledge the game's non-committal nature. Of course, recipients are not prevented from doing so; on the contrary, they have every freedom to do so, to behave towards ludic communications as if they had to be taken seriously; indeed, this freedom is abundantly exercised. On the other hand, on the sender's side of the communication, the feint allows messages to be flagged as faked and at the same time to aim at a certain connecting behaviour: Pretending to be noncommittal in order to test whether there is a chance that the communication will be taken seriously. Obviously, the fundamental possibility, even probability, of a difference between the intended and the understood meaning of a communication can also assert itself in such a way that only one of the two sides, sender or addressee, plays.

From the game, we turn back to normal communicative relations in order to sharpen the difference once more and to envisage transitions. The communicative counterpart of the ludic communication (which can occur naturally in play in the mode of non-binding acting as if) is an order, which only leaves addressees the option of not agreeing and not carrying it out under penalty of the use of force. If, on the other hand, freedom and equality of senders and recipients are acknowledged, it is advertising and public relations, or public relations, among the modes of public communication that try to make it difficult for addressees to say no to messages and to impose a yes. Journalism, on the other hand (cf. Hoffjann & Arlt, 2015, pp. 37–63), is somewhat closer to the game because, unless it is deformed, it explicitly leaves the yes or no to its messages to its recipients; but its underlying information is binding, reality references obligatory, and thus anything but ludic. Entertainment, on the other hand, is non-binding, open to fiction (see Sect. 2.4), but obligatory to its recipients. The closest we come to the game is artistic communication.

Playful Art, Artistic Play

As sport comes from playing with itself, so art comes from playing with themes, signs and media. From the novel that is set sometime and somewhere and the instrument that is played to acting and feature film, the vocabulary confirms the close relationship. As a craft-technical as well as a communicative-reflexive approach to the unexpected that pretends, artistic activity is particularly close to ludic action. But the noncommittal nature of art is not unbroken. Whether visual, musical, liter-

ary or performing art, it lacks nothing for play – except the non-committal nature of its execution. Those who play *can be* virtuosic; those who create art *should* display certain skills and abilities.

While the recipients of artistic creation have every freedom, and art wants it that way, the situation is different for the producers. Aesthetic demands and the associated expectations of a certain virtuosity in dealing with themes, signs, dissemination and object-media establish a considerable difference between art and play, despite its ludic roots. When Huizinga formulates in "Homo Ludens" (1956, p. 157) that "the essential nature of all musical activity is play," he identifies all who make music as playmakers.[9] Whether they are also artists is left open. Likewise, it would be in Huizinga's sense to say that all essential kind of poetic activity is a playing. A related study is entitled "Poetry as Play: Studies in Nonsense Poetry at the Limits of Language" (Liede, 2015). Art begins as play, but must reach beyond it to come into its own.

Regarding the never-ending dispute about the relationship between play and art, it should be noted that its *ludic* character is negatively affected wherever art, beyond its immanent demands for aesthetics and virtuosity, wants or is supposed to want something for its addressees (or its clients). Whatever expectations may be placed on it from the outside, whether by the public or by artists, it "only" has to satisfy aesthetic criteria, however controversial. On the other hand, this does not answer the question of whether works (communications) with an intention and/or a commission also lose their *artistic* quality for this reason alone, whether they can remain art or go away. This question only settles itself if one "succumbs to a topos of media historiography that accuses commercially oriented artifacts of triviality, if not always, then regularly and in any case undifferentiatedly" (Hensel, 2018, p. 380). Alongside the boundary with play, art engages its boundary with entertainment (see Sect. 2.4) and, almost in the same breath, with its funding: "money or quality?". These four, play, art, sport and entertainment, turn out to be hard lumps for working on difference because they are so multifaceted.

[9] "Artifacts that we use to realize a purpose with them acquire the status of instruments for us. […] Musical instruments are apparatuses with which we create musical worlds that have no counterpart in the natural sound event. […] So there are artefacts with which we do not simply increase what man does anyway, but with which we bring forth what finds no model in human activity. Artificial worlds are produced and experiences are made possible that would not exist without technical apparatus" (Krämer, 1995, p. 225 f)

The Topic Area of the Unexpected

Topics

When choosing a theme for a game, the ludic usually comes less from the *what* than from the *how*. About the what we can say: it is the thematic field of the unexpected on which games prefer to settle, so they will (in Central European culture) be more about knights than gatekeepers, about dragons than mites, about treasure chests than cutlery boxes. The stories that involve games will be more about adventures, experiments, mutinies, less about habit, routine, obedience.[10] Far more often, though, it's the how, it's the everyday themes prepared with the unexpected, for example, catching, hiding, throwing, sitting down, settling: Running away from a catcher who can catch anyone and everyone, hiding in the most unexpected places possible, throwing a ball at an unexpected target, grabbing a free chair in musical chairs in response to an unpredictable signal, experiencing one surprise after another as settlers of Catan, and submitting to the randomness of rolling the dice.

Object-, Success- and Dissemination-Media

Sybille Krämer (1995, p. 227) has formulated the "largely hypothetical assumption" that "instrumental use and playful interaction are alternative modes of using something": again, the how is crucial.

Krämer's assumption proves itself in a striking way in the distinction between tools and toys. Acting as if is free to use each thing as another. The basic phenomenon is also evident in normal ways of dealing. From the "Art of Acting" (Certau, 1988, p. 80 f) we know "the enigma of the consumer sphinx", for which "its richness of list, its crumbling depending on the occasion, its poaching, its clandestinity and its incessant muttering" are characteristic. The function and purpose of products, as intended by producers, are used by consumers again and again in many different, highly diverse ways.

[10] For the nineteenth century, Peter Schnyder speaks of "anti-normalist counter-worlds in the collective imaginary". "In the reception space of industrialization and normalism", narratives with ludic themes unfolded: "A novel like Prévost's *Manon Lescaut,* which is also centrally a novel of gambling and chance, is thus rewritten, as it were, in literary repetition – whether in Stendhal's gambling novel *Le Rouge und le Noir* or in Dostoyevsky's *The Gambler.* And an autobiography like Casanova's, in which the gambling world of the eighteenth century is portrayed in unique colour, can become a central reference value for the self-understanding of modernity" (Schnyder, 2009, p. 394 f).

Object-Media and Technology

The game also has further freedom here, for which three stages can be distinguished. First, the simple re-functioning of found things by giving them a different meaning and using them in a correspondingly different way: the branch that becomes a sword to defeat the monster into which the red cabbage head has suddenly turned. In the second stage, things are made or manufactured on a case-by-case basis so that they are well suited for play; stuff for play is created. The level of technical development, which is decisive for the making of tools and for the working of materials, also influences the possibilities of making toys. "Dolls made of wood, clay, plaster, ivory, marble, alabaster, leather or cloth" (Ziegler, 2004) have been proven by archaeology for Greek antiquity. Playing with fire, "the playful application of pyrotechnics in pleasure fireworks" (Leng, 2003), is another example.

> The technical foundations for this date back to the 14th century. But only with increasing mastery and refinement of the initially predominantly martial pyrotechnics, accompanied by a professionalization of the gunsmiths an increased need for representation of the courts, the pleasure fireworks could develop. […] After initial hesitation, a highly sublime art of fireworks developed quite quickly from war fire from about 1500 onwards. (Leng, 2003, p. 106 f)

Mechanics, and later electronics, lay the foundation for automated gaming. Mechanical toys were used long before one-armed bandits (since 1899) and pinball machines (since 1947 with the typical pinball lever).

> For example, with a "17th-century game box which, after insertion of a coin, allowed one to thrust a rapier into the heart of the widely hated imperial-ligist general Tilly, or the coin-operated machine of a certain Vascot, with which one could guillotine King Louis XVI, even before his death, *in effigie in* the field camp of General Dumouriez." (Warneken, 1974, p. 73 f)

Managing toy production happens on the third level. Managing means making provisions for tomorrow's supply today. In the case of toys, this is what the toy industry has been doing since the nineteenth century. It produces, markets and advertises toys – including classics such as toy trains, dolls, humming tops and construction sets – and turns them into a profitable business. Until the First World War, it had a centre in Germany (cf. Hamlin, 2007).

> The circumstance that hundreds of thousands of people in Germany live from the manufacture and sale of toys, and that the craft of toy-making has been and continues to be handed down from generation to generation in thousands of families in Saxony,

> Thuringia, Bavaria, and Württemberg, imposes upon us, if only in the interest of the more than modest existence of these innumerable poor toy-makers, who are the descendants and heirs of our old German master craftsmen, the duty of seeing to it that we continue to retain the world championship in toy-making. (Hildebrandt, 1904, p. XI)

Theoretically, the link between technology and play is also interesting because technology requires experimentation in order to be developed and tested (cf. Poser & Zachmann, 2003). Technology, which is what makes it so comfortable, insofar as it works, couples cause and effect in monocausal chains and represents the pretty much exact opposite of a game. Technology, appropriately maintained, runs endlessly and produces as obligatory as it actually does only what is expected. It takes experimentation, a temporary noncommittal doing, to invent and try out new techniques. Albert Einstein's dictum "Play is the highest form of research", which can be purchased in the tin plate design, sums up this circumstance.

Love and Power

Krämer's assumption that instrumental use and playful interaction are alternative modes of using something is furthermore confirmed in communication. This can be demonstrated by the use of the *success media* and *dissemination media.* In order for communication to continue and unfold beyond interactions of those present, system theory says, special media are needed with which "the threshold of non-acceptance of communication, which is very obvious when communication reaches beyond the realm of interaction among those present, can be pushed out" (Luhmann, 1997, p. 204). Money in business, power in politics, law in justice, attention in the public sphere, truth in science, promise in counselling, love in the family are such media that motivate and make it more likely that business will continue, politics will continue, justice will continue, public communication will continue, research will continue, counselling will continue and love will continue.

In contrast to dissemination media in particular, systems theory speaks here of "symbolically generalized communication media" (Luhmann, 1997, pp. 316–396) or more simply of success media. Measured against tribal societies, the social function of such success media becomes irreplaceable and self-evident in later stages of social development. In ludic communication, power and love are likely to be the two success media that most characterize the handling of the unexpected. Money, on the other hand, is the medium of success that play seeks to instrumentalise in a particularly sustainable way (see Sect. 6.2).

Theoretically, at this point it is worth recalling that the function of play was developed from interaction as communication among attendants. Therefore, we must be interested in "how the references of the media of communication to human bodies […], that is, to the actuality of the organic-psychic life of the human being, are regulated. […] How is the inclusion of corporeality in a social process regulated when the body cannot play a part, when communication is not fluid like blood or mercurial like thought, but must proceed in a certain orderliness, because otherwise it would not be intelligible?" (Luhmann, 2005, p. 171). The answer is that media-specific references to corporeality can be discerned: "When one thinks of love, sexuality is the evidential case" (ibid, p. 172). In the case of power, "there are clear relations to physical coercion, that is, to the violence that can be exercised against bodies" (ibid, p. 174). We address violence, at the difference between lawful and "naked", in the context of digital games (Chap. 5), because their executions as non-binding actions as if and their corresponding performances only come to full fruition online. This is also related to the above-mentioned circumstance that the function of success media is needed above all beyond presence. The option of communication between addresses triggered by digitalisation, i.e. for interaction between absentees (see Sect. 5.2), is subject to this requirement.

Primary to Tertiary Order Dissemination Media

Dissemination media and signs function in communication as inseparable components. The classical division of dissemination *media* into primary, secondary and tertiary, which Harry Pross (1970) proposed under the aspect of the production and reception conditions of communication, also applies to game media. *Primary* media get by without technology, only with light, air and the five senses; they "carry" direct interaction, for example, in rhyming and singing, guessing and arithmetic games. *Secondary* media, including writing and pictures, are produced with simple tools from quill pens to crayons, but also with more sophisticated ones such as cameras and printing presses. The technique is applied by the respective sender, the recipients get by with their sensory perception. Theatre stage here versus film theatre there illustrate the difference to tertiary, namely to all electronic media that use technology on both sides like radio, television and computer.[11] Now the recipients also need technology, namely projection devices, in order to perceive the signs and

[11] It is not uncommon to speak of quaternary media in the context of digitisation, but the criterion of distinction is thereby tacitly changed, because it is no longer the technical device used on both sides that is decisive, but its functionality.

receive the radio play or the feature film. Analogue radio media block themselves from the game because they can show their audience ludic actions, but the spectators cannot play along, or only very sporadically and selectively. This is changing with digitalization.

Computer games are given their own chapter, although this may imply too much disruption. Indeed, playing on and with the computer has considerable new aspects, yet there is much to be said for the "thesis of the tense unity of aesthetic media, which states that every aesthetically successful object renegotiates the boundaries of aesthetic media as a whole" (Feige, 2015, p. 112). But the computer functions not only as a medium, but also as a tool.

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Playing in the Digital Sandbox

5

Abstract

As video, console, PC, online and mobile games, digital games have become highly differentiated within a few decades; category formations and genre designations are in flux for both hardware and software. The computer as a universal tool and as a high-performance medium opens up new fantastic worlds for games, which owe their existence to the punch line of digitalization: the more thoroughly separated, the more possibilities for recombination arise, the more trivial the distinction, the easier its increase into ever greater complexity. A look at the history of communication helps us to better understand the Ludic potential of the computer, which enables a threefold first-person experience as player, played and observer. What is striking about computer-based games to this day is the disparity between supreme technical sophistication, luxurious design and opulent imagery, and sometimes poor social skills. Digital communication as interaction between addresses creates a contradiction between richness of experience and poverty of compassion. It finds expression in ludic excesses of violence, which are, however, thoroughly misunderstood on the simple comparative level of game and reality.

> Those who still grew up in the sandbox dreamed of what it would be like to be behind the wheel themselves with toy cars. The new generation sits in front of the screen and steers their racing cars around Formula 1 circuits. (Lischka, 2002, p. 16)

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Actually, as always when new media and/or new signs change the possibilities of communication in previously unimagined ways, also in the case of digitalization the two descriptions compete against each other, which emphasize either the old or the unprecedented in the new. In order to understand the ludic potential of the computer and thus the evolutionary thrust of play as it occurs with digital games, what matters is the difference between analog and digital, a small difference within the radio media that work with electricity, which has major consequences due to the invention of the computer.

The work on the difference between analogue and digital, to which longer passages are reserved, gives this chapter a different basic character in comparison to the preceding line of argument: media-technical and communication-practical preconditions of playing are dealt with in detail, whereas previously they were only mentioned as marginal conditions. "What does this have to do with the subject of play now?" some readers will ask themselves. If play has been able to move that far into the centre of social attention, as it is currently experiencing, then this has a lot to do with the fact that it has been given an additional foundation through digitalisation. Making sure of this foundation is not an obligatory task for a theory of ludic action, but it is a contribution to a better understanding of play, which was theoretically captured in the second chapter as a voluntary, temporally and often spatially marked, constantly new way of dealing with the unexpected in the mode of a non-binding activity as if.

As a scientific topic and object of study, digital games resemble a Wishing-Table. On the one hand, everything that has already been said about the game can be seen, described and interpreted anew. On the other hand, many questions that have been asked about communication up to now can be renegotiated, because with the computer as a medium of dissemination, everything can be sent acoustically and optically that has been communicated up to now, in whatever media format, and even more. "Modern society thus seems to have reached a limit at which nothing is no longer incommunicable – with the one old exception: the communication of sincerity" (Luhmann, 1997, p. 311). Tables of contents of monographs and readers on the "computer playground" (Lischka, 2002) are therefore thematically and perspectively overflowing cornucopias: "Computer game researchers come from literature, film, art, or media studies, education, sociology, communication studies, or computer science" (GamesCoop, 2012, p. 10). Philosophy, architecture, ethnology, and economics could also be mentioned, and probably others. The object of study serves itself to them; it would be arbitrary to reject even one of these perspectives as inappropriate.

The Game Is Not Reinvented Digitally Thirdly, the new possibilities that digital communication offers to gaming can be explored and discussed in their own technical language with fashionably created terms, whereby uninformed recipients of the technical literature can hardly find their way around without a glossary.[1] This third aspect, assigned to milestones in the history of communication, is the focus of the following analysis. This also raises the question posed by Claus Pias: "Why do computer games exist at all? If there is something surprising about all previous studies on computer games, it is the matter-of-factness with which it is taken for granted that they exist" (Pias, 2002, p. 9).

The game is not being reinvented digitally, but it is being practiced in a significantly different way. As video, console, PC, online and mobile games, digital games have become highly differentiated within just a few decades; category formations and genre designations are in flux for both hardware and software.[2] "Genre categories are almost inevitable in practice – be it on the part of game developers and publishers who want to market a new product; on the part of game critics who structure their test reports according to genres; and last but not least on the part of recipients and communities as a selection aid when buying and discussing games. Genres thus constantly oscillate between economic, cultural, social and, not least, scientific category formations [...]" (GamesCoop, 2012, p. 20 f.).

[1] "English terminology in the field of games was mostly not developed by experts, but it has historically emerged through interaction between developers, copywriters, and users. Even the game developers, who had insufficient command of the English language, felt obliged to describe their game types in English in the course of globalization. [...] Advertising copywriters adopted the wrong terminology and embellished it with emotional filler words. International users took over this chaos of terms and adapted their spellings to their respective national languages. This has led to sometimes amusing, sometimes confusing terms [...].Given the name, you might think of a "third person shooter" as either shooting the third person you encounter in the game, or – if you think of 'third person' correctly in terms of grammar, as the creators of this strange word construction probably had in mind – shooting a third, uninvolved person while talking to an avatar. Correctly, all shooters should be called "second person shooters", because "first person shooters" would then logically have to be suicide games" (Breiner & Kolibius, 2019, p. 10 f.).

[2] A now historical overview of software genres together with long lists of associated games is provided by Frey (2004). Based on the hardware, understood here only as the device used, a distinction is usually made between arcade, console, PC, handheld and smartphone games. (German-language) computer magazines such as "PC Games Hardware" and "GameStar", also "c't" and "Computer Bild", provide information about model developments in hardware. Just as differentiated as clear, classification criteria of computer games and game genres are now presented in Breiner and Kolibius (2019, pp. 9–59).

Things and Nonentities First of all, it should be remembered that everything that users encounter on the Internet is a communication; it is communicated or – whenever – what is communicated is received. The Internet thus forms a stage of a development that Vilém Flusser calls "abstraction play" and describes in this way:

> Not long ago, our environment was made up of things: of houses and pieces of furniture, of machines and vehicles, of clothes and linen, of books and pictures, of tins of food and cigarettes. [...] It is not easy to know one's way around things. And yet, as we now realize in retrospect, it was rather comfortable to live in an environment of things. [...] Unfortunately, that has changed. Undings are presently invading our environment from all sides, and they are displacing things. These things are called 'information'. [...] It is unding information. The electronic images on the television screen, the data stored in the computers, all the film tapes and microfilms, holograms and programs, are so 'soft' (software) that any attempt to grasp them with the hands fails. These non-things are, in the exact sense of the word, 'incomprehensible'. They are only decodable. (Flusser, 1993, p. 80 f.)

Starting from the dual existence of the computer as a tool and a medium of dissemination (Sect. 5.1), we discuss the interactions between addresses as well as with the computer itself (Sect. 5.2) and describe properties of computer games that open up previously unknown possibilities for experience and action (Sect. 5.3).

> The dreams of cyborgs, neurointerfaces, or detachment from the body, of immersion in virtual worlds where one begins a second life but with all sensory experiences and motor possibilities, up to and including cybersex with other telepartners whom one will never 'really' know, open up, it seems, a playful world with new rules made possible by the computer. (Rötzer, 1998, p. 150)

5.1 Computer as a Tool and Dissemination Medium

> That computers play is an ideological metaphor. The fact, on the other hand, is that computers are extraordinarily seductive invitations to play. (Adamowsky, 2001, p. 21)

As a machine tool and medium, the computer has both a manufacturing and a representational function. "To an understanding not yet irritated by philosophical questions, technical instruments are regarded as means for something, but media as mediators of something" (Krämer, 1998, p. 83). Here again, the history of communication helps us to better understand. Verbal communication among those present uses air and sound as perceptual media and language as a means of dissemina-

tion. These are comfortable conditions, assuming knowledge of language, because communication in the complementary roles of sender and recipient is possible at any time due to naturally given conditions. What is sent back and forth are the phonetic signs. One's own body, equipped with mouth, ears and eyes, is ready to function as sender and receiver, provided one is conscious. The fact that even everyone present can speak at the same time is then rather a disadvantage. It is important to keep this description of verbal communication among those present in mind, because it recurs in a peculiar way in online communication.

Writing "did not, of course, come into being as a means of communication, for that would have presupposed readers. [...] The best-known reason for its emergence, now already related to social communication, lies in the recording needs of complex economic households" (Luhmann, 1997, p. 260 f.). As a medium of perception, writing "buys" its advantage of also reaching absent people with the inconvenience of having to fix the signs on a material. The theory of signs therefore includes not only semantics, but also a kind of material science, because the materiality of the signs is also important, their visibility and tangibility.

> In the dawn of human history, the first statements were recorded by clumsy scratching or cutting into stone and wood. This deepened digging allowed the sign to be perceived not only visually but also by palpation with the hand. This sense of being anchored in an imperishable material has retained its effect: for even today a monument or gravestone is not painted, but hewn with hammer and chisel. Superficial, two-dimensional drawing or painting on lighter supports such as boards, skins, leaves expanded the possibilities of expression and made it possible to express oneself more quickly over time. For the expansion of communication, these factors were contributory. (Frutiger, 2006, p. 50 f.)

Unlike verbal communication, writing is a materialized form of the medium of dissemination that travels between sender and addressee or is stored in libraries where it can be read by interested recipients. Book printing does not change this basic constellation, but it does make it more dynamic due to the technical reproducibility of the signs. Signs and dissemination media that can be mass-produced by machine can leave monastery walls and library halls, assuming expanded and faster transport possibilities. Dissemination media circulate in technically produced, materialized form, among other things as leaflets, posters, books, newspapers. But the fact remains that recipients have to go to the bookstore to get the medium, or that senders provide or pay for postal services to get the medium to certain addresses.

Microphone and Loudspeaker, Camera and Screen

With the radio media, the constellation that shapes communication among those present arises in a new way: It is not the media that are on the move, but the signs. This is made possible by "the fact that electricity creates instantaneous links locally and globally that can be switched at the speed of light" (Baecker, 2010, p. 42). "From mouth to ear – on the beam of electrical power" is the sequence that the media magazine of Rundfunk Berlin Brandenburg broadcasts to this day as a distinctive sign.

Transmitters and receivers are technically manufactured. They are usually purchased by living senders and receivers, i.e. people, and placed in their homes – with one decisive difference: this advantage of being able to transmit signs much more quickly and directly with the aid of electrical energy can initially only be achieved by a few senders facing many addressees. Producers and recipients of mass media messages are widely separated from each other. The recording and output of sounds and images become technical processes with microphone and camera on one side, loudspeaker (radio) and screen or monitor (television) on the other.

Discretion and Recombination

Despite this massive intervention of technology, moving images – once the initial horror has been overcome[3] – radiate a certain credibility. In order to record and show something, it must have happened; even fictional scenes must have happened for real; sometimes stunt men and women find jobs in the process. "The guarantee of reality that language had to give up, because everything that is said can be contradicted, thus shifts to the moving, optically/acoustically synchronized images" (Luhmann, 1997, p. 305). In this respect, too, digitalization leads to a rupture, which will first be understood in technical terms with the help of Achim Brosziewski.

> The paradigmatic component of this technology is the membrane. It is the 'interface' between acoustic and electric impulses, which it transforms forward and backward into each other. The basic problem of this technology is to teach electricity to listen

[3] Film history notes the following about the screening of the Lumière brothers' film "The Arrival of a Train at La Ciotat Station" in Paris in 1895: "In 'L'ARRIVÉE DU'TRAIN' the locomotive raced from the background of the screen towards the spectators, who jumped up in fright because they feared being run over" (cited in Dotzler & Roeßler-Keilholz, 2017, p. 81). It is also reported that the viewers could initially only explain the close-up of a head as meaning that someone had been decapitated here.

> and to blow. [...] Both at the same time cannot be realized in one apparatus, because then the apparatus would have to be able to *decide* which of the two transformations it should carry out at the moment. Imagine this in a telephone conversation with all its speech overlaps and pauses. The problem described above – which can be applied mutatis mutandis to the relationship between optics and electricity – forced message theory and device construction practice to *distinguish* between pulses and signals and thus to ask how the *unity of* a signal can be generated and maintained in the alternation of pulse forms. The solution was and is called: by reduction [...]. On the side of electricity, digitalization represents the optimum of reduction. (Brosziewski, 2003, p. 84 f.)

Whether reduction is a happily chosen term may be doubted. Discretion would perhaps be a better choice of words, because selectivity coupled with combination capacities characterize the digitization of signs. Discretion is so radical because digital signals know only two states, realizing the sharpest possible either-or: If 0, then not-1, if 1, then not-0.[4] "Electrical impulses are *decomposed* from a 'more or less distinct' (voltage) into an 'either-or' (switch on or off) and are also *reassembled* from these 'bits' – decomposed on the input side, assembled on the output side" (ibid, p. 85). One can also summarize the performance of the tool-computer as transforming acoustic and optical impulses into digital signals, storing them according to programming, processing them, forwarding them as well as transforming them back into acoustic and optical impulses, which the medium-computer offers to human perception as writings, sounds and images. The point is: the more thoroughly separated, the more possibilities for recombination arise. Users can use the computer, especially if they are gamers, in principle, not always in concrete cases, as a medium and as a tool, as sender and receiver, but also as producer. "Those who get involved with digital images (and how should one avoid that today?) can know that they can do both at the same time: register immensely reliably (with millions of pixels and in the highest resolution) what is the case, and at the same time make an image, that is, process the material or, in comparison to analogue photo and film technology, the non-material" (Hörisch, 2013, p. 21).

[4] This is true for classical computers. Quantum computers, we read, can do more: "While in a classical computer a bit is set either to 0 or to 1, a quantum bit can take on both values at the same time, in other words, be in two states at the same time. This is called superposition." (Homeister, 2018, p. 2) "And suddenly there's another world," writes Christian Stöcker (2019) on Spiegel-Online, "Machines that learn in seconds would become possible."

From Steam Hammer to Thinking Machine

Figuratively speaking, the Matterhorn has dissolved into sand-grain-sized stones of two kinds, which can be put together again and again to form new configurations. We are experiencing a "new dissolution" (Kucklick, 2016, p. 10), in which the exciting novelty is its enormous potential for recombination. Digitized, the signs – assuming mastery of the technology, programmers will interject – achieve a mobility and mutability that minimizes spatial and temporal barriers. They remain signs in the fundamental sense of standing for something else, but in a highly fluid, dematerialized, and meaningless way. "Whether they are 'serious' or 'playful', 'decent' or 'indecent' [...] must be decided *outside* the medium, that is, by the participants. The digital medium – like writing, like even language – is indifferent to valuations" (Brosziewski, 2003, p. 227). Douglas Adams has set a literary monument to the meaninglessness of digital computing. In "The Hitchhiker's Guide to the Galaxy", supercomputer "Deep Thought", which is so powerful that it meditates on the vectors of all particles of the Big Bang to pass the time, gives this answer to the question of all questions, the answer "to the great Question of Life, the Universe and Everything" after 7.5 million years of processing: "'Forty-two', said Deep Thought, with infinite majesty and calm" (Adams, 2005, p. 119 f.).

Simplified to (from today's point of view) the point of no return, the digital signs can be increased to previously unimaginable dimensions of complexity: "With its possibilities for serial testing, a computer can, under certain circumstances, run a million-player game of trial and error, for which nature needs millennia, in minutes, in order to find the right one out of thousands and thousands of wrong throws. In this respect, indeed, the 'thinking machine' has become an amplifier of our minds, as the steam hammer has become an amplifier of our fists" (Krämer, 1998, p. 99).[5] Being able to do all sorts of things nevertheless does not free us from the operational necessities of any particular endeavor: the work of programming remains. This circumstance, in turn, does not change the fact that the

[5] Even if serial testing is not the last word, but – keyword artificial intelligence – generative processes are possible, it is worth remembering: "Francisco J. Varela compared the trampling paths of ungulates on a fenced and an open pasture in a pretty drawing some years ago. The comparison is telling. It makes it plausible that the computer owes both the high degree of certainty of its operations and the speed of its data retrieval to the *finite* world of possible situations input to it" (Krämer, 1998, p. 102). Or in the words of Friedrich A. Kittler (2013, p. 291): "The so-called philosophy of the so-called computer community does [...] everything it can to obscure hardware behind software, electronic signifiers behind man-machine interfaces."

computer has the capacities of a universal tool, i.e. it is not, like previous machines, only oriented towards a specific purpose.

From here, one first arrives at a very mundane description of the computer game. "Formally speaking, all actions that a player triggers are initially nothing more than the shifting of a few zeros and ones on various memory locations" (GamesCoop, 2012, p. 69) Or asked with Daniel Martin Feige: "Aren't computer games simply binary code that can be described in mathematical and machine language terms, and thus ultimately nothing more than bits and bytes?" (Feige, 2015, p. 81).

Operations in the Data Room

In fact, computers deal with two fundamentally different kinds of signs, namely the mathematical signs 0 and 1 and the phonetic, written and pictorial signs as they are accessible to human perception and known from previous dissemination media. The one make no sense without the other, which ensure that hearing and seeing come into being, and the other revert to their analogical existence without the one. That is, "everything that happens aesthetically on the computer ultimately has a correlate at the level of code" (Feige, 2015, p. 99), based on operations in data space, for which the notion of algorithm, "which generally means nothing more than the calculation rule for solving a problem. [...] Algorithms are mathematical tools for processing data in such a way that statements can be derived from them and conclusions drawn" (Hartmann, 2018, p. 150).[6] Programmers can be described as the interpreters who mediate between the two types of signs with their transla-

[6] "To simplify the problems of classifying online information, one can distinguish four types of algorithmic computation in the ecosystem of the Web. Figuratively speaking [...] the position of computation can be thought of as *next to, above, within,* and *below* the mass of online digital data. Thus, first, measurements of audience are located *alongside the* Web, where they quantify Internet users' clicks and determine the *popularity of* Web pages. Second, there is the classification group based on *PageRank*, the classification algorithm underlying *Google's search engine.* It is localized *above the* web because these calculations decide the *authority of* web pages based on the hypertext links associated with them. Third, there are the measurements of *reputation that* have evolved in social networks and are located *within the* Web because they provide Internet users with a metric to evaluate the *popularity of* people and products. Finally, *predictive* measurement, which personalizes information to users, uses statistical learning methods *beneath* the web to calculate the navigational paths of internet users and predict their behavior relative to the behavior of others with similar profiles or histories" (Cardon, 2017, p. 132 f.).

tion services and thus also between the computer as a tool and as a medium that disseminates texts, sounds and images.

The fundamental difference in the signs required for digital communication means that the concept of text is "one of the greatest challenges in studying computer games from a literary studies tradition" (Backe, 2017, p. 34).

> "The only fixed textual level is the source code, which, however, is usually hidden from the user and in its alphanumeric form is also 'readable' at best only by experts. However, even these can only anticipate the effects of executing the code, since it is not a description of a state, but instructions for a process." The executed code requires a character-based output to make running processes and the game state tangible for the players. This audiovisual output is usually oriented towards other media. However, even if computer games appear cinematic, adapt literature or borrow from comics, the primary engagement with them always aims at keeping the game running. (Backe, 2017, p. 34)[7]

One of the consequences of digitalization is a dramatic mobilization of communication. Not only do digital *signs* transcend time and space, but the *medium of* digital communication has also become mobile since the advent of handhelds, laptops, tablets and, above all, smartphones.

Playing On and with the Computer

If playing means dealing with the unexpected in the mode of a non-binding action as if voluntarily and marked in time, often also in space, the question arises as to how this concept of play and the computer fit together. Computer games can take place both as ludic actions *on* the computer between players *on the* basis of a program (see Sect. 5.2) and *with* the computer between player and program, and thirdly as a combination of both possibilities. Given the triviality of the basic operations, which take place as if-then sequences between just two states, one does not expect anything unexpected at first. But exactly this simplicity is, as already mentioned, the condition for the possibility of a previously unattainable complexity, which makes the computer a black box for players

[7] In terms of communication theory, source code is not easy to grasp because it has a double communication character. Both humans can read it (understand it functionally) and continue working on it, and machines can 'read' it and translate it into their 'language'. However, it does not have a message that needs to be understood, it functions without meaning, but not without purpose (With thanks to Jo Wüllner for his briefing).

> and game fun by suggesting contingency where programming prevails. While the freedom of the player necessarily takes place on the level of ignorance, the compatibility between man and machine is guaranteed by the fact that hardware and software design him in their image, and call this 'human justice', 'usability' or 'playability'. At this point in the system, the player appears as a feedback *device* or second program whose outputs are queried in a time-critical manner (action), who must retrace links already made in a database (adventure), or who must optimize a configuration of variable values (strategy). (Pias, 2002, p. 12)

Unpredictable Computing Power

It is the computer's far greater computing capacities than those of the players that make it unpredictable as a player and opponent. Success in games then depends, among other things, on transforming the unexpected into the expected by means of repetition, and knowing how to deal with it. The computer itself is now best at this. "Google AI beats top human players at strategy game *StarCraft II*" reports the prestigious science journal *Nature* on October 30, 2019. "DeepMind, which previously built world-leading AIs that play chess and Go, targeted *StarCraft II* as its next benchmark in the quest for a general AI – a machine capable of learning or understanding any task that humans can – because of the game's strategic complexity and rapid pace" (Garisto, 2019).

But it is not the digital player, but the digital producer that is initially the subject. As a computing machine, the computer possesses production capacities that were not inherent in earlier tools for the production of dissemination media, such as the printing press or the analogue camera. *Before* digitalization, the following was true: in order to show the Vienna Philharmonic's New Year's Concert to a worldwide audience, it had to take place in real life, be recorded and broadcast. *After* digitalization, everything that is to be broadcast can be written as a program, perceived on the screen as a virtual reality and, if not protected, changed. This potency of computers to function as "reality machines" (Hartmann, 2018, p. 147), to produce moving images, synchronized with sound, without being illustrations, makes possible visual worlds that – at the cost of credibility (see above) – are fantastic in several senses of the word. A threefold fusion of previously separate perceptions can now take place, which must appear as a confusion from the perspective of the previously familiar: "first, of the media with each other in intensive and extensive transmediality; second, of the media with the environment in hybrid augmented *reality constellations*; and third, of the media with their users in increased psychological, cognitive, and also physical immersion" (Freyerrmuth, 2013, p. 323 f.). Computer games benefit in all three respects.

Games, the All-Rounders of the Digital World

Digitization is a driver of the game and the game becomes a driver of digitization. Because the computer speaks a common language on the level of digital code for all previous technical media of dissemination, game design can make use of everywhere and adapt all previous technically supported variations of the game. In addition, there is the double mobility of sign and medium. The horizon of possibilities of communication as a whole, and thus also of ludic communication, now tends towards "anything anywhere, anytime". Finally, it is worth recalling the potential multiplicity of ludic actions that exceeds any normal measure (see the introduction in Chap. 4). If this ludic potential can now be exploited virtually, that is, "only" needs to be programmed, then the computer game is predestined to become one, not the only, pioneer of digital technology. And indeed, "the list of successful start-up entrepreneurs who have gained access to IT through computer games is long – the fascination with games, either as users or developers, continues unabated" (Anderie, 2018, p. 6).[8]

This technical avant-garde function of the computer game depends not only on its diversity but also on the priority of the images.

> Indignant shaking of the head and narcissistic mortification now and then sets in among the authors of extensive texts when they compare the small amount of storage space required by 500 pages of a book with the considerable storage space of just one holiday photo (not to mention a short video clip). (Hörisch, 2013, p. 21)

More and better images require higher computing power. As far as computer games are concerned, this does not simply mean more realism. "Technical development does not strive purposefully towards a 'simulation of impressions of reality'; rather, it constantly expands the representational repertoire of the computer game" (Beil,

[8] "Steve Jobs started his career at Atari, then founded Apple and Pixar, and if you look at the user interface of the iPhone, the signature of the games industry becomes transparent. Elon Musk, the legendary Silicon Valley investor, Tesla founder, and aerospace entrepreneur, also started programming videogames early on (see Vance, 2015, p. 26) before then using his coding skills to launch his first startup." (Anderie, 2018, p. 6); see also Maibaum and Derpmann (2013).

2012, p. 23). A more intensive scholarly engagement with the imagery of digital games has taken place in Game Studies compared to its beginnings.[9]

5.2 Interaction Between Addresses

Equipped with keyboard, microphone and camera as well as loudspeaker and screen, computers become transmitters and receivers at the same time – and thus also their living users. Under the two additional conditions of mobility and the networking of computers, communication relationships become possible that have something essential in common with communication among those present: everyone can be sender and receiver at any moment.

Once again, the history of communication helps us. With drawing, painting and *writing,* the communication has separated itself from the sender. This separation is strongly enforced with *letterpress printing,* because texts and images can be mass-produced and what happens to and because of the messages gets out of control. Analogue *radio media,* geared to mass communication, have – reunited optics and acoustics that were separated from writing, but – drawn a deep chasm between a few professional senders on the one hand and their many receivers on the other. Despite this chasm, simultaneous sending and receiving takes place, as in interaction, but even the most developed, transnational and multimedia analogue radio medium, television, does not overcome this chasm: Everyone can watch the feature film, the guessing game, the entertainment show; they cannot play along. In reality game shows, people from the audience may appear, but it doesn't change anything; tuning in means watching and listening on the other side of the divide.

Analogue radio media optimise the quality of messages up to the transmission of moving images, which depict natural as well as operational-technical and communicative events. Real events can be presented to those who are absent, even if only selectively and prepared for broadcast. Fictitious events can also be communicated in an acoustically and visually perceptible manner. Analogously, stored content can be broadcast in sound and image, as well as live events that are cur-

[9] "Still established in the shadow of the *linguistic turn*, the young game studies accordingly sought to interpret their subject matter primarily from the point of view of narration and regarded the imagery of the computer game at best as an illustration of original textual references to meaning" (Hensel, 2013, p. 209 f.). In favor of Game Studies, it should be remembered that "In the first phase of its development, the function of the computer is foregrounded primarily as a calculating, coding, and text-processing machine. In the course of the examination of the computer, new potentials and uses are discovered and created. The computer as a visual and networked medium emerges" (Sehnbruch, 2018, p. 359 f.).

rently taking place. In the analogue world, the broadcasters decide when stored content is accessible to the public.

Quantum Leap in the Play with Signs and Media

This often described constellation, in which the audience becomes a spectator of world events, an addressee of PR and advertising as well as a consumer of colourful entertainment programmes of film and television, changes with digitalisation. To connect to the Internet means, in addition, to become *able* to *communicate,* and in relation to the game, to participate, to play along. Digitization triggers a quantum leap (if one may say so in contradiction to the physical meaning of the word) in the play with signs and media by building a bridge from watching to playing along that is accessible to all, even to those who are absent. There is no interaction between persons present, but between addresses – which do not have to be persons. This gives rise to new kinds of game situations, because "interactivity is not just any addition to an audiovisual event, but is determined by the intentions, preferences and abilities of the players on the one hand and the specifications, offers and aesthetic strategies of the games on the other" (Neitzel, 2008, p. 110).

In the digital medium, everything imagined, simulated, fictional can become a social address.[10] Communication is possible as a matter of course with superheroes, knights, dragons and space monsters; the fact that it often only takes place as violence is another matter (see Sect. 5.4). Real things that are absent can be clicked to "present" just as fictional things can be clicked to "present", but not only imaginarily as shared conceptions, nor of course as realities, but virtually, that is, as sensually perceptible signs that can be called up at any time, and which can moreover – not all and not always, but in principle – be changed interactively and in real time. The normally impossible can not only be imagined or narrated as a possibility, but can be perceptibly shown on the screen in moving images without having been realized beforehand. Virtuality becomes a gala for ludic communication.

[10] At the same time, in the extra-ludic normal world, things, natural as well as artifacts, can become carriers of information. Cars, fridges and clothes make messages about changes of state.

Sandbox Games

In the digital world, being able to play along doesn't just have to mean participating; it can also involve self-organization to a previously unfamiliar extent. For this purpose, so-called sandbox games are offered, which are presented in the advertising-infected language of the trade publication *GameStar* under the headline "these games give you all the freedom you need".[11] A prominent example is "Minecraft"; "Conan Exiles" and "Lego Worlds" also fall under this category. In contrast to *open world games,* in which a rich, but ready-made, predefined game world is explored, for sandbox games the creation is central, not only of game paraphernalia such as buildings, machines, costumes, weapons, but also of the events and the stories.

Such possibilities of play illustrate the difference between the imaginary and the virtual, but not infrequently the imaginary side of communication (see Sect. 3.1) is equated with virtuality. Thus Achim Brosziewski says that the semantics of virtuality fails to recognize "the virtualizations that are constitutively inherent in every 'mediation' of information. Every reproduction of information in one of the established media 'mediates' with possibilities that exceed the test horizon of 'unmediated' perception and must be 'localized' with the help of their own space-time constructions in each case" (Brosziewski, 2003, p. 101 f.). We argue against this that imaginary and virtual should be understood as two different forms of reality, because the virtual is made accessible to perception by technical means, whereas the imaginary is communicated by communicative means or, this applies to both, not at all. To put it more sharply: the imaginary must first be transformed into signs and thus into communications in order to be perceived.[12] Virtuality has a social presence, it is a matter of communications that can be switched on and off. This retrievable social presence gives rise to a new, hotly debated quality of online communication.

Social Control Makes Responsible

Interactions as communication between addresses take place on the same basis as communication between attendants, namely the change of role of all participants

[11] https://www.gamestar.de/galerien/die_wichtigsten_sandbox_games,133748.html (accessed September 10, 2019).

[12] Interesting analyses and differentially described examples of virtual worlds include Bogen et al. (2009).

between sending and receiving, which is possible at any time. “An observer option coincides with the voice option, creating a dynamic form of communication that is hardly controllable – and just as often gets out of hand” (Nassehi, 2019, 281 f.). That it gets out of hand ever so often is related to important qualitative differences from communication with those present. First and foremost is how much the function of social control loses effectiveness. Among those present, “there is a density and hopelessness of being observed” (Kieserling, 1999, p. 51), which makes all participants equally controlled and controllers. There is no possibility of “sinning against the interaction or against its rules and then hiding this”. Or in Goffman’s words, “A crime against interaction can only be committed under the eyes of the jailers” (ibid., p. 52). Social control makes responsible, it does not always, but without further ado, result in moral judgement, in respect and disrespect. Experiencing social control forms “an essential moment of our emotional life and grounds our emotion and our anger, our joy and our sadness, our pleasure and our disgust, our fear and our hope, our pride and our shame” (GamesCoop, 2012, p. 120).

Less Control in, More Control Over Communications

In communication between addresses, on the other hand, the persons involved have only a virtual presence, they cannot completely hide behind their address, but they are not tangible in the communication situation, which increases communicative aggressiveness and attackability. “The social compulsion to adhere to certain rules of interaction, which is maintained by the common physical presence in a space and by the identity of the individual anchored in the body, breaks down [...]” (Rötzer, 1998, p. 149).

In digital communication between addresses, sender and receiver do not control each other, but, only this hint completes the picture, their communications can be controlled by third parties to an extent that communications between present persons never were due to an “almost complete penetration of the digital sphere by spying apparatuses. [...] Any defence of social networks, for example – I have often done this too – must be supplemented retrospectively by the fact that social networks are also a perfect instrument for creating a maelstrom of private information onto the Internet. And thus to surveillance” (Lobo, 2014).

The atmosphere of communication between addresses is disinhibiting, it relaxes social ties and loosens responsibilities. On the one hand, these conditions are decisive for behaviour in so-called social media that undermines civilised minima of mutual respect – keywords “hate speech” and “shitstorm”. In public perception, the

focus is primarily on this dark side. Another side of the World Wide Web is less discussed: the opportunities for the improvised, the imperfect, even the careless.

> While in the classical media and in traditional academia thoughts often only reach the public after a procedure lasting months or even years as finished products that are difficult to digest in their self-containedness, quasi-oral writing in virtual space facilitates a playful-fluid cooperative circling of topics or theses. (Praetorius, 2015, p. 60)

Computer games are not only affected by the basic communicative constellation of the digital, less mutual control in communications, they use it for escalations. Public attention is also primarily focused on the problem side of games.

> The game provides the narrative motifs for action while almost coquettishly exhibiting the possibility of radically despicable action, and especially so in games that offer a morally integral and a morally despicable course of action as options (such as the games *Black and White, Bioshock* and *GTA IV*). Without the context of social accountability and its emotion-building power, the experienced action in computer games shows itself to be emotionally *thin in* a very characteristic way. (GamesCoop, 2012, p. 121; see also Grimm & Capurro, 2010).

This tendency towards emotional coldness in the sense of reduced compassion is expressed most strongly in the excessive use of violence (see Sect. 5.4).

Above and Below the Neck

What is striking about computer-based games to this day is the disparity between supreme technical sophistication, opulent design, fantastic decoration and sometimes very low social skills.

> Of course, we already have some 'computer game verbs': Actions like run, shoot, jump, climb, throw, and punch. But if you watch a movie, you find that there is a whole other set of verbs at work: talk, negotiate, argue, plead, and complain. The difference is clear: these 'movie verbs' denote actions that take place above our neck; computer game verbs denote actions below our neck. (Schell, 2015, p. 358)

The digitalized handling of the unexpected in the mode of non-binding doing-as-if often takes place as a bursting action, largely without reflection; actions instead of

words are on the agenda.[13] The reason for this is hard to overlook. The bestsellers among the computer games do not only obey the logic of playing, they are already in the development to the highest degree subjected to the media economy, the rationality of buying and selling (see Sect. 6.3). This is the clearly dominant impression, which needs to be qualified under two aspects. Firstly, the long-tail theory (Anderson, 2007) points out that niches on the Internet have good conditions for existence alongside the mainstream, and this is not only true from a marketing perspective. Therefore, it can be assumed that the computer game scene is far more colourful than bestseller lists suggest, that the opportunities for free development are used.

> While the majority of narratives in computer games have long been of archetypal simplicity – freeing princesses, overthrowing despots, saving the world – the range of topics covered and the quality of narratives has grown steadily. In a highly differentiated publishing landscape, there is now room for both character-driven action dramas in the style of Hollywood blockbusters – The Last of Us (Naugthy Dog 2013), for example – and autobiographical artist's games such as dys4ia (Anna Anthropy 2012). Moreover, online games have given rise to new, communal forms of reception, or rather experience, in which hundreds of players go through dramatic situations together, which afterwards often provide the subject matter for, as it were, autobiographical narrative texts by female players. (Backe, 2017, p. 33)[14]

On the other hand, economic colonization must not cloud our view of the fact that gaming itself is actually gaining new dimensions. The merging of ludic and virtual reality gives rise to a "second life" with seemingly realistic possibilities for action and experience in games, and on the other side, on the side of normality – after all, we are moving in the same (computer) medium – a "real life" with pronounced playful connotations emerges (see Sect. 7.4).

5.3 A Triple Ego Experience as Player, Observer and Played

Online communication is far from being able to do everything that is possible in communication between those present, but "in very many cases, computer games bring to bear a possibility of representation that is hardly realized in any other me-

[13] "Do video games themselves now have only idiotic stories, and are they perhaps played only by idiots?" (Neitzel, 2000, p. 8).

[14] Naugthy Dog is an award-winning computer game development studio; Anna Anthropy is a US game designer.

dium and has not been realized so convincingly in any medium developed to date: *the representation of experienced action*" (GamesCoop, 2012, p. 105). Gamers and players can experience a fictional character, the avatar, as a graphic embodiment of themselves, while observing and controlling their behavior without actually practicing that behavior themselves.[15] "This representation of experienced action, appearing in the overwhelming majority of action games, MMORPGs, adventure games, and strategy games, does not exist with such conciseness in any other medium" (ibid., p. 105 f.). The basic phenomenon of dealing with an alter ego has a literary tradition. "Je est un autre," Arthur Rimbaud's (1854–1891) classic formulation-"I am another. What is one to do when the wood becomes violin all at once?" (Rimbaud, 1990, p. 11) – and Rainer Maria Rilke's (1875–1926) comment, "I will say of my novel hero Malte Laurids Brigge: He was my I and was another",[16] exemplify this. The leap to current developments in the direction of deep-fake in China is daring, but does not land outside the context of meaning.

> A selfie is all it takes to star in feature films and music videos. Within days, the deep-fake app Zao became a viral hit in China. The software allows its users to digitally 'superimpose' their own faces on Hollywood and pop stars in short video clips. Game developer Allan Xia, for example, had his face mounted in a series of movie scenes with Leonardo DiCaprio. The clips were 'created in less than eight seconds from a single photo', he wrote on Twitter. Examples like this have ensured that Zao has already become the most downloaded free app in China in the few days since its launch last Friday. Clips and memes produced with it are flooding the country's social networks. However, this also only applies to China, because so far Zao is only available there. (Spiegel Online 09/ 2019)

Nothing could be more obvious than for digital games, after their bumpy beginnings, to take film as their model as a particularly technically advanced mode of

[15] "Holding down the W key to make your avatar run forward is in no way to be confused with the experience of real running" (GamesCoop, 2012, p. 119 f.). The abbreviation MMORPGs, used in the following quote, stands for Massively Multiplayer Online Role-Playing Games.

[16] The Rilke quote is taken from a manuscript by filmmaker and radio playwright Alfred Behrens.

communication, to pick it up and transform it for their use.[17] "It can be said without much exaggeration that the aesthetic medium of film has perhaps inscribed itself most strikingly in computer games today – just as, conversely, many uses of CGI (Computer Generated Imagery) have inscribed themselves so strikingly in film that the computer game character of some films has sometimes already been criticized" (Feige, 2015, p. 120).

It's part of the blockbuster strategy of the movie and game industry to turn very well-received movies into games and very well-received games into movies.

> The ever-growing and immensely profitable relationship between film and video games cannot be overlooked. Not only the marketing effect of designing avatars after film characters and equipping them with the original voices of the stars testifies to this exchange relationship. The growing number of filmed video games [...] also shows only one facet of this correlation. Film and video games are linked by a complex, multifaceted, and reciprocal influence. (Distelmeyer, 2006, p. 187 f.)

As a business relationship, the relationship between film and computer games is only one among many others. All media that promise traffic and money are integrated into merchandising. "The Lord of the Rings" as a book, film, computer-, board- and card game is the subject of advent calendars, stickers, coloring books, stamps, blankets, shower curtains, figurines, doormats, wallets, pillows, cookbooks, mouse pads, posters, key chains, keyboards, jewelry, music boxes, toys, cloth bags, T-shirts, statues, cups, plates, gym bags, coasters, weapons and other stuff.[18]

But as a business, the relationship between film and computer games is only captured on the surface. It can be seen from the debate, as it has been conducted in the context of game studies, about the primacy of narratological or ludological ap-

[17] On the beginnings, see, for example, Forster (2015), Frey (2004), pp. 17–30, Lischka (2002), pp. 19–68, and Kent (2001). "In game museums with the amateurish charm of private erotic museums, in *high*- and *low-brow computer journals*, but especially on the Internet – everywhere the 'history of computer games' is currently being written" (Pias, 2002, p. 7). In the self-representation of the games industry, the following headings can be found for the previous stages of development: "1972–1983: The golden age of digital games", "1984–1991: Home computers and Japanese consoles conquer the world market", "1992–2000: Unstoppable progress – The leap into the third dimension", "2001 to 2010: High definition, motion control and online gaming revolutionize the market", "2011 to today: Indies, mobile, eSports and virtual reality – The games market is becoming increasingly diverse" (game – Association of the German Games Industry o. J.).

[18] The Star Wars films have grossed US$9 billion to date. Total merchandising including games over 65 billion, computer games about 5 billion; cf. https://en.wikipedia.org/wiki/List_of_highest-grossing_media_franchises

proaches to digital games[19], that modes of representation, plotlines and habits of perception are also up for debate: If in contemporary film "the plot loses its imperative power, and this loss is compensated by form-aesthetic attractions" (Leschke & Venus, 2007, p. 7), then this also has something to do with cultural land gains of the computer game.

> The significant change of form in contemporary cinema is undoubtedly not dominantly due to the aesthetic rationality of the medium of film, but is rather a reaction to the omnipresence of the media system and its canon of forms, which cannot be overlooked. That post-postmodern film is primarily concerned with the integration of game forms is probably due not least to the sensational career of computer games. (ibid.)

Movies like *Jurassic Park, Matrix, Tomb Raider,* even *Run Lola Run,* even martial art movies like *Kill Bill, Tiger & Dragon, The 36 Chambers of Shaolin* are aesthetically and dramaturgically reminiscent of computer games or are direct adaptations.

From GUI to NUI

In order for the effect of representing experienced action to occur, an interface between player and machine is needed. "The interface is the sum of those technical conditions that enable the player to act in the game" (GamesCoop, 2012, p. 54). In particular, it couples physical behavior of the user with the behavior of the avatar in the gameplay (cf. Jörissen & Marotzki, 2009, pp. 208–223).[20] There is now talk of a kinetic turn in digital games, because touch, voice, gestures and eye movements are replacing graphic interfaces via keyboard and mouse.[21]

The general direction of development for which computer games are prototypical is recognizable: "With the upgrade of the analog flat screen to the digital touch screen, the radical change of function is currently taking place: from a means of tactile separation, the glass cover becomes a medium of tactile interaction. [...] As a consequence, the analog image space of modernity implodes. The distance of the

[19] "One of the most striking controversies in game studies" (Feige, 2015, p. 41; with a detailed account of the points of contention on pages 41–55); see also Backe (2008) and Beil et al. (2009).

[20] Ott and Saldik (2011) offer an explanation of the evolution of human-computer interaction (HCI) that is both concise and clear.

[21] Cf. Preim and Dachsel (2015), Dorau (2011) and Naone (2010).

viewer, which the stage, cinema screen, television screen and analogue computer monitors demanded, is thereby abolished" (Freyermuth, 2013, p. 320). The optical and acoustic perception of the absent in real time, which Life-TV allows its viewers, is to be extended into *participation in* the absent, into the interactive experience of recreated or fictitiously created virtual realities.

With virtual reality goggles on your head, you can search for sunken treasure in shipwrecks, fly space routes at a speed of 30.9 trillion kilometers per second, or have fun with beautiful virtual ladies and gentlemen – despite the fact that sensory perception is still severely limited, unimagined spaces of experience are opening up. "There are already studies from Stanford University that show that VR has such an impact that some experiences in VR are already stored as memories. [...] How can I still distinguish VR from reality if in my brain it's already stored as this is what I really experienced?" (Chibac, 2016). Research and development aim to open up further dimensions of sensory perception, to develop interfaces at which more than hearing and seeing emerges.

> Sensorimotor and acoustic interfaces, interactive game consoles, wearable and fashionable technologies, data glasses, gloves and suits, bio- and nano-interfaces, and last but not least the so-called intelligent environments are examples of interface developments as they seem to increasingly shed their frame that confronted them to us as technical artifacts and nestle further and further into our everyday lives, actions and bodies. (Skrandies, 2010, p. 244)

Representations should be able to be perceived in the same way as real actions of people present, moving images of an elephant should be experienced like an elephant in the flesh. It is nowhere near that point, and much resists the idea that it might be possible at some point, but the handling of media realities is on its way to a new dimension that calls up old unresolved questions again and makes them more urgent. Such answers, which have always been too easy, are now becoming even more popular and even more inadequate.

Egological Primacy?

Dieter Mersch (2008, p. 29) ascribes an "egological primacy" to this constellation of being able to be producer, performer and observer of events as a computer player. He argues that since "the subjective experience space coincides with the perceived image space, it is always a matter of *my* experience and *my* reaction". This first-person perspective makes it difficult to gain a reflexive distance; it is to this that "the unique suggestibility of digital games, their pull and their 'training effect'" is owed, and even more, the egological primacy leads to "experiences with-

out emotions". Feelings play "only a subordinate or limited role" in games. "Unlike films, photographs, or literatures, they do not refer to the circle of sympathy and empathy; they do not move to tears, trigger passions, seduce, or display melodramatic or cathartic effects." Such an interpretation implies that individualization-the increasing ability to see and experience the world from one's own, if one wants to call it egological, perspective-should be understood as a process of displacement of compassion.

The same finding, "empathy or identification with the protagonist of a computer game [...] cannot take place in the same way as in film or literature", is justified more plausibly by Britta Neitzel (2008, p. 108): "Sympathy or empathy, however, is possible primarily because of the impossibility of intervening in the events in non-interactive media". Empathy and identification can be observed less during the game and more in the environment of the game "for example on fansites, in chats or even lookalike contests". Also worth mentioning here is the real avatar culture, keyword cosplay, which is spreading from Japan. Fans dress up as heroes of games and movies and party. In the game itself, says Neitzel, emotional inclusion is most likely to take place via NPCs (non-player characters), which are controlled by the computer, not by players. Added to this is the simple fact that in action games, given the reaction times required, empathy is only a hindrance. The concentration is on aggression, on counter-feelings. The irritating topic of violence forces itself upon the viewer.

5.4 Killing Without Commitment: The Fascination of Violence and the Digital Ease of Death

> Just for me again to make sure: So I would be allowed to start using large-caliber weapons at the age of 14 and then drive as a 21-year-old sport shooter with a trunk full of semi-automatic weapons and 0.4 per mille on the highway at 320 km/h from the shooting festival to the CSU party conference – but computer games should be banned? (Sascha Lobo, https://saschalobo.com/2009/03/25/erlaubtheiten/)

What has happened so far: communication between absentees needs success media (see Sect. 4.4). Power and love, we have assumed, are particularly prominent in ludic actions. Success media have specific references to corporeality, we were informed by Niklas Luhmann, and identified violence for power and sex for love. Furthermore, (under Sect. 5.2) for communication between addresses, only a weakly developed social responsibility was registered, which also reduces the otherwise required empathy and promotes a tendency towards emotional coldness.

Just now (in Sect. 5.3) we followed the argumentation that compassion and pity are primarily spectator phenomena, that they accompany precisely the impossibility of intervention, while the ability and necessity to act oneself, as they are given in the computer game, leave less time and space for the acting out of feelings. Finally, the overarching point of view is to note that everything that happens occurs in the mode of a non-binding acting as if. How, thus prepared, does the subject of physical violence and its specific relationship to power present itself in computer games?

"Before there can be more power, there must first be more freedom" (Luhmann, 2012, p. 97). Where there are no alternatives for action, there is no need to reduce them to a selected one with power. Power becomes particularly conspicuous in the visible context of physical violence. As *threatened,* violence forms the basis of power: "The possibility of using violence cannot be ignored by the person concerned; it offers the superior person a high degree of security in the pursuit of his goals; it can be used almost universally, since as a means it is not tied to specific goals, to specific situations, or to specific motivations of the person concerned; finally, since it involves relatively simple action, it can be well organized and [...] centralized" (Luhmann, 2003, p. 64 f.).

Applied violence, on the other hand, "is only one's own action, not a powerful disposition over the behaviour of others" (Luhmann, 1991, p. 235 f.). All the risks and chances that communication opens up, all the possibilities to say it one way, another way or not at all, to ignore it, to understand it one way or another, to agree or disagree, none of this works anymore as soon as violence is exercised. What remains are two inevitabilities, namely perpetrator and victim.[22]

Gripping Violence and the Fascination of Its Reproducibility

Violence destroys everything that is unexpected, but at the same time, that is the gripping thing about it, it heightens the tension of what happens during its exercise and what can be expected afterwards. How strong is the resistance, how high are the losses, who gains the upper hand? Does peace reign afterwards, or on the contrary, is there an escalation of counter-violence, does war break out or is communication even resumed? The use of violence makes, perhaps no longer for its victims, but for the social situation as a whole much more possible than any normal communication. "This is the reason why the use of violence, although and because it is

[22] Analyses of violence in computer games operate with different meanings of violence (cf. e.g. Kunczik, 2013, p. 12 ff.), which we do not address.

a clear reduction of complexity, does not reduce uncertainty but increases it" (Baecker, 2007, p. 46).

In the mode of noncommittal acting as if, these two extremes, nothing goes and everything is possible, can be repeated and varied as often as desired. Terrifying certainties and dramatically heightened uncertainties are produced in one fell swoop, so to speak, and reproduced at whim. "Nowhere else can the social search for the actor, for the action, for the intention, for the effect of an action, also for the ability of an action to be effected by structures, in short: for the drama, its subject, its object and its action be staged as convincingly as in the act of violence" (Baecker, 2007, p. 45).

What impresses and captivates in the virtual world is the ludic reproducibility of violence. An enormous fascination emanates from the constellation of violence, which lurid book titles such as "Digital spielen – real morden? Shooters, Clans and Fraggers" (Fromm, 2003) instrumentalize it. Violence in digital games will remain a permanent phenomenon – and with it the question of its potential danger in the public discussion[23], a discussion that was conducted on the subject of media violence long before the spread of computer games (cf. Fischer et al., 1996) and in which scientifically "no reliable statements can be made about reception interest, let alone the mode of action of the reception of representations of violence" (Leschke, 2001, p. 335).

[23] After the right-wing terrorist attack on a synagogue in Halle on October 9, 2019, in which two people were murdered, headlines like this could be read:

- "The Halle Attack. Right-wing terrorism, staged like a computer game".
- https://www.tagesspiegel.de/politik/der-anschlag-von-halle-rechtsterrorismus--inszeniert-wie-ein-computerspiel/25103584.html
- "Halle assassin: He planned his acts like computer games".
- https://www.zeit.de/gesellschaft/zeitgeschehen/2019-10/attentaeter-halle-internet-radikalisierung-memes
- "Stop in Halle. "He wants to score points and be praised like in a game"
- https://www.welt.de/politik/deutschland/plus201712462/Anschlag-in-Halle-Er-will--wie-in-einem-Spiel-Punkte-sammeln-und-gelobt-werden.html (accessed 11 Oct 2019)
- In the TV program "Report from Berlin", German Interior Minister Horst Seehofer "did not address the far-right connections of the attacker, but mentioned the anti-Semitic attack in a general context of computer games." 'Some people just take simulations as their model,' Seehofer said in the sequence. 'You have to look closely to see whether it is still a computer game or covert planning for an attack. That's why we have to take a closer look at the gamer scene.'" https://www.sueddeutsche.de/politik/seehofer-gaming-halle-twitch-1.4639479 (accessed Oct. 14, 2019).

> Since the first empirical investigations into the question of media violence were carried out around the middle of the 20th century, i.e. attempts have been made to fathom the causal relationship between violence portrayed in the media and aggressive or violent actions on the part of the media user, various answers to this question have been formulated, criticised and rejected again. Undeterred by this checkered history, media violence research hopes to move ever closer to its research question, though without suggesting that a definitive answer is within reach in the foreseeable future. (Otto, 2008, p. 11)

The public debate about violence in computer games is fuelled by school rampages. "Not a single year went by this millennium without a killing spree at an educational institution. In contrast to youth violence in general, the number of these specific rampages increased sharply. In Germany alone, more than 34 such acts of violence have taken place since 2000, although fortunately in most of them there were no fatalities. [...] In the German media, first-person shooters – in addition to liberal gun laws – are almost exclusively seen as the cause of school rampages" (Breiner & Kolibius, 2019, p. 62). Following a thorough empirical analysis, Breiner and Kolibius (2019, p. 98) draw this conclusion: "It is convenient for politicians and the media to populistically point to computer games as the supposed scapegoat for rampages instead of addressing these deeper, far more complex causes. [...] The causes of rampages at educational institutions are multi-causal, but lax gun laws and violent computer games are not among them."[24] In any case, it can be justified that the simple parallel between violence in computer games and factual acts of violence is misleading.

A Fundamentally Different Context of Meaning

Visualized violence has a long tradition in film, said to have begun in 1903 with the execution of the circus elephant Topsy.[25] "The classic action film thrives on the sequence of violence-based actions anyway. But the detective film, the Western, science fiction, and even melodrama also readily and purposefully employ violence

[24] "Thus DER SPIEGEL (March 16, 2009, 36) wrote about Winnenden: 'And also the computer games now reappear in the investigations. Of course there is no causality; millions play without killing, but the other way round is also true: those who kill at some point have usually played before.' This coincidence between involvement with violent games and homicides regularly gives rise to speculation about effects. The fact that the widespread use of first-person shooters alone makes it likely that they will be found on a violent offender's computer is often ignored" (Kunczik, 2013, p. 211).

[25] https://de.wikipedia.org/wiki/Datei:Edison_-_Electrocuting_an_Elephant.ogv

as a narrative as well as aesthetic element; not to mention genres such as horror or its radicalization, the splatter film" (Ahrens, 2019, p. 2). But violence occurs differently in computer games than in analogue film because in film it must legitimize itself narratively and dramaturgically; it is bound up in a web of relationships between ends and means and is placed in a relationship to right and wrong.[26] "This legitimation cannot be arbitrary; it must be convincing." (ibid., p. 8) Provided it is designated as such and placed in the appropriate context of meaning, violence in film can also be shown as illegitimate and immoral; what matters is "the 'correct' evaluation of violence in each case" (Leschke, 2001, p. 331). "Depictions of violence cannot be meaningfully isolated in this respect: They can only be positioned within a normative system" (ibid., p. 307), is a statement that applies to analogue film; the status of violence in the virtual game world is different.

Why does violence become so normal in the virtual reality of digital games, and in some games even the predominant event? Because it can be carried out for its own sake, without being tied to other contexts of meaning, and because the fascination of violence and the digital ease of death form an unbeatable combination. Thus virtuality forms the basis of "a fundamentally altered reception condition of visual death scenes compared to the linear feature film (or novel): The death of characters is treated neither physically nor narratively as a final frontier, but as a necessary and reversible game-use" (Degler, 2006, p. 364). Death, the most extreme event among the living, can take place in the digital game as an arbitrarily repeatable event, as a casual or imaginatively staged occurrence. Dead victims of violence who resurrect or continue to play as the undead are part of the normal gaming experience on the computer. For players in the guise of their avatar, it becomes the norm that it is their own death that ends a game. "Game Over" often means that the player has lost too many lives; in order to continue playing, a new game must begin.

Compared to its real meaning anyway, but also compared to its semantic embedding in film, violence, by no means in all, but in a conspicuously large number of digital games, stands in a fundamentally different context of meaning, namely in none outside of itself. It is tempting to short-circuit that ludic acts of violence seem more realistic than ever before due to the simulation-strong virtuality, which forces the concern that played violence will turn into real violence. This fear does not take into account the completely different function of violent acts and death in computer games. Analogies are drawn here that make it seem advisable for wives to avoid the

[26] Walter Benjamin (1965, p. 31), in "Critique of Violence," put it this way: "Natural law strives to 'justify' the means by the justice of the ends, positive law to 'guarantee' the justice of the ends by the justification of the means."

vicinity of the man playing Othello during the theatre season because he murders one on stage every night. Such statements about violence in digital games, which imply a transfer from ludic-virtual to real violence, should be critically questioned.[27] However, there is nothing to suggest that the hasty parallel between violence in computer games and actual violence will not be drawn again and again in the future; it is too simple not to be allowed to be true in an agitated public.

Competition for the Cruelest Death

The special function of violence in computer games, to occur for its own sake and to be experienced in all its dramatic elements without actual bloodshed, is exploited by players in the games industry in their own way. In order to increase sales figures, PvP games (Player versus Player) such as *League of Legends, Dota* or *Overwatch* use lurid comments such as "double kill!", "triple kill!", "legendary kill!" or "killingspree!" to encourage players to hit even harder and harder, to kill opponents in even more outlandish ways, to eliminate even more enemies. Game participants are informed, for example, "Player DeathForGood is on a killingspree" – amok runners as animating game elements.

"Fatality!", "Brutality!" "Animality!", "Flawless Victory!", this is how the end of a fight is announced in the *Mortal Kombat*[28] fighting game series in fuelling stadium announcer fashion, players are rewarded for a particularly brutal combination of attacks and for fighting particularly hard with suitably gruesome finishing moves to kill opponents in even more outlandish ways. Since the marketing of this game series, a real competition broke out for the most brutal death – the more horrible, the better, the more points you scored. In 1944, half a century before *Mortal Kombat* appeared, Max Horkheimer and Theodor W. Adorno wrote: "The condi-

[27] This is also pointed out by Kirsten Zierold (2011, n.d.) in the preface to her dissertation when she rejects the "accusation of an uncritical and thus irresponsible use of violence in computer games": "I was irritated by the fact that this argumentation recklessly created a short circuit between what is depicted in the game and the performative participation of the player and, moreover, assumed a direct interaction between game and reality. I was puzzled that the usually unmistakable superficiality of such criticism persisted so persistently and could fuel debates for years."

[28] "In Germany, the game was indexed in 1994 by the then Federal Review Board for Writings Harmful to Young Persons and ordered to be confiscated nationwide by order of the Munich District Court on grounds of depiction of violence pursuant to Section 131 of the Criminal Code. It criminalizes the sale, display or promotion of the game, but not its possession." https://de.wikipedia.org/wiki/Mortal_Kombat (accessed 18 September 2019).

tion of the public, which ostensibly and actually favors the system of the culture industry, is a part of the system, not its excuse" (1991, p. 130). From the perspective of media economics, one, the excessive display of media violence, is as useful as the other, the public uproar over it, because both are guaranteed to generate attention.

Violence and Sex as Media Events

While in online communication violence for its own sake finds a favored place in computer games, sex for its own sake has its favored place on pornographic websites. "Pornography tends to become available through the Internet at any time, for any person and at any place. Boundaries of socio-spatial and temporal nature are virtually eliminated. Barriers to access are lowering, as is the effort required to obtain pornographic material" (Lewandowski, 2012, p. 95). Via the Internet, pornography is becoming part of popular culture. It is remarkable that sex for its own sake as a media event has its own designation in the form of "pornography", while in the case of depicted violence no linguistic distinction is made between socially integrated and naked violence.

In digital games, sex is played out as a matter of course, but is usually an element of social relationships, while pornography remains rather marginal.

> (e.g. 'Kumitate'), dating games ('Elf Girl Sim Date RPG', 'Paradise Heights'), dress-and-dress games ('Yakyu Ken', 'Dress-Up Asuka'9), card games ('Slave Poker') or even simulations such as brothel simulations, which, however, usually focus on economic simulation in terms of the game concept. In the simplest case, one loads a so-called 'nude patch' to a commercial game, and then, for example, Lara Croft runs naked through the jungle. (Vollbrecht, 2012, p. 189)

Even the description of the possibilities doesn't sound particularly sexy. This could be due to the big difference between virtual and real reality in the case of media-played violence and in the case of media-played sex. If the real absence of violence is experienced as intoxicatingly beneficial, the real absence of sex is more likely to be experienced as frustratingly deficient. The fact that media (sex apps) are certified by media (Spiegel, 2016) as being capable of reality, "Sex in virtual reality: Feels real", is another matter.

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Transitions I: Expansions and Corruptions of the Game

6

Abstract

Playing does not seem to attract attention without a moralizing connotation of disregard or deference. Bad or good, harmful or useful are fundamental distinctions, but those who make them with ludic actions in mind should not expect those who play to be impressed by them. The continuation of the value judgment takes place as a direct instrumentalization of the game. Such "spoilers" can be players themselves, keyword gambling addiction. Far more frequently, individual game methods (gamification) or certain games (serious games) are fitted into the context of social functional fields and used for organizational purposes. Without a doubt, it is education and the economy that prefer to seize the game. Educators exploit the fact that games have a natural proximity to learning because they deal with the unexpected. The economization of play is not an isolated phenomenon; it is a subset of the attention economy by which public communication as a whole is now largely dominated. Interpreters of the massive expansion of the play zone are divided: play is conquering the planet and making it a more beautiful place, is an optimistic position. Opposed to this is a defensive position that wants the game to be as untouched a game as possible: does playing save the world or does the game have to be saved from the world?

> Since the bourgeois era, however, the Western relationship to play seems to have gotten somewhat out of hand. Characterized by idealization on the one hand and disciplining on the other, it takes the form of a love-hate relationship that has found expression in many strategies of empowerment. (Adamowsky, 2001, p. 19)

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The phenomenon affects all social forms, it reads in perfect sociological terms: structural components of a certain context of meaning are transferred to other areas. The best-known case today is probably the transfer of economic structures into other contexts of action, such as medicine, sport or the mass media public sphere. Other examples include the military order of early factory work, family behaviors in small businesses, religious influences on scientific research, elements of public communication such as staging and campaigning in politics. Modern organizations are in and of themselves "multireferents, that is, they can incorporate different criteria in their decision-making and consequently mediate between different logics" (Besio, 2012, p. 268). Organizations embed in their internal structure very different expectations of their environment. From a certain size upwards, all have legal and public relations departments, posts for event management, travel accounting, emergency medical assistance and many more.

The overlapping and interlocking of structures confronts scientific observation and description with difficult tasks of analysis. The pragmatism of practice takes no account of the problems of its scientific observers. One can, in order to understand better, sharply draw boundaries as an observer and still acknowledge that blending and interlocking dominate realities.[1] The diverse vocabulary already hints at the problematic; there is talk of delimitation and de-differentiation, coupling, hybridization, bastardization, land-grabbing, mixing, recombination (cf. e.g. Ha, 2005).

Transitional phenomena provoke controversial evaluations. Is the pure form the ideal form and any deviation to be seen negatively, as for example in artistic activities, scientific research or journalistic work? Or is the pure form the problematic, perhaps even dangerous, for example in the economy, where there is critical talk of "pure capitalism", or in the military, where there is warning talk of the "state within the state"? In the background, the classical distinction between perfection and corruption continues to operate. "In the rich diversity of the cosmic order, this difference of perfect and corrupt states could be observed in the most diverse phenomena, but always in view of the essential. Built into the difference of perfection/corruption was consequently a directional decision, a hierarchical structure." (Luhmann, 1999, p. 11) This asymmetry with its posi-

[1] Is ("Western") analysis, that is, distanced dissection, or ("Eastern") wholeness, empathy, the better way? "What can one call, in view of knowledge (connaissance) and its hegemony over European culture, its other, which it has covered over and not thought? I have chosen to call this other relation to the world […] agreement (connivence), of which, in opposition to the established regime of cognition, I must recall 'coherence'" (Jullien, 2018, p. 180, e-book)

tive accent on perfection has a strong influence on game discourse – including the descriptions presented here.

6.1 The Game is Willing

The considerations so far serve to illustrate that the emergence of games or of individual action components of games in non-ludic contexts of meaning is nothing unusual from an overall social perspective. However, discussions about this sometimes give the impression that something extraordinary is happening here with games, that something bad is being done to them, or that they are happily conquering more and more areas of life. After all, it seems that the game is well-suited for this, offering particularly little resistance to being used. This availability begins with the matter-of-factness with which games are judged.

Neither its enormous diversity nor the knowledge that it has always accompanied social life save play from being subjected to ongoing judgement, regularly condemned but also repeatedly praised. Play does not seem to attract attention without a (often moralizing) connotation of disrespect or deference. Where does this sheer inescapability of a value judgment come from, we ask (in Sect. 6.1) on the basis of the understanding of games presented here, and answer: Because games care so little about morality, they become a favorite subject of moralizing.

Its evaluation as useful or harmful contradicts the basic social function of play, to temporarily free oneself from the liabilities of normal contexts of expectation. This diagnosis does not imply a secret request to please refrain from evaluations of play; useful or harmful is a fundamental distinction under whose perspective everything and everyone can fall. But, here lies the insight, whoever makes it with a view to ludic actions must not expect those playing to be impressed by it.

Quite a Few "Spoilers"

Value judgements about play, one could say, are the beginning of the end of the idea of play. Instrumentalizations of play continue the value judgments and increase them by integrating ludic actions into normal everyday events. Such 'spoilers' can be the players themselves (Sect. 6.2). The 'usual suspects' are the social function fields of education and business (Sect. 6.3). In the meantime, the adoption of individual game methods (gamification) or even certain games (serious games) has become widespread, especially for organisational purposes (Sect. 6.4).

Expansions of play, as far as we can survey the literature, have only become an issue since the eighteenth century. It seems that the drive for expansion and the "logic of increase" (cf. Schulze, 2003) that are typical of modern society – as evidenced not only by economic growth but also, among other things, a far greater range of artistic offerings, many more scientific publications, significantly more legal regulations, an expanding transport system – also affect play. A big push came with digitization. "The steady growth-more players, more games, higher revenues-of which the cultural assertion of digital games has been characterized since the 1970s occurred in the context of constant change in the conditions of production, distribution, and use" (Freyermuth 2015, p. 19).

Already the selection of criteria ("more players, more games, higher turnover") indicates that this is not only about gaming, but that the expansion is also related to other motives. Gainful employment and ludic action now become even more interrelated. "Since the turn of the millennium, the production of digital games has risen to become the most economically significant cultural industry in the Western cultural space, overtaking both the film and music industries in sales and revenue" (Helbig & Schallegger, 2017, p. 9).

6.2 Good Game, Bad Game: Patterns of Interpretation in Dissent

> The positive use as well as the evaluation of games correlate, of course, just as consistently with fundamental criticism and recurring efforts to ban them. […] In the Western and Christian-influenced modern era, they range from the multiple efforts of British kings to ban preliminary forms of modern football between the 14th and 16th centuries, to the ban on pinball machines that applied in New York between the 1930s and 1970s, to the calls for bans on so-called 'killer games' that flare up again and again in the present. (Freyermuth, 2015, p. 47 f.)

The Latin word for game is ludus. TThe "lude" appears at the beginning of the twentieth century in the Berlin crook language. The linguistic environment of ludic is a bit disreputable. Unlike business and politics, religion and law, family and medicine, whose practices – with fluctuating reputations – are basically accepted and considered largely indispensable, play has either a question mark or an exclamation mark behind it. It is problematized as the wrong thing to do or chosen as the true thing to do; it is primarily observed for the harm it can do and the benefit it can bring.

> On the one hand, one expects a salvation from it that it cannot bring – as if it solves all problems, finally liberates people to themselves; as if it overcomes all fear and

> alienation and as if it is the promise of a happy, lustfully fulfilled life. On the other hand, it is criticized and defamed as a veiled continuation of the monotony of work by other means, as an affirmative pseudo-satisfaction of unresolved social needs and thus as 'system-stabilizing' devil's work […]. (Scheuerl, 1991, p. 190)

> On the one hand, the Federal Association of Computer Game Developers (G.A.M.E.) was accepted as a member of the German Cultural Council in August 2008 […], on the other hand, a book in which digital media (not least computer games) are held responsible for dullness, obesity, reading and attention disorders, sleep disorders and a general dumbing down of children and young people […] made it to number 1 on the Spiegel bestseller list in the non-fiction category (Fromme, 2012).

> The game corrupts the character, and with it all sense of honour; all sensibilities are destroyed. The gambler loses love for his fatherland, for his neighbors, his parents, he no longer cares for his family or his household; in short, he loses all the civilizing elements that make him human in the first place. (Huber, 2012, p. 271; summary of a text from 1824)

> I look forward to a future in which massively multiplayer games are once again designed in order to recognize society in better ways, and to get seemingly miraculous things done. (McGonigal, 2011, p. 10).

Play is subject to constant observation and evaluation because it takes place as a – strongly conditioned, explicitly limited in time, only recognized in the mode of non-commitment and as if – self-liberation from the habits of persons and from the normal structures of society. More generally and simply: freedoms and orders are in tension with each other, players are under the control of the "forces of order", which take care that no one takes too many liberties. It must always be expected that something will happen in the game that does not occur in the normal course of social action, if only because it is forbidden, would disrupt the course of events, or would be far too absurd, far too far beyond all realities. Non-commitment and acting as if do not prevent the question of harmfulness and usefulness from being asked. The boundaries between ludic actions and normalities are too permeable for that, the possibility that what has succeeded there is also attempted here is not sufficiently excluded in the eyes of many. Rather, non-commitment and to act as if are themselves up for debate as modes of behavior, for both a negative and a positive position can be taken on each of the two components.

On the side of non-binding action, some criticise the *fact* that legally and morally discriminated behaviour, for example criminality and brutality, is practised in games. They see play as a kind of practice, as habituation to such behaviour, and therefore consider it dangerous. Others, however, interpret such noncommittal ac-

tivity therapeutically as substitute acts that take the place of otherwise possibly actually practiced violence and other discriminated behavior.

On the side of the as if, some warn of a loss of reality, assess the game as an attempt to evade obligations and commitments, and classify it as an inferior occupation. Thus the "Gesellschaft für Medienwissenschaft" (Society for Media Science) dealt with computer games for the first time at a conference entitled "TV Trash". Computer games found their way into German media studies "via the 'trash', the 'rubbish', the 'discarded'" (Neitzel & Nohr, 2006, p. 9). Others, on the other hand, see the as-if dimension as a good opportunity to experiment, they emphasise the chance to try things out and see games as an ideal place of learning and innovation.

The critical examination of games thus takes place on two different levels. On the general level, where it is discussed whether gaming itself is harmful or useful, and on the level of the individual game with the problem of whether it is a good or a bad game.

Cautious and Differentiated Results

Here we enter the broad field of research on effects (cf. Schenk, 2000), intensified and complicated by the fact that players act not only communicatively but also operatively – but noncommittally and only as if.

> Computer games can be understood both as moral objects and as agents of ethical values. Player narratives, rule contexts, achievements, or high scores suggest what is considered right and virtuous in a game. Under this assumption, moral dilemmas in games can sensitize players to real-world moral dilemmas and thus promote ethical reflection. (Wimmer, 2014, p. 274)

Media effects research alone does not arrive at generally accepted findings (for which there are good reasons in terms of communication theory); the effects of games are, as can be seen from contrary assessments, an open, but important and therefore constantly re-explored question (see also Sect. 5.4). Serious studies in this subject area rarely present hard results, but rather cautious and differentiated ones. Based on a study by the University of Innsbruck (Greitemeyer & Mügge, 2014), the "Süddeutsche Zeitung" reported at the beginning of 2014: "Since 2009 alone, at least 98 individual studies have appeared on the question of the effects of video games with a total of 36,965 test subjects – that corresponds to about one publication per month." (Herrmann, 2014) For figures, data, facts especially, but not only related to Germany: "Reports of lobbying associations (BIU, Bitkom),

market and media studies, reports of industry insiders, but also scientific surveys such as the KIM and JIM studies of the Medienpädagogischer Forschungsverband Südwest provide extensive numerical material" (Jöckel, 2018, p. 18 f.).

6.3 Gambling Addiction: A Seduction of the Game or Its Abuse?

The disagreement between the patterns of interpretation that are descriptively and prescriptively applied to play is concretized and intensified in the debates about the addictive potential of play. Caillois (1960, pp. 52–65) already speaks of corruption in connection with play, and by this he means excesses that gamblers are guilty of. For him, "the principles of play correspond in fact to powerful drives (competition, pursuit of opportunity, dissimulation, intoxication)" and left to themselves, "these original drives, which like all drives are intemperate and destructive, can only end in disastrous consequences" (ibid., p. 64), as there are violence, the will to power, superstition, astrology, alienation, alcoholism, drugs. That implies that, Caillois sees the problem of corruption in players who do not control their urges.

We have identified (in Sect. 2.2) the desire to repeat, as it arises from ludic actions, as a connecting point for potential addictive behaviour. Actual gambling addiction would be understood from our theoretical approach as the instrumentalisation of gambling by individuals. As a public issue, it receives a lot of attention in the context of computer games because, primarily among adolescents, it can be associated "with social isolation, conflicts with parents, truancy, and neglect of personal hygiene and food intake" (Breiner & Kolibius, 2019b, p. 110)."

> During days of uninterrupted gaming sessions, sufferers become so engrossed in the game that they forget to drink and eat – and eventually collapse in exhaustion. It is important to note that all of these cases are rare extreme behaviors. Most computer gamers are casual gamers or can be described as enthusiastic gamers. (ibid, p. 108)

The great public interest in the ludic potential for addiction, which before computer games was mainly directed at gambling as an unfortunate combination of gambling and profit addiction, can hardly be based on valid and stable scientific findings. "There is as yet no consensus regarding diagnostic criteria, nor as to when behaviour should be classified as pathological. This makes the comparison of individual studies many times more difficult and the estimation of prevalence rates in the overall population almost impossible. […] A major problem in the research on computer game addiction to date is that these are predominantly cross-sectional

studies. From this, one can only conclude a correlative relationship, whereas causal conclusions are not permissible. There is a great need for longitudinal studies in the field of computer game addiction" (ibid, 2019a, p. 153).

Two Lines of Discourse

Scientific weakness gives rise to mass-media strength, because journalism has the free choice to take decisive positions as well as to engage in open controversy. But the problem goes deeper, because two lines of discourse emerge significantly. One follows the interpretative pattern that gambling addiction comes from the seductive power of the game, the other sees the cause more in the social situation and/or personality traits of gamblers, that is, here the game is used compensatorily, abused if you will.

The perspective of analysis that asks about instrumentalizations of ludic actions must transcend the personal reference; it has been addressed here only very briefly (we are working on the tree trunk of the cognition of play, not on branches and leaves) for the sake of completeness. In what follows, we will address the colonization of play, as it has always emanated from education, increasingly practiced by business and the public, with the active aid of politics and academia. Money and publicity,[2] especially professional sport, subjugate the game to their own ends, in Europe and South America with football at the forefront. In doing so, they create a pressure to perform under which, despite the best medical care, one must be very lucky not to have "bad luck" with injuries.[3] "Save the game!" (Hüther & Quarch, 2018), the appeals to (return to) the meaning of the game, and the successes of the "game spoilers", who come up with big money and broad public attention, face each other like David and Goliath.

[2] Common terms are mediatization or medialization.

[3] "In an official statement from the club, coach Joseph Guardiola said: 'It is so, so difficult for him. It's so sad, we will miss him a lot. It's bad luck, but that's football.'"
https://www.spiegel.de/sport/fussball/ilkay-guendogan-fehlt-manchester-city-mit-kreuzbandriss-monatelang-a-1126241.html
"'It looks like he's badly injured,' said coach Niko Kovac, who was 'doubly heartbroken' given the late equaliser and Sule's misfortune."
https://www.afp.com/de/nachrichten/3961/bayern-abwehrchef-suele-wohl-schwer--verletzt-doc-1lk2v63 (accessed 23 Oct 2019).

6.4 Dreams of Purity and Realities of Success: Education and Economics Dominate

> The seemingly so harmless world of purposeless games can obviously be exploited for the most diverse purposes, it can be instrumentalized, manipulated and abused. (Scheuerl, 1991, p. 190)

The politicisation of the Olympic Games, the legalisation of gambling with its regulated market, its unregulated or sanctioned grey and black markets, or the militarisation of play on virtual battlefields (cf. Schulze von Glaßer, 2014) are well-known phenomena that are also temporarily thematised in the mass media public sphere. But it is undoubtedly education and the economy that seize the game before anyone else. Such instrumentalizations can become so normal that they are attributed to the game as its functions. For example, Breiner and Kolibius (2019a, p. 116) list seven functions of play: The learning, social, intoxicating, therapeutic, physical, creative, and cultural functions.

In contrast, with Niklas Luhmann (1997, p. 757) and very early on Luhmann and Schorr (1979, p. 34 ff.), we emphasize the distinction between function and performance. A dog's function is neither to keep watch, pull sleds, search for avalanche victims, serve as a hunting aid, nor find drugs. But it can be trained for such performance. Performances require responding to specific, varied expectations of the environment. Play is also confronted with such diverse expectations. For play, there is the added tension that it is part of its function to be free of purpose; nevertheless, or precisely because of this, performance expectations can be directed at play. The concept of function should be reserved for the relationship to a totality, in the case of play to society, in the case of the dog to nature. For the function of play, a theoretically sound proposal was made in the second chapter; for the function of the dog, one would have to consult biological evolutionary research. When describing the function of play, it was noticed (see Sect. 2.3) that it has an immanent proximity to learning due to its handling of the unexpected. Pedagogy therefore has a good chance of finding that play meets its performance expectations.

Tennis for Two at the Nuclear Research Center

For computer games (see Chap. 5), beyond education and economics, the military background has great significance, but we address it only episodically. "Tennis for Two" is generally considered to be the first video game, and its installation and

presentation in 1958 at an open house at Brookhaven National Laboratory (BNI), a nuclear research center on Long Island, has been described repeatedly (e.g. Schwarz, 1990).

> Its designer, physicist William Higinbotham, began his career at the MIT *Radiation Lab* around 1940 and was involved in the development of the *Eagle Radar Display* installed in B-28 bombers for ground target acquisition. Later, as an engineer in the Manhattan Project, he worked on the firing mechanism of the first atomic bomb and was legendarily converted to a pacifist by witnessing its detonation. By 1958, at any rate, he was working at the *Instrumentation Department of* the *BNI,* which was concerned with the civilian implications of nuclear technology and, among other things, with the design of Geiger counters. But since such activities are difficult to exhibit, Higinbotham's old military problems of ballistics and timing merged into the open day in civilian semantics of balls flying and bats hitting at the right moment. (Pias, 2002, p. 13)

Playing as a Pedagogical Measure

Pedagogy sees itself as the mistress of play. This can be illustrated by the difference between socialisation and education. "Socialization comes about without special rules of attention by living along in a social context. It presupposes participation in communication, and specifically the possibility of reading the behavior of others not merely as fact, but as information" (Luhmann, 1984, p. 280). Everyone learns to dose acceptance and rejection of what is perceived in such a way that behavioural abnormalities are kept within limits. Societal responses to deviant behavior have changed a great deal in many countries over the past half century. Pedagogy has experienced an anti-authoritarian phase, it has become more open and reflexive – and is therefore all the more interested in play.

Education does not want to rely on socialization processes, but to intervene and direct them. "One defines the states or behaviors one wants to achieve, appreciates the starting point (maturity, aptitude, previous knowledge) as conditions, and chooses the pedagogical means to achieve nevertheless what does not happen by itself" (ibid, p. 281). Play is the preferred means of education in this regard because it avoids the impression of coercion while maintaining the goals. This is not only associated with smoother learning processes, but also with well-founded expectations of a more lasting acceptance of what is learned, which is then practiced without external pressure in the flowing transition from non-binding acting as if to binding factual behavior.

> The real impetus for a revaluation of the concept of play, however, comes in the Enlightenment period from Rousseau and Locke and the philanthropist educational reform inspired by them. While Rousseau emphasizes in *Émile* (1762) the irreplaceable intrinsic value of children's play for the education of the individual as well as for the development of civilization, thus initiating its cultural nobilization, John Locke, half a century earlier, in his first treatise *Some thoughts concerning education* (1693), sketches out a systematic concept of education based on the consistent use of the play method. […] Children should be able to develop an intrinsic 'desire for instruction' as soon as it is affectively linked for them with feelings of 'pleasure and recreation'. (Kaulen, 2009, p. 583)

The fact that there is a close connection between games as a way of dealing with the unexpected and learning is exploited not only by pedagogy but also by games research. From both perspectives, the claim is pushed that playing and learning are ultimately identical. From this, pedagogy derives the claim to treat play as its domain and to judge it according to whether it benefits or harms learning.

Game Studies, on the other hand, hopes for higher consecration for its subject, which is definitely in danger of not being taken seriously. After all, it ennobles games to be equated with learning, the most important competence of a developed society. Game studies do not shy away from not only occupying socialization together with pedagogy, but also from going back a few hundred million years and appropriating evolution. "In play, animals, while moving, could teach themselves to run, walk, gallop, trot, and so on. Learning and play were invented simultaneously as two parts of the same evolution. It is pure irony that we are currently thinking about whether games can be used to support learning, when in fact play and learning are two sides of the same coin" (Crawford, 2013, p. 78 f.). Interesting and inspiring reflections emerge. What needs to be discussed is whether they are more than a good example of the academic tendency to make the central concept of one's own topic a catch-all concept and to assign everything to it, if not subordinate, then at least.

Games Economy

> Every family, every clan, every city, and every culture produced and processed its own stream of communication long before anyone had the idea of making money by carrying messages or producing their own messages. (Hutter, 2006, p. 23 f.)

The medium of money is so successful in society that success is hardly measured in any other way than in financial terms, at least in terms of its positive economic consequences. In the games economy, playing without paying is impossible: the product, otherwise it would not be a game, remains committed to dealing with the

unexpected and acting as if, but in front of voluntary participation a paywall pushes its way in and/or in the game itself ludic successes become (for)saleable,[4] that is, the non-committal loses its full validity. Paying spectators, paid and paying players come to the fore. Virtual markets of online games couple to the normal economy via real money transactions. "It is thus possible to work not only on or about games anymore, but in them" (Raczinkowski, 2018, p. 185). Julian Kücklich (2005) coined the term "plabour" (game-work) for this. In the background, the conditions of development, production, distribution and application of games are adapted to economic rationality, in Europe and the USA predominantly by white men – with consequences for which games are produced, offered and performed at all. "Games are a multibillion-dollar business that has remainded largely white and largely male" (Zaveri, 2019, p. 6). Furthermore, it would be worth asking, and examining more closely than has been done so far, which success media dominate the games themselves: Money, (violence-based?) power, law, knowledge, (sex-fixated?) love, truth, solidarity (see also Sect. 4.4).

The economisation of games is not an isolated phenomenon, it is a subcategory of the economy of attention (Franck, 2007), by which public communication as a whole is now largely dominated, with entertainment at the forefront. Thus, the game economy also bears the two basic characteristics of the entertainment industry:

> An incontrovertible fact of this business is a high degree of uncertainty about the success of any product and a huge discrepancy between the recognition of those with modest success and those with the really big successes. (Wu, 2012, p. 260)

A revenue increase from 1.9 trillion dollars in 2017 to 2.4 trillion in 2022 is predicted by the "PwC Global Entertainment and Media Outlook" (PwC, 2018) for the global entertainment and media industry. And the next cash cow for the games industry? "Videogames publishers and sports entertainment entities increasingly view e-sports as their next big revenue growth engine" (ibid, p. 17).[5]

[4] Successes, e.g. optimizing one's own game character or reaching a higher level, are often achieved through so-called grinding, i.e. the repetitive, assembly-line-like execution of the simplest activities (cf. McNeill, 2014)

[5] See also Werdenich (2010)

E-sports: "Attitudes Differ Greatly"

In Germany, it is not yet publicly apparent that the games industry has high hopes for e-sports. Just a few years ago, Tanja Adamus (2013, p. 133) wrote that "the general public largely treats e-sports with ignorance or scepticism", unlike e-commerce or e-learning. On the other hand, even around this time, from a domestic perspective, the situation of e-sports was already described differently: "Even if in Western Europe, in contrast to Asia and parts of Northern Europe, social recognition (e.g. in the form of consideration in public sporting events) is still very limited. in the form of consideration in public sports funding or inclusion in sports associations) of e-sports as a sport is not yet complete, in Germany alone more than one million users of digital players can today be described as e-sportsmen in the form that they have organized themselves into so-called clans (as equivalents to traditional sports clubs) and leagues" (Breuer, 2011, p. 13).[6] In February 2019, the Sports Committee of the German Bundestag dealt with the question of the recognition of e-sports as a sport worthy of funding in an expert hearing with the "result of the conversation: Attitudes differ strongly."[7]

However, a general basic understanding of what is meant by e-sport can be assumed: "The term e-sport (short for electronic sport) refers to the competitive playing of computer or video games in single or multiplayer mode. E-sport understands itself according to the classical concept of sport and requires both game skills (hand-eye coordination, reaction speed) and tactical understanding (game overview, understanding of the game)" (Müller-Lietzkow, 2006, p. 30).

Silicon Valley, Wall Street, Hollywood

The anthology "Global Game Industries and Cultural Policy" (Fung, 2016) provides an informative overview of developments in the political economy of computer games in North America, Europe, Japan, China and Southeast Asia. Digital

[6] "With its exemplary commitment to esports, FC Schalke 04 is taking a courageous step forward and occupying a leading position worldwide. As one of the first football clubs ever, S04 recognized the unique opportunities offered by electronic sports and therefore began incorporating its own Esport department into the football club's structures in May 2016." https://schalke04.de/esports/s04esports/ (accessed 10 Oct 2019).

[7] Cf. https://www.bundestag.de/dokumente/textarchiv/2019/kw08-pa-sport-589106; see also the paper by the Scientific Service of the German Bundestag "Ist E-Sport Sport? Stand der Diskussion" unter https://www.bundestag.de/resource/blob/515426/c2a9373a582f-7908c090a658fdff1af8/wd-10-036-17-pdf-data.pdf

games have fully arrived in the market economy, even belonging to the avant-garde (see Sect. 5.1). "The games industry's mix of entertainment, innovative technology, rapid product development and marketing cycles, and the accompanying value creation process regularly exerts a high level of fascination on observers unfamiliar with the games industry" (Anderie, 2018, p. 2), How technology, capital and ludic entertainment interlock and mutually promote or also block each other, the USA with Silicon Valley, Wall Street and Hollywood are an interesting example.[8]

A social sphere as colorful as the game – the jubilant statistics on sales figures of the "global players" should not be taken for the whole – is admittedly not completely subject to the regime of payment and non-payment; by no means all access to the game is paved with money. But the dreams of the magic of immaculate play, the hope of rediscovering "the liberating and unifying power of play" (Hüther & Quarch, 2018, p. 5) (why does hope need the conceit that it was once good?) and the economic hype of digital play, they do not want to go together.

6.5 Gamification – Bullshit or Gateway to a Better World

What has long been observed in the economy, science and the public sphere, namely that they are expanding and spilling over into other social spheres, has only recently become more noticeable in games. Gamification, a combination of game and infection, seems to be gaining acceptance as a term for this.

The expansion of ludic communication that takes place here is not easy to assess in every case. Describing transitions means having to deal with the classic constellation "half she pulled him, half he sank down". Who infects whom? Does the game penetrate other functional fields here, or do these take possession of the game? When simulation practices and simulation games are used in the social sciences (cf. Herz & Blättle, 2000) or when situations of non-binding acting-as-if are created in scientific experiments, is it science that occupies the game or the game that occupies science? Divergent answers are given from different observer positions. In any case, digitization has also created more favorable conditions for accessing the game from individual functional fields and their organizations.

[8] "Silicon Valley has been synonymous with cutting-edge disruptive innovation that 'changes the world' in the region near San Francisco since the 1950s. Wall Street has served as the epitome of capital funding free-market entrepreneurship from New York City since the 1790s. And Hollywood, a neighborhood of Los Angeles, has been considered the epitome of the best entertainment and top-notch film and TV series productions since the 1920s" (Anderie, 2018, p. 22 f.)

Employee Motivation, Further Training, Customer Animation

Gamification in the narrower sense means using ludic elements in non-game contexts to motivate people to prefer and do better what they are supposed to or have to do. "The fun, eagerness and verve of the player should be transferred to the consumer, employee or student. The media of this transfer are game mechanisms along which individual everyday experiences, but also entire institutions, are ludically restructured – gamified" (Raczkowski, 2018, p. 187). It is always about more social skills, e.g. for innovation processes (Scheiner, 2019), and/or more motivation for desired behaviours,[9] namely that expectations of others are better met by them than would happen without the use of gamified means.

> As far as the technical requirements are concerned, gamification is obviously a consequence of digitalisation. At the same time, an eye sharpened by the increased occurrence of playful animation sees that comparable phenomena, such as discount systems and prize competitions, the use of game-like reward and winning mechanisms, can be observed much earlier. (Arlt, 2015)

Employee motivation, competence building, further education and customer animation are large fields of application, but also working on emails, brushing teeth, using stairs instead of escalators, jogging, saving energy, improving traffic safety and much more can be gamified, i.e. charged with the additional sense of participating in a game. For this purpose, suitable game mechanisms are selected and used such as "points, levels, leaderboards, badges, challenges/quests, onboarding, and engagement loops" (Zicherman & Cunningham, 2011, p. 36).

One example: "Brush smart, have fun!" is how the start-up "Kolibree" (www.kolibree.com/de/) of the New York company "Baracoda" advertises an electric toothbrush with smartphone connection in a crowdfunding campaign. Data on brushing habits is collected, evaluated by an app and displayed on a dashboard in the form of a points system. Brushing teeth becomes comparable, intra-family rankings are created, prizes can be won, rewards can be unlocked if a certain score is reached, and the data can even be used to develop own games.

Nora Stampfl (2012, p. 26 f.) provides a clear overview of game mechanisms that are typically used. We summarize her presentation in key words. *Points* are an instrument to measure behaviour and to give feedback on progress and regression. *Levels* make visible where one stands. They show what has already been successfully achieved and give an idea of how long the road to reach the goal still is.

[9] Another term from behavioural economics is nudging, whose protagonists speak of a "libertarian paternalism" (cf. Thaler & Sunstein, 2011)

Challenges are the missions that players are sent on and for which they are *rewarded* with status gains, an increase in power, a gift or even money. *Awards* are public acknowledgements of successful moves. *Scores* encourage players to compare themselves with others, they drive competition. "Such building blocks are what make gamification work: If mechanisms of this kind are integrated into websites, online communities, marketing campaigns or the like in the context of a game, and if a game dynamic emerges from this, the chances are good that user participation and engagement will increase" (Stampfl, 2012, p. 27).

Serious Games and Exergames

Adopting individual game design practices is one side of gamification; another is the proliferation of serious games. "Their 'seriousness' consists in the fact that through them and with them something is to be achieved, trained and learned" (Gotto, 2015, p. 139). A more rarely used term in this context is exergames, composed of exercise for exercise and *gaming*. An example is "Games for Health – i.e. computer games used in therapeutic and clinical settings" (Breitlauch, 2013, p. 387). For serious games (cf. Raczkowski, 2018; Strahringer & Leyh, 2017), gaming is not just an adjunct but a method, but it should remain in the background and only a means, not become an end in itself. "It is important to prevent playing instead of working or consuming – the concern is found in the consultative literature on gamification in the frequently invoked differentiation between desirable (productive, goal-oriented, meeting the expectations of the designer) gaming and problematic gaming (power gaming, gaming with the system, cheating, manipulation) (Raczkowski & Schrape, 2018, p. 321).

"What If We Started…"

The economization of art, the juridification of the economy, the scientification of medicine, the politicization of ecology, etc. are, as already mentioned, well-known developmental tendencies of modern society. If games are now expanding more strongly than in the past into the economy, science, politics, etc. – where they have arrived everywhere for decades with the method of the simulation game (cf. Ameln & Kramer, 2007) – then a catching-up movement of the social sphere of play is taking place here that triggers conflict. Since the game itself is constantly subject to value judgments, it can be expected that gamification will also be judged in a contrary manner.

The serious is given a cheerful framework through gamification, the necessary is adorned with a colourful gift ribbon, critics argue and find "gamification is bullshit" (Bogost, 2011). Others also register and criticize the instrumentalization intentions that go hand in hand with gamification, but see much more in the expansions of the game, give gamification a much broader meaning, namely the chance to use the game for something greater, for a better future.

> What if we decided to use everything we know about game design to fix what's wrong with reality? What if we started to live our real lives like gamers, lead our real business and communities like game designers, and think about solving real-world problems like computer and video game theorists? (McGonigal, 2011, p. 7)

Play conquering the planet and making it a more beautiful place is an expansive Ludic position. Letting play be play is a defensive position against the encroachments from social functional fields and their organizations.

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Transitions II: Modern Play Spaces and the Ludic Basic Feeling of Digital Culture

7

This seventh chapter has Hans-Jürgen Arlt as sole author.

Abstract

Wherever complexity, i.e. the need for selection, and contingency, i.e. the risk of disappointment, together with their accompanying phenomena such as independence, freedom of choice, and unpredictability can be observed, i.e. everywhere by now, the game is invoked as a reference. How much reality content and how much whitewashing is involved in the inflationary use of the game metaphor? The voyage of discovery, which searches for ludic charm in the normal structures of modern and digital society, for elements of the action form of play, finds what it is looking for in many respects. The rise of three new virtues, *mindfulness* as a response to the unexpected, *connectivity as a* guarantee of social survival in networks, and *error-friendliness*, which sees defeat as an invitation to start anew, all point to Ludic proximity. But the rhetorical expansion of the game also serves the dubious purpose of glossing over real failure with – wholly unexplained – prospects of future success.

We play until death comes for us (Schwitters 1975)

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> I don't want anything anymore. I want to start playing. Last words of the poet Günter Eich. (Vieregg, 1994, p. 518)

Since the twentieth century, the game has become the most popular, apparently particularly obvious scientific metaphor. Wherever complexity, i.e. the compulsion to select, and contingency, i.e. the risk of disappointment, together with their accompanying phenomena such as independence, freedom of choice, unpredictability, can be observed, i.e. in the meantime everywhere, the game is invoked as a reference. Measured against what the invocation of the game is supposed to explain, the explanation of the game lags behind.

"No physicist who does not like to talk about the play of forces in order to explain complex movements, no historian who does not like to talk about the play of interests in order to explain complex political situations, no art critic who does not like to talk about the play of forms, colours and tones in order to evaluate a composition". (Matuschek, 1998, p. 1). "The play of social relations" (Derks, 2000) is analysed, Ervin Goffman (1983) says "We all Play-Act", describing (with high plausibility) *interactions* as games. Imagining *organizations* as play arenas, depicting micropolitics as power games (Crozier & Friedberg, 1979), describing "games in organizations and organizations as games" (Neuberger, 1992) has almost become a standard program, not missing the "games of managers" (Scheer, 2010), but also "the NGO game" (McMahon, 2019). To declare large social *functional areas* as playing fields, to see "serious games" (Hutter, 2015) going on in economy, art and science, to illustrate "politics as a game" (Trimcev, 2018) and Christian worship as a "holy game" (Lang 1998) is on the scientific agenda. It is particularly fond of saying about digitalization that "we are thrown into a New Game that turns many certainties upside down" (Seemann, 2014, p. 8).

7.1 On a Voyage of Discovery

This accumulation of the game metaphor would not be sufficient evidence, were it not for the fact that (from a European perspective) the eighteenth century and a rising social status of the game are regularly mentioned in the same breath. And if it were not for the fact that in normal everyday life such far-reaching expansions and instrumentalizations of the Ludic were to be registered (as they were the subject of the sixth chapter), which give the game such a high public presence. All of this together makes the thesis irrefutable that there seem to be neighborly relations between social structures of emerging modernity and ludic actions. This chapter will go in search of traces of ludic grace in modern normalities. In addition, the

hype that arose with the digitalization of games and has found its scientific expression in Game Studies will be examined to see how it is connected to the possibilities of digital communication and the Internet. A kind of voyage of discovery will take place, searching first in modern and then in digital society for elements of the action form of game, that is, of a constantly new way of dealing with the unexpected in the manner of a voluntary and temporary participation in non-binding acting as if.

In the transformation process from modern to digital society, we encounter so much that is typically modern that it is still quite controversial to what extent the term Society 4.0, as favoured by Dirk Baecker (2018), is justified. Are we dealing with a separate digital social formation or is "only" a digital version of modernity developing? In "Muster", Armin Nassehi builds up a line of argumentation that provides good reasons to locate digitalization within modernity, on which he diagnoses a digital disposition that reaches back into the nineteenth century.

> The functional explanation for the triumph of digital technology is thus rooted in the very structure of society, which generates and finds a need for the use of forms of information processing that are not immediately visible, in this sense data-shaped and thus countable. (Nassehi, 2019, p. 67)

Nevertheless, it is hard to deny that with the computer as a medium of dissemination, communication and with the computer as a tool, work are being put on a new footing. There is a great willingness among the public, as well as in academia, to prioritize disruption over variation. One does not stand on the resilient shoulders of strong theory design when operating with the difference between modern and digital society – but it is happening here. The general dissent about what kind of society we actually live in (Pongs, 2004) can be considered a hallmark of modern times.

7.2 Comparison or Equation

The following more detailed analysis can be preceded by a general observation. The inflationary references to the game not infrequently and probably not always without intention leave open whether an equation or a comparison is meant. That is, whether politics, social relations, organizational life are really meant to be understood as a game, or whether only an analogy is drawn, a Ludic model used as a comparative foil to create distance and improve the visibility of certain features. In non-scientific everyday life, in which metaphorical ways of speaking have many

functions, all this need not be taken so precisely. In a scientific perspective, other requirements apply.

7.3 Temporary Voluntary Participation: Associations and Work Organisations

The lowest common denominator, which is also supposed to bear any superficial comparison with play, is a moment of non-expectable movement. As soon as a "play space" appears that not only exhibits monocausally conditioned changes, but also allows a certain uncontrolled freedom of movement, someone can be expected to point out that something has clearance here. In modernity, that is the diagnosis, social relations have considerably more ludic aspects than in tribal and estates societies. This is evident in several respects, in the form of organization, in the pluralization of meaning, and not least in the fact that the unexpected is no longer experienced primarily as an event that bursts upon society from the outside, but as an occurrence generated in society by its actors themselves.

Organizations, including clubs, have become so normal in the modern age that it is hard to imagine that their basic structure could be of interest in the context of play. Especially since the club is an often ridiculed social form because it gathers very special interests under its roof, such as rabbit breeders, stamp collectors, and people who wear traditional costumes. Nevertheless, the association is properly modern, because it represents the social change of form from persons as members of corporative estates to persons as free and equal individuals. "As a specific structure, associations replaced or absorbed older forms of social associations such as craftsmen's guilds, cooperatives, guilds, or journeymen's clubs. In contrast to these medieval forms of organization, which encompassed the entire sphere of the individual's life and to which one belonged on the basis of birth and status, the associations were based on voluntary entry and exit […]" (Ehn, 2010, p. 291).

Freedom of Assembly and Association

The revolutionary aspect of the association, which has long been regarded as cosy, can be seen in the fact that it is based on the historically contested fundamental right of freedom of assembly and association. Members of the association come together for a purpose of their own choosing; the fact that the purpose is subject to state control to this day makes it clear. And they decide individually on the beginning and end of their participation in the life of the association. These possibilities

of self-determination bring the association into a structural proximity to the game. In other words, in modern society we find a normal, widespread form of organisation which, with its self-determined purpose and voluntary participation that can be shaped as temporary, has Ludic structural features.

It is striking that modern work organisations have so far remained unmentioned in this context, although the legally free and terminable participation also applies to them. This brings us to the multifaceted topic of work and play, where interestingly, on the one hand, work is almost always declared to be the opposite of play, and on the other hand, the organization of work is more and more often declared to be a parallel of play. It should be noted at the outset that people in the modern working society are not normally free to do or not to do gainful employment, unless they have a larger fortune or a family connection to support them. It is true that, with the exception of military service, no one is required to perform work in a particular organization. Therein already lies a difference from the society of estates, which is captured by the term "free labour." Labour power, which slaves and serfs could not dispose of themselves, is now regarded as the "natural property" (John Locke) of every person; like other property, persons can also take their labour power to market and sell it to the highest bidder. However, no one will be able to establish and maintain an independent social existence in the long run without gainful employment; if only because in the modern age, in which there is a profound division of labour, no one is able to survive without the labour of other people. The semantics of work in relation to play encompasses a rich repertoire of sense-making, which we will not go into.[1]

7.4 Non-binding: Plurality of Meaning, Positive Law, Experience-Orientation of Consumption

It has often been pointed out, among others by Ulrich Beck in the introduction to his book "Die Erfindung des Politischen" (The Invention of the Political) (1993), that either-or descriptions that suggest black-and-white relationships miss modern realities.

[1] The limited nature of the modern bourgeois concept of work can still be impressively demonstrated by taking a tour of the apartment, past the small room in which there are shovel and broom, vacuum cleaner, cleaning materials, ironing board, toolbox, perhaps also a sewing machine and a basket for dirty laundry, called the *storeroom,* past the *kitchen* in which cooking and washing up is done, to the room in which reading and writing is done in a professional context, which is then called the *study.*

> There is an essay by Wassily Kandinsky with the curious title 'and'. In it, Kandinsky asks what word characterizes the 20th century as compared to the 19th century. His answer is surprising: while the 19th century was ruled by the *either-or,* the 20th century should be about working on the *and.* There: separation, specialization, the effort for unambiguity, predictability of the world – here: Juxtaposition, multiplicity, uncertainty, the questions of coherence, cohesion, the experiment of exchange, the included third, synthesis, ambivalence. (Beck, 1993, p. 9)

This also applies to the pair of opposites binding-unbinding. Modern society is not anarchic, it knows very well liabilities, but of a different kind. Modern liabilities are closer to the non-binding nature of the game. What is meaningful, which meanings are recognized and which are not, is regulated by each ludic action for itself. Moreover, the players are sovereign; the rules of a game apply – until the players change them by consensus. In both dimensions, factual meaning and temporal validity, modern social relations move closer to the game – which can make them easier and more light-hearted, but also harder and more burdensome.

Chameleon-Like Changeability

Communication not only enacts the reality form of the imaginary (see Sect. 3.1), the use of signs generally leads to a constellation for which John R. Searle coined this standard philosophical formula: "X counts as Y in K" (Searl, 2011). What is said here is that the same thing can be something else at the same time in a different context. Searle uses the formula to describe social phenomena, for example, the fact that a piece of paper is money in a certain context, a single woman is the German Chancellor in a specific context, and a man is a husband in yet another context.

Modern society is characterized by the fact that it actually has an X – the free and equal person, formerly called the subject, today usually called the individual – to whom it is *basically* possible to overcome every internal social boundary of meaning, to take place in every social context.[2] Individuals become involved in economic, legal, scientific foundations of meaning and the rules associated with them, but they also always leave them again in order to switch to the family, to art, to politics, or even to play. This chameleon-like changeability often comes up against practical barriers, but as free and equal individuals their society is funda-

[2] The formation of a new concept of subject in the eighteenth century, focusing on the self-understanding of the individual, coincides historically not only with a tremendous valorization of play, but also with a shift of interest in it. (Strätling, 2012, p. 9)

mentally open to them, the class barriers have fallen. However, each and every one is responsible for equipping themselves with the success media, with money, power, truths, law, love, etc., which are considered currencies in the respective sphere of meaning.

"We Are Pope"

The important parallel to the game lies in the fact that outside a social functional field it is not what happens inside that counts – formulated so apodictically, contradiction rightly arises, but this cannot eliminate the crucial point. Money and attention as success media of the public and the economy seem to be welcome everywhere. Crossover effects are not to be denied, especially politics likes them, but this does not improve their reputation but worsens it. There are also still some grand narratives, for example "every man is the architect of his own fortune" and "effort must be rewarded". But there is no longer an overarching, binding authority like religion in the society of the estates. In each social field, only its meaning is valid, so that the individual who acts as B in politics counts as E in science, and thus does not take his status with him when he changes – as long as truths are not questions of power.

Because its functional fields function autonomously in principle[3] – in practice, corruptions are high on the agenda (see Sect. 6.2) – modernity is no stranger to the typical phenomenon of the game, at least as an idea, that successes and failures are left behind on the respective (playing) field as soon as one leaves it, i.e. are not binding beyond that. The functioning of a modern society is based on relative non-bindingness of meaning and thus on the loss of ultimate truths. "'We are Pope' – here, probably without quite meaning to, a mass medium […] dismantles in three words the position of a sovereign ultimate observer. Everyone is watching everyone" (Hörisch, 2013, p. 22).

"Abyss of Arbitrariness"

In addition to the plurality in the matter, there is the changeability in the course of time. The laws and rules that modern society makes for itself in order to install

[3] Michael Hutter suggests that "the joint development of autonomous value spheres should be understood as the co-evolution of value games, so-called 'serious games'" (Hutter, 2015, p. 14).

certainties of expectation are not introduced with the claim to eternal value (millennial empires are modern absurdities), but with the knowledge that other government majorities will enact other laws. Law no longer has a natural or extraterrestrial status, as positive law is subject to a "will of the people" arrived at however.

> Positive law is understood to mean legal norms which have been put into effect by decision and which can accordingly be annulled again by decision. Whether and to what extent law can be handed over to decision-making processes is an unsolved problem for the jurist. Accustomed since time immemorial and attuned to deciding disputes and thereby establishing what law is, the idea of also establishing law itself by decision visibly troubles him. The abyss of arbitrariness that could open up if all law applied only by virtue of decision makes him shudder. (Luhmann, 1983, p. 141)

What is to apply becomes open to decision. The validity of the past, which could not be questioned in the pre-modern present, is no longer automatically extended. Valid law is and remains binding, just as valid rules of the game have binding force, but what is to apply in the future has never been set in stone in the game and is now not set in stone in law either. New things can be put into effect to make way for other law and other rules.

Excitement Thanks to Shopping

A third moment contributes to the emergence of a modern aura of non-commitment that leans towards the playful. Certainly not for all persons equally and generalizing only from the middle of the twentieth century, an experience orientation of consumption is spreading. This development is expressed in the fact that the consumer "is left a part of his household budget to nurture his emotions and give them vent" (Baecker, 2010, p. 38). Necessity and practical usefulness take a back seat as criteria for the purchase of goods and services to experiential qualities that are promised and expected.[4] "For example, not the bicycle is then the good, but the bicycle experience/driving experience, not the hotel, but the hotel experience, not the museum, but the museum experience" (Reckwitz, 2018, p. 191). Goods are not completely stripped of their material functions, but their attractiveness comes from their immaterial values. The brand as a guarantor of good utility properties is being equipped with experiential potentials; brands have become "the elite of thing culture: a group of semantically charged objects that repeatedly arouse excitement"

[4] Nike does not sell shoes, but dreams, points of view, thoughts. (Jung & von Matt, 2002, p. 184)

(Ullrich, 2008, p. 35). This makes it difficult to assign specific products and services to specific target groups, because it is both open in principle which goods can be associated with which experiential values, and which experiential values are important or unimportant for which people in which life situations. A relationship with the experience orientation of ludic actions, as we have discussed in Sect. 2.4, is not difficult to recognize. Modernity was already described as an thrill-seeking society before the book with the relevant title, Jo Wüllner drew our attention to this, for example in "The Man without Qualities".

> An increased turnover of thoughts and experiences could not be denied to this new age [...] and he involuntarily enjoyed the poignant spectacle of a tremendous production of experiences freely combining and disengaging, a kind of nervous pudding that trembled in all parts at every convulsion, a huge tam-tam that boomed tremendously when touched in even the slightest way. (Musil, 1970, p. 409)

7.5 Unexpected: An Insured Life in the as If

New unpredictabilities stand at the beginning of modernity, because in place of an unknown but predetermined future, a no less unknown but decidable future is emerging, based on the idea that people make their own history. Although, or more correctly, because future is experienced as "homemade," more uncertainty arises. "A world in which people make decisions not only has an uncertain future that depends on the decisions made in the present. In this world, uncertainty is multiplied by the number of people making decisions. Each of those people, in turn, makes their decisions dependent on the decisions of other people and the consequences of those decisions. And because everyone does this, of course, the result is a dizzying multiplication of uncertainty" (Esposito, 2007, p. 51 f.). Whether the increase in freedom or uncertainty is emphasized in the "multi-option society" (Gross 1994), whose logic of increase (Schulze, 2003) increases general – not automatically personal – choices, is a question of observer perspective.

Uncertainty and insecurity in the modern age are given special weight by the fact that people and organizations feel responsible for their handling of the unexpected. Their current situation, whether things are going smoothly for them or whether they are stuck in the mud, whether they stand as successful or as a failure, is largely attributed to them as a consequence of their past decisions (Schimank, 2005, pp. 113–119). That is, they experience every present as a challenge not to leave everything to chance, not to simply let the unexpected happen to them, but to make sure today that "everything will be all right" for them tomorrow. The ques-

tion of the calculability of the incalculable finds a logical answer in probability, the probability calculation becomes a rationalization of the unexpected, which modern society itself produces. The practical answer is insurance.

> For in fact the profession of insurance agent […] presupposes the existence of chance. […] If one were simply to abolish chance, then the agents would of course have to go bankrupt, because their potential customers would no longer consider it necessary to arm themselves against the unexpected. The insurance agent's dream, then, is to allow chance to continue – on the condition, however, that only he (and not his client) can see through chance well enough to be able to control it to some extent. It is precisely this knowledge that is the object of the science of the probable. (Villeneuve, 1991, p. 84)

This explains, introduced only as a side thought, the modern semantic emphasis on the irrationality of play; it is only the idea of predictability that makes the deliberate handling of the unexpected irrational. Just as "it is only probabilistic thinking that makes the adventure visible as an 'irrational' undertaking in the emphatic sense, with only slight chances of success" (Schnyder, 2009, p. 393 f.).

Calculating with Probabilities

Measuring the future on the basis of the distinction between probable and improbable seems to make sense, since the unexpected is regarded as a result of observable actions that can be examined for regularities and whose actors can be questioned about motives and intentions.[5] Thus, the very question that gamblers have always asked themselves is put on the agenda: Can Fortuna be calculated?

> The prerequisite for the calculability of probabilities at the gambling table and in life was that the corresponding event contexts were detached from their immediate tie-back to a transcendent order. Only when an event could be translated into pure event quanta and thought independently of special-provisional interventions, only when it could be translated into a 'datum' – to which the dice are etymologically related in English and French – was it possible to calculate. (Schnyder, 2009, p. 27)

[5] Between 1660 and 1800, probability is constituted as theoretical knowledge and as a theory of aesthetic appearance. (Campe, 2002, p. 15)

Opinion polls, economic forecasts, and statistics of all kinds have become important guides to reality in our world. They are considered informative, although the original aim of probability theory was to offer signposts to the obscure realms of uncertainty and mere opinion – non-real realms par excellence, that is. (Esposito, 2007, p. 12)

The connections are compelling. When the idea becomes normal in society as a whole that one's own actions determine the future, or at least help to determine it, then action is perceived as risky. With the normalization of risk comes the willingness to engage in probabilities, because you don't have anything better. "Probability theory arises [...] from the need to prepare for the unknown and unpredictable future, or from the attempt to find a secondary form of certainty" (Esposito, 2007, p. 100). Probabilities, as statistically underpinned as possible, are used as operationally effective fictions, as if one could rely on them, as if one could act in a disappointment-proof way; one takes out insurance against the residual risk. Living with as ifs seems relatively natural to modern persons; the step into the ludic as if does not lead over an abyss, but only over a threshold (cf. Ortmann, 2004).

However, the classical relativization "all, but not everyone" applies to statistical findings. "The increasing statistical taming of accidentals in the sense of life accidents and coincidences conveys greater certainty only in relation to large collectives and long-term trends. For the individual subject, on the other hand, who is interested in the very concrete individual case of his life, probabilistic reason remains mute. […] What happens at the micro level of individual life stories is […] conceptualized as happening in a lottery" (Schnyder, 2009, p. 391 f.)

Stock Gambling

The social place where the unexpected makes its greatest appearance in modernity is the market. "In the market, as Marx already explained, actors confront their own choices as an alien power, which they experience as idiosyncratic, as restless, as saturated, as volatile" (Arlt & Schulz, 2019, p. 26). The other way in which one becomes proactive and authoritative in dealing with the unexpected, in addition to probability, bears a name that in its Latin origin means as much as to peep around, to scout, namely to *speculate.*

As already indicated by the keyword market, it is first and foremost the field of economics in which attempts are made to capitalise on the unexpected. If a future occurs on which one has bet, while others have not expected it, one has won. Economic betting and gambling for money are so closely related that the concept of speculation is anchored in both contexts, as can be seen, for example, in the expression "stock gambling." "The gambling/speculation distinction is […] contested: it is disputed whether speculation as an economic operation is distinct from gambling; likewise, the scope of this distinction is also hotly contested, as is particularly evident in the discussion of futures trading. And normatively, too, a broad spectrum of irreconcilable positions opens up, ranging from the moral reprehensi-

bility of speculation to its celebration as the 'most economic' of all economic operations" (Staheli, 2007, p. 44). Urs Staheli brings the two, speculation and gambling, even closer together by arguing that stock market speculation derives its incentive not only from economic calculation but also from emotional excitement, from the thrill associated with it (ibid., p. 37 f.).[6]

Both speculation and operational fictionality, as they enter everyday life with statistics and probability calculation, have a distinctly Ludic feel as elements of modern normality. Together with the pluralization of meaning, the positivization of law, the experiential orientation of consumption, and voluntary, terminable participation in organizations, they are among the elements of modern life that evoke associations with play. In modernity, comparisons with play are in the air. Are play and social normality once again moving closer together as a result of digitalisation?

7.6 Always on: Mindfulness and Connectivity

Felix Stalder (2017, p. 94) judges that the culture of digitality has "already become everyday and dominant. It shapes cultural constellations that determine all spheres of life and whose characteristic features are clearly discernible." That the transformation from a modern to a digital society (or to a digitalized modernity?) can already be essentially described and understood today could be an underestimation of the change potential of the digitalization of communication and work. But the fact that striking new things are already emerging cannot escape anyone's notice, and Stalder has described them with an analytical depth and empirical vividness that few others have.

In the fifth chapter, especially in Sects. 5.1 and 5.2, an analytical approach to digitalisation was sought from the perspective of the problem of understanding computer games. In contrast to communication among those present, communication with addresses was identified as a characteristic feature. Here, the aim is only to consider digital communication in terms of whether and to what extent it has similarities with components of ludic action. Which of its qualities place digital communication so close to characteristics of play that it may even be justified in

[6] John A. Hobson, who was one of the main points of reference of Lenin's theory of imperialism, formulates an almost identical argument for the gambler. He explains the popularity of money-play by the monotonous order of modern everyday life. The money game introduces into the monotonous monotony an element 'of the unexpected, the hazardous, the disorderly.' (Staheli, 2007, p. 37) Staheli refers to the economist John Atkinson Hobson (1906, p. 6), by whom the book "Imperialism" was published in 1902.

making a strong case for the thesis of a Ludic culture of digital society? In his "Manifesto for a Ludic Century," Eric Zimmerman (2014, pp. 19–24) has argued for just that. Nevertheless, important differences remain for play even to digital normalities, which will be addressed first.

Disruption as a Disaster

If playing means dealing with the unexpected in the mode of a non-binding activity as if voluntarily and restricted in time, often also in place, then digital communication differs from the outset in that temporal and spatial barriers are more alien to it than to any mode of communication before it. Interruptions are tantamount to catastrophes; always and everywhere "on" is the natural challenge posed by digitalization. That's why it's not just putting pressure on work – "The good news: you can now work anywhere, anytime. The bad news: you can now work anywhere and anytime" (Engelmann & Wiedemeyer, 2000, cover text) – but also on play. One can now play anywhere and anytime, but the ludic action does not lose its temporal marker as a result; the beginning and end of the game remain identifiable to the players. However, massively multiplayer online games (MMOGs) are designed to be timeless. As globalized actions with very many participants playing at different times of the day and night, MMOGs become continuous events. A game can run for several months, sometimes even years, it can also leave its end open. Nevertheless, the temporal exclusivity of the game is contrary to the logic of digital communication.

The situation tends to be comparable with voluntary participation. Although only celebrities have many followers worldwide, being connected, belonging to the network, is becoming a natural desire under the conditions of digitalization. How much voluntary participation remains in the long run, however, is highly questionable. Not participating takes on the character of self-exclusion. The shift in communication from offline to online is now reaching so many areas of everyday life that participation is asserting itself as a general expectation that every person and organisation directs at others and at itself. "Individuals must communicate a lot and continuously [...] or they will remain invisible. The necessary mass of tweets, updates, emails, blogs, shared images, texts, entries on collaborative platforms, databases and so on can only be produced and processed with the help of digital technologies" (Stalder, 2017, p. 137).

On the one hand, participation in the digital network loses its status as a right that everyone is free to exercise, and is transformed into a social duty. In this respect, too, play and digital communication are rather alien to each other. Even if

there is a lack of voluntariness, from the point of view of equality the possibilities of participating in communication, which are expanding with digitalisation, nevertheless affect the ludic. Relatively open participation opportunities, which have always applied to gaming, are at any rate more normal for online standards than for offline communication.

The Rise of Three New Virtues

In contrast to the temporal marking and the voluntary nature of participation, the remaining ludic components of dealing with the unexpected, non-commitment and acting as if are receiving a clear normalisation boost from digitalisation. It is visible in the rise of three new virtues: Mindfulness as a response to more unexpectedness, connectivity as a guarantee of social survival in networks, and error-friendliness, for which Odo Marquard (1981) coined the magic word "incompetence-compensating competence".

The incessant talk of complexity and contingency in the digital society demonstrates how the unexpected is being pushed into the centre of the society. Complexity means the necessity to choose; contingency expresses the fact that one cannot know how elections will turn out. "Complexity, then, means in practice the compulsion to select; contingency means in practice the danger of disappointment and the necessity of taking risks" (Luhmann, 1987, p. 31). One can also see the immense importance of the unexpected for contemporary society by how enormous its efforts are to bring it under control. On the one hand, it invests huge resources in communication campaigns, advertising, marketing and public relations to persuade customers and voters to vote a certain way. On the other, it collects immeasurable amounts of data and tries to use algorithms to identify patterns from which reliable expectations can be derived. The paradox inherent in this is too obvious for the currently still stoked expectation of being able to open up a market for well-paid certainties of expectations in the future,[7] not to turn to ashes. The means of data collection and evaluation, with which our society tries to get a grip on its unpredictability, is itself a production factor for uncertainty. What is digitally recorded in terms of texts, sounds and images can in principle be constantly updated, deleted and supplemented. Whether, to paraphrase Josef Mitterer (1993, p. 60 f.), a

[7] A prominent player is, or more correctly was, the British data analysis company Cambridge Analytica (CA), cf. https://www.theguardian.com/news/series/cambridge-analytica-files. Informative-critical on Big Data: Rust (2017), e.g. pp. 8–10.

digitized communication "so far" will also endure as a communication "from now on" is more uncertain than ever.

The habitual experiences of dealing with the unexpected culminate in crises. As a permanent phenomenon, they are an expression of "a social complexity in which there are only improbable combinations and every improbability also reveals itself at some point. […] The signs of the times are therefore not recognized by those who ask about the causes of a crisis and about the possibilities of remedying it, but by those who ask what comes after the crisis" (Baecker, 2010, p. 43).

Pleas for Error Friendliness

The impression that digital culture is accurately captured by ludic is supported by further evidence, such as the increasing number of pleas for error-friendliness and creativity. Alongside the discrimination against failure, which tends to declare losers to be hopeless cases, there is – ironically in a social situation in which the division between winners and losers is deeper than it has been for a long time (cf. Bude & Willisch, 2008; Mau, 2012; Stegemann, 2017) – the ever louder praise of successful failure, which learns from mistakes.[8]

The Ludic self-evidence of "new game, new luck" is recommended as a scientifically proven strategy for everyday life to individuals as well as organizations, and sociological findings diagnose that the recommendation is well received: "The late-modern subject derives enormous satisfaction from not being fixed once and for all, but from being able to discover yet completely new activities and possibilities for itself again and again in boundless actionism – new travel destinations, a new type of sport, another partner, another place to live, etc." (Reckwitz, 2018, p. 343). Jesper Juul (2015) describes "the art of failure" in video games and discusses the benefits of transferring these experiences into real life and work settings. Frank Degler draws a parallel between real and ludic reality by arguing that in digital games we now encounter "forms of play against/with the software in the mode of provisional life designs, which in the ever new starting and trying out of options represent the virtual counterpart to the modern, urban patchwork existence" (Degler, 2009, p. 554).

Play as a social action sometimes needs more, sometimes less rules, it always lives from not only fulfilling expectations, but also from letting fantasy and creativity run their course. The extent to which the description of ludic qualities now re-

[8] Cf. as early contributions to this e.g. Weizsäcker and Weizsäcker (1984) and Guggenberger (1987).

sembles job descriptions has long been noticed and illustrated (cf. Arlt, 2015). Fulfilling expectations is not enough; one must also be good for positive surprises.

> Anyone who wants to impress and assert social status should nowadays therefore always be able to reveal at least one more side than was previously known about him or her. (Ullrich, 2008, p. 53)

> The creative subject must also be an entrepreneurial self, must constantly observe the cultural markets, assess the valorizations there, position itself on them; it must deal wisely with risks and opportunities there and speculate accordingly in moderation. (Reckwitz, 2018, p. 304)

More Flexibility and More Mobility

To the unexpected comes the non-committal. Many more people are connected online than offline – but more noncommittally. This is a connection that is as trivial as it is logical, but one that is not infrequently talked about as if it could be overcome if one only wanted to. People often complain about the increasing non-commitment of social contacts, while at the same time demanding more flexibility and more mobility. Those who tie themselves down lose their ability to connect; one *and* the other are not equally available. There is no getting around the need for standards, but everything standardized in the digital world very quickly acquires a patina of staleness; the institutionalized, the regulated is suspected of being retarded. Where there was strict coupling, loose coupling becomes normal. Connectivity, the magic word of networks, has achieved the status of a central social competence. Being able to be another in another context improves connectivity. People as well as organisations are challenged to present themselves, their own history and the events they have experienced in a way that is appropriate to the situation at hand and yet, or precisely because of this, to appear credible. Online communication in general and computer games in particular train users to "lose all belief in the necessity that an event in the world can only be presented in the one unchanging way" (Degler, 2009, p. 546). The three success media of love, money and truth can be used to show how the dynamics of digitalized communication further dissolve liabilities.

Dating and Ghosting

Online dating apps have become firmly established on the Internet and are expanding. Not unlike an online shopping experience, users swipe left and right – depending on whether they like the person on the screen or not. If users like presentations on the net, what can happen is that the social atmosphere created by dating portals seems normal: Let's write, phone, meet, screw, go our separate ways again and probably never hear from each other again. Or at least let us enjoy our match, which strokes our ego because it proves we're in demand. A great first impression can be easily created online with Photoshop plus purposeful omissions and emphases regarding one's life situation. It is subject to verification at real meetings, but their binding nature suffers from "fomo" (fear of missing out) anyway, the fear of missing out on something better if you get too involved with the next best thing.

Quite a few of the apps have moved to emphasize the playful nature of relationships. In the US, *Tinder* has been offering a "Swipe Night" every Sunday since fall 2019. In the style of a mini Telltale Games,[9] users have the opportunity to intervene in the plot of an apocalyptic adventure game with their decisions. These choices, in turn, influence the suggestions *Tinder* makes to potential dating partners (White, 2019). The dating app *Candidate*[10] relies on playful elements from the very beginning. Users here have the opportunity to think of questions and start a "question and answer game". Up to five questions can be asked and answered as creatively as possible by up to five people. Neither the questioners nor the answerers initially know what the respective counterparts look like. Whether a contact is subsequently established is open. Initiated contacts, even if they make the step from online to offline, don't have to mean much. Breaking off contact and disappearing into the vastness of the Internet, or not getting in touch at all after a real date, is so common that there is a word for it: Ghosting.

Compared to the formerly much-vaunted binding power of love, which preferred to mark its shelf life with "eternal", truth and especially money are more fleeting from the outset. The non-binding nature of truths has a long pre-digital history (cf. Weingart, 2005). To characterize the problematic under digital communication relations, one question may suffice. What does the information potential of Big Data do to the truthfulness of knowledge if it is true that "with the data produced on every single day, all American libraries could be filled eight times over" (Floridi, 2015, p. 31)? The amount of new information that can be gleaned

[9] Telltale games was a us computer game development studio; see https://telltale.com/ (accessed 30 Oct 2019).

[10] Cf. https://www.getcandidate.com/ (accessed 30 Oct 2019).

from the data glut becomes a threat to old truths. Among the three functions of money as medium of exchange, treasure and capital, only treasure exhibits bonding qualities anyway. Money connects through its unboundedness. The unbinding nature of money in digital times has already been described so often using the example of high-frequency trading – the trading of securities within nanoseconds on the basis of computer algorithms – that it needs no repetition (cf. Gresser, 2017).

Instantaneous Presence: A Running Coming and Going

Digitisation reinforces the as if. Linguistic communication has made imagination an everyday phenomenon through its use of signs (see Sect. 2.1). Signs stand for something else. By charging them with meaning, their representative position gives rise to an as if, whereby this other, irrespective of whether it exists in reality or is fictitiously imagined, exists in the linguistic communication situation only as an imagination. Far beyond the potential of analogue radio media, digital communication (see Sect. 5.2) allows us not only to visualise the imaginary, the fictional and the absent real in the reality form of the virtual, but also to move within it and make changes – as if we were really involved. For example, "The scientific or military use of computer simulation of a real object or process consists of 'detaching' mathematically formalizable structures from the materiality of the object through measurements and formalizations, and then serving as the basis of a virtual, approximate, and modifiable model" (Schröter, 2009, p. 26).

Everything that makes virtual reality visible is fully there or completely gone, it has an instantaneous presence. The suddenness of the appearance and disappearance intensifies the already strong impression of as if: "The residualness of this disappearance is as unusual as anything. What remains of us is at least a corpse, of the cigarette the ashes and of the gasoline the stench. But here everything is clean, clinically clean. The appearance was already the whole substance, there is nothing behind and after it" (Welsch, 1998, p. 234).

7.7 The Continuing Invocation of the Game: Good Reasons, Dubious Purposes

The ludic and what is experienced as normal are moving closer together. This conclusion can and must be drawn from the considerable number of related phenomena that exhibit modern normalities and constitutive features of play. Digitalisation intensifies the proximity of the experienced everyday life to the experience of the

game, with it a virtual reality is formed that facilitates transitions between the game on the one hand, realities, imaginaries and fictionalities on the other, to such an extent that it becomes questionable which is the case at the moment. The virtual reality form of all online communication requires constant monitoring as to whether it is real, imaginary, fictional or ludic. As a cultural consequence, Dirk Baecker has diagnosed in a broad analytical arc that beyond the question of which society we actually live in, the even more fundamental problem of which reality we actually live in pushes its way onto the agenda.

Word formations such as "reality-TV", "virtual reality" and "augmented reality" (projections of virtual into real realities) are indications of the miraculous multiplication of the real. "Believer or non-believer, happy or not happy, these standards of ancient and modern culture no longer apply. Instead, the question is: real or unreal. For only under this question can the all-important search for references still be negotiated. Every aspect of our reality is subject to the suspicion of unreality" (Baecker, 2003, p. 71 f.). In this mixed situation, in which the transitions become blurred, games can be spoken of with hasty analogy or generous essayistic gesture, with advertising fade-out art anyway, even where "in reality" hard realities are in progress.

The Ludic Mask

This is the final thesis: there are both structurally anchored reasons for the ongoing invocation of play, as outlined in this chapter, and strategic deployments aimed at misappropriating realities and suggesting a brave new world. On the social user interface, modern structural affinities to the Ludic are exploited to put a Ludic mask on the competitive struggles, performance demands, and social dislocations of everyday life through the strategic use of the term play, which suggests spaces of possibility full of lightness, informality, and free development. Such "beautiful language" (Schlüter, 2009), which is poured over real events like foamed milk over black coffee, is part of a widespread counterfactual use of language that uses valuable terminology to charge quite normal, rather banal practices with high and noble meanings. From the need to avoid spreading demonstrable lies as far as possible, the "Bild" newspaper makes the slogan "Every truth needs a brave person to speak it". Arbitrary contacts operate on the online platform Facebook under "friendships". "We love food," a retail group advertises, but then sells it and even "cheaply." The rhetorical expansion of the game also serves the dubious purpose of beautifying real failure with – completely unclear – prospects of future success.

> Undeterred by it all, "the music of chance" plays. "'Then maybe we should go over and get the cards out.' And with that, just like that, the game began." (Auster, 1992, p. 108)

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