The Naturalization of Knowledge

Games between Common Sense and Specialized Knowledge

Reflecting on how and with what kind of consequences something artificial, something manufactured becomes naturalized in video games will be the central issue of this text. It deals with the question of how the video game hides its artificiality in terms of technique. In a certain sense this retrieves one of the fundamental questions of modernity and industrialization: How does the manufacturing of our environment become a naturalized, self-evident and indubitable process?

Technical mass media 'traditionally' tends to cloak its apparative and technical qualities partially or totally in order to become agents within a society. The symbolic would not be functional without its concealment. But by using this kind of generalization, we would pass over fundamental questions concerning video games, for instance the question of the significance of video games concerning digital devices and digital media within our culture, or the significance of the particular quality of the games' visual language. Furthermore, the impulsive role of video games in the development of technologies, networks or symbolic forms of action would be left out of consideration. And, last but not least, the whole set of problems concerning the naturalization of media, which seems to be embodied in video games in a very remarkable way, would not be appreciated enough. In short – we have to deal with the question of why we do not 'see' the apparatus, the politics or even the idea of playing while playing with our SING STAR (2004) equipment.

I cannot and I will not try to find exhaustive answers to the sketched complex of questions during this argumentation. I'd rath-

in: Logic and Structure of the Computer Game, ed. by Stephan Günzel, Michael Liebe, and Dieter Mersch, Potsdam: University Press 2010, 130-145.

http://pub.ub.uni-potsdam.de/volltexte/2010/4274/ [urn:nbn:de:kobv:517-opus-42746]

er like to suggest some arguments that might help us work on this complex of questions. I would like to address briefly three of these forms of naturalization in the field of video games: the naturalization of play, the naturalization of the apparatus, and the naturalization of knowledge. The ambition of this text is less to clarify each of these forms in detail than rather to point out that the *invisibilization of the manufactured* is a continuous element that should urgently be highlighted in the media studies and the critical research and analysis of a playing culture.

Playing Action as Naturalization: Action in Rehearsal

A first starting-point for an approach to the naturalization of artificial and factitious features of video games can be found in the action of playing itself. We conceptualize playing as a form of action that is given by nature. Due to the fact that *game studies* have not provided a sustainable theory of action that is capable of integrating the range from cultural action to media action in a sensible way, I would rather like to concentrate on anthropological aspects referring to playing.

Ostensibly, game studies challenge the difference between game and play again and again with great pleasure – but in my opinion it hardly becomes aware of its consequences. Thus, in such a distinction, the play is deemed to be an ideal model of "action as rehearsal" [orig.: Probehandeln] or an action in form of "as-if" and therefore an opportunity to have a go at cultural or subjective actions in a playful way. The action as rehearsal is ostensibly the basic definition for playing.

Gregory Bateson, too, considers this distinction to be pivotal in his anthropological examination of the game theory. A game functions as a reference between the action and what is meant by it. Akin to playing animals that for instance 'simulate' a fight playfully, he considers the conceptualization of games within our culture to be an asif relation. According to Bateson (1972:180), we experience the game

as an action that is substitutional for another action: "These actions in which we now engage do not denote what those actions for which they stand would denote". The problem that Bateson derives from this experience is the paradox of the game as a framing. Playing puppies for example rehearse real fights while they play around. But we do not see fighting puppies – we see playing puppies. However, the crucial essence of Bateson's approach lies in this: For him the game is a secondary process that refers to a primary process of action (ibid.:185). Thus, it is not conceivable without the primary process – and therefore not precisely distinguishable from it. The playing puppy that simulates the fight in an abstract way performs it just for trial and without factual consequences, but simulating the fight is not conceivable without the existence of fighting.

Thus, the 'framing' as a variant of trial action does not become evident as an answer to the question concerning play but as its aporia, because assuming that the secondary process of playing is always directly linked to the primary process of action would lead in the wrong direction. Because inversely, the existence of fighting constitutes the animal's play – in our simple example we can't even think of a distinction or a valuation between secondary and primary process; even less if we include the context of playing and acting in the sense of subjective and intersubjective levels of meaning. However, it is crucial that we permanently cloak the connection between play and 'seriousness'. Playing appears to be a part of nature, its non-performativity seems to be a matter of course and the distinction between symbol and object is self-evident. The relatedness of play and effective action becomes naturalized.

In short: Just because playing appears so natural to us, we overlook that the nature of playing is not only an acting out of an *as-if* relation – free of all consequences. The nature of playing wouldn't exist at all without the involved consequences and the potential of

real effects. So, while we are playing, we naturalize the concept that playing is 'only' playing and therefore not a formation of semantics and meaning with concrete effects.

However, it is not only games that are well-established forms of trial action within our culture. In an analogue perspective we can conceptualize all kinds of media as an archetypical form of trial action and of acting with discourses, symbols, systems and subjects with (ostensibly) 'no consequences'. In the genealogic connection between options of action, trial action and the medium, a performative system of meaning evolves within the ludic in which a formation of knowledge materializes. Its analysis not only gives information about the game and *knowledge-in-the-game* itself but also about media, forms of society and dominant regulative systems. This leads to the next level of naturalization:

Medial Naturalization: The Apparatus-Debate

It is certainly more plausible to work on the question of naturalization by choosing a perspective from within media studies. It is the disappearance of the produced and manufactured, the invisibilization of the technique and the technical dispositive in modern mass media. There is no camera, no microphone, no director, no Jonny Depp and no script, no dirty screen, no green exit-sign and no smell of tortilla chips when the cinema is darkened – there is only Captain Jack Sparrow.

Based on the sustainable arguments of the apparatus-debate we can expose the constitution of medial effects caused by the invisibilization and immediacy of technologies and instances of production. The main point of this debate of 1970s French film theory is the idea of a reevaluation of the concept of technology in cinema. The main theorists of the apparatus debate – Jean-Louis Comolli, Marceline Pleynet, Jean-Louis Baudry – tried to 'strip' the technology of

its neutral character. The cinema is analyzed as 'symbol generating' machine, as an ideological machine that is no longer a prerequisite of communication, but itself part of the meaning and message. Here we can see how the power of the play as a dispositive masks its ideological and technological inscriptions. At this point it is important to distinguish between 'power' and 'ideology'. In short I'll draw a distinction between power as an immaterial (and not necessarily bound to a person or institution) tool of (self)government and ideology as a characteristic of symbolic or technical artifacts. Terry Eagelton (2008) describes language as an 'ideological battleground'. For him, symbols are the 'real' material medium of ideology, because values or ideas can't exist without ideology.

In an overall view of the phenomenon video game we can identify a tendency of naturalization of the 'basic' technical system computer that can be seen in analogy to the – in the words of Comolli (1986) – "work of transparency [la travaille de la transparence]" of the cinema as an ideological system. Just as the dispositive and technical arrangement of projection, theatre and screen in cinema become naturalized in the sense of a 'window to the world' and as the process of performance and the 'status of the produced and manufactured' of the cinematic become cloaked, the video game similarly works on cloaking its own technical basis. This does not mean neglecting the fact that we act playfully with a machine, however. And it does not only mean that we neglect the symbolic code of the games, its particular artificiality and arbitrarity while interacting with the visual representations.

The efficiency of this process is guaranteed not by a total invisibilization of the technological but by a dialectic of "hypermediacy" and "immediacy" as conceptualized by Bolter and Grusin (1999). The technical basis of playing becomes immediate parallel to its total visibility. While playing ICEHOCKEY MANAGER 2009 (2008) we are immersed in the game – although we 'know' at the same time that we are working on an Excel-sheet.

This 'cloaking of the manufactured' rather means that every playing makes the 'productive tool' more familiar to us in the long run. It accustoms us to the processing of texts and images, adjusts our response time and dexterity to the machine and therefore reconciles work and leisure time in a totally 'productive-economic' way. Thus, the video game is a technological medium that is generated under economic production conditions and soaked with ideology. And this medium has a great potential to reconcile us with and to naturalize its artificiality. To have a short look on how this form of ideology slips through the experience of immediacy, we have to turn to the forms of knowledge in games.

My main point is that the major form of naturalization of video games takes place in the organization of knowledge transfer. So we need to look at the different forms of discourses and *fluid knowledge* in video games.

Discourse

In my opinion, the most essential point for approaching naturalization lies within the production of immediacy of the experience in games. For this, the concept of *sensualization* of abstract regulative knowledge and rationality of action can be introduced here and might stand for such productions of immediacy. 'Sensualization' is used here as a concept of naturalization of arbitrary, ideological or somehow produced and manufactured knowledge. The result of this immediacy is a form of knowledge which, mostly unseen and unrecognized by the playing subject, 'slips' through the sensualisation and application of a discoursive knowledge.

The theory of discoursive coupling emanates from the 'classic' definition of discourse: thus a discourse according to Jürgen Link (1998:50-51, trans. by author) is "a specifically-historic and special, regulated formation of propositions [...] that are allocated to a specific and special thematic field". Discourses according to Siegfried Jäger (2004:23, trans. by author) can be understood as articulating

practices which "do not represent social circumstances passively but that constitute and organize them as a flow of social knowledge through time". A discourse is therefore to be understood as a 'somehow' regulated link or formation of utterances. The term 'utterances' does not mean description, grammatical sentences or speech-acts but the entirely individualized, contingent, anonymous, pure and tight materiality of something 'really' said at a certain time and in a certain place.

The video game is set upon a long tradition of sensualizing its abstract and logical rules, regulations and narratives. The invisibilization of the idea of acting without consequences and the immediacy of the technological basic structure only opens up the way for the sensualization of abstract and ideological knowledge. A game articulates discourses of knowledge and is at the same time embedded in discourses that exceed the game itself. A game does not only deal with one regulated and marked-off discourse about what it is 'telling' or what constitutes the genre that it belongs to. A game is rather surrounded by and soaked in most different kinds of knowledge, ways of speaking, forms of action and discourses, discourses about what the game is telling, about the culture, the economy as a regulative technique, the game as a simulation but also about media and its use. These forms of knowledge do not ultimately 'materialize' in the concrete form of a 'message', but in a diffuse 'swarming' of most varying forms of articulation and representation.

Of course, a discourse is not just the simple sum of all that has been said. Nor can a discourse embody everything that is utterable. Imperceptible procedures define what is legitimate to say in a society. Of course, the question is how such a procedure negotiates and stabilizes what is legitimate. In short: video games are part of a discursive machine which manufactures common sense. How do the different kinds of knowledge a subject activates in order to play a game intertwine with the author's intentions and the mediality of the game itself? I'd like to suppose a reductive structure to explain that:

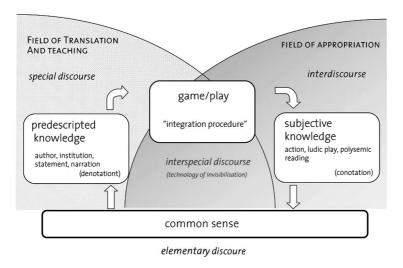


Fig. 1: The transformation of discursive knowledge

Various factors of differentiation shape, build or stabilize most different 'speech forms', statement forms and complexes of knowledge. Such a differentiation is based on the conviction that modern societies can be characterized by functional differentiation, that means by the development of distinguishable and specialized fields of knowledge and practice, each forming unique and distinct structures of utterance as specific discourses of knowledge. These places are dominated by specialized language forms - the so called special discourses. In short: in certain partial segments of a society characterizing itself by specific knowledge, this knowledge is expressed or 'said' in a special language: For example a language of sports or fitness but also of economic knowledge, of urbanism, of warfare and so on. The special discourses' methods of dissociation go together with integrating procedures that link these distinct spheres in a kind of 'compensation' or 'transmission'. These connective structures are traded under the term of *interdiscourses* within the critical discourse-theory according to Link:

The most important function of such cultural interdiscourses is the production and the supply of connecting elements and by their application the production and reproduction of collective and individual subjectivity that allows to survive in highly differentiated societies based on division of labor without getting disrupted by various specializations and professionalizations all the time (Parr/ Thiele 2004:265, trans. by author).

The legibility of such interdiscourses evolves from a kind of double coding. What is expressed has to be 'readable' in each of the two discourses. My proposal would be to conceptualize video games as such a 'procedure of integration' and therefore as an interdiscourse. According to that, the knowledge that is located in the enunciative-narrative part of the game could be characterized as special discursive knowledge. It tends towards a maximum of immanent coherence and to wall itself off against external discursive material (comp. Link 1998:50). This means that the knowledge (about certain yoga positions, about constructing a city, the use of weapons or tactically skillful moves in soccer games) is a kind of 'professional' and 'secret' knowledge, primarily to be described as denotative knowledge that has to be 'taught' within the play as an interdiscourse.

On the ludic side (the subjective player's) this knowledge establishes forms of appropriation, or more precisely, an intersubjective form of appropriation for the provided special discursive knowledge. This knowledge is now generated and shaped much more by connotation. 'Reading' the game can hardly cope with the requested domination of denotation, because the game/play especially emerges always by communication as well as by social and subjective practices.

Nonetheless, the proclaimed ambiguity does not imply a semiotic or textual polysemy or a generally critical form of appropriation but merely a discursive variation. This means that even the narratively most terminated game cannot be understood or read in a denotative

way. Therefore, the theoretical concept of interdiscursive linkage of knowledge in the transition between the enunciator and the player does not imply an arbitrary interpretability of the 'coded' knowledge. Actually it rather deals with the given open modulation of the text corpus within a medium or a public discourse field.

In contrast to special discourses, interdiscourses are complexes of knowledge that are not terminated but circulate variably and flexibly through all other discourses in a connective way. Then, the game itself would be an interspecial discourse. This interspecial discourse contains special discursive elements (denotative discourse elements) that occur in several interdiscourses (for example connecting statements of the body as an economic resource with the logic of regulation). So, the quite vague term 'naturalization of knowledge' in the model can now be described more precisely as a transfer from special discourses to interdiscourses. The link between knowledge and the subject within the game could be reconstructed as follows: The game avails itself of an existing social knowledge and transfers this knowledge as an 'offer' in form of a 'knowledge-algorithm' dedicated to the communication and the active appropriation by the player.

From this point of view, the interspecial discourse of the game as a 'black box' is rather a 'complex of simplification' than a complex of rationalization. But an evident and naturalized type of knowledge can only evolve on the basis of such a 'rationalization framework'. A knowledge that is implemented in the system of discourse transition 'slides' on the symbolic level 'below' the threshold of being suspected as something 'made' or 'constructed' and normalizes itself towards a (pretended) experiential knowledge. Besides the intended and negotiated knowledge also and especially the not-intended formations of knowledge generate a dominant effect in the game and play. So what are the effects of this permanent invisibilization of the manufactured on different levels?

If we outline all the three forms of invisibilization that I have mentioned, we can speculate about a complex *self-management* which lies within the video game. And the 'place' where this self-management takes place is the common sense.

Shaping the Self

The common sense of a society that all this is based on has to be understood as a concept of organization that ascribes rigidity against deviant behavior to knowledge. The common sense is the actual 'place' in which the naturalization of knowledge about and within video games gets organized and structured. This knowledge is not just 'marginal' knowledge about certain articulations or minor propositions, but a quarrel between elementary political and ideological values of a given society. Quite the contrary: the common sense – in all its vagueness - provides the reservoir for social orientation-knowledge. The subjective accommodation to discursive components of knowledge that circulate within special- and inter-discourses as well as within the common sense coincide with the concept of the subject as an 'adjustable' factor as it is described in discourse-theory. Each player of video games has to integrate themself into a cultural system of meaning in order to experience the pleasure of the game. They have to align and adapt themself to a knowledge prescribed by the society in order to 'conceive' the game entirely. You can only have fun with the game if you betake yourself inside a 'system of adaptation' that is 'rigid' in terms of technology and action.

The player subordinates themself to a matrix of meaning that is technical and reaches to symbolic and discursive levels at the same time. The player subordinates voluntarily to a process of optimizing his or her own actions by adjusting themself to invisible, naturalized and subjectively internalized patterns of action. Naturalization – this could be concluded as a quintessence – is not only an effect of cloak-

ing machines and devices but also and especially an effect of *self-management*. Today, providing social orientation-knowledge means providing 'abstract' patterns of knowledge and action for a digital culture on which the subject can adapt. The video game is the 'place' of enculturation (Neitzel et al. 2009).

Abstract, ideological and discursive forms of knowledge are reprocessed here in order to be 'internalized'. This reprocessing (for example of norms and values) ensures itself by cloaking the fundamental intersubjective forms of validity: The adjustment of the subject to the regulative social norm masks itself with the adjustment to the constitutive agreement: the accepted rule, the framing of the video game as ostensibly free of consequences, the voluntary use of a medium. A good example for this is the component of work science within the video game. Thanks to the video game leading us playfully to the computer, we also establish methods for solving non-playful problems concerning computers.

But the function of the video game is more than just providing a playful mode of learning and self-governing. The play as such soaks the digital media in terms of regulation, the regulated interaction, the role-play, the participation and the abolishment of borders – the borders between sender and receiver, between I and not-I and between play and work. Maybe the claim of participation concerning technique and textuality of the digital medium is its strongest moment. On closer examination, participation does not mean participating in a game, in a magic circle beyond the real world, but participating in the world itself, in the work, the self-representation and the construction of identity that are transfigured into play.

References

Bateson, Gregory (1972): "A Theory of Play and Fantasy", in: G.B.: Steps to an Ecology of Mind. Collected Essays in Anthropology, Psychiatry, Evolution and Epistemology, Chicago: Chicago UP, 177-193 [1955].

Bolter, Jay D./Grusin, Richard (1999): Remediation. Understanding New Media, Cambridge/London: MIT.

Comolli, Jean-Louis (1986): "Technique and Ideology. Camera, Perspective, Depth of Field", trans. by M. Butzel and P. Rosen, in: *Narrative, Apparatus, Ideology. A Film Theory Reader*, ed. by P. Rosen, New York: Columbia UP, 421-443 [1972].

Eagleton, Terry (2008): *Literary Theory. An Introduction*, Minneapolis: Minnesota UP [1983].

Jäger, Siegfried (2004): Kritische Diskursanalyse. Eine Einführung, Münster: DISS [1993].

Link, Jürgen (1998): Versuch über den Normalismus. Wie Normalität produziert wird. Opladen: WV.

Neitzel, Britta/Nohr, Rolf F./Wiemer, Serjoscha (2009): "Benutzerführung und Technik-Enkulturation. Leitmediale Funktionen von Computerspielen", in: *Leitmedien. Konzepte – Relevanz – Geschichte*, ed. by D. Müller, A. Ligensa and P. Gendolla, Bielefeld: Transcript, 231-256.

Parr, Rolf/Thiele, Matthias (2004): "Eine 'vielgestalte Menge von Praktiken und Diskursen'. Zur Interdiskursivität und Televisualität von Paratexten des Fernsehens", in: *Paratexte in Literatur, Film, Fernsehen*, ed. by K. Kreimeier and G. Stanitzek, Berlin: Akademie, 261-282.

ICEHOCKEY MANAGER 2009 (2008), The Games Company, PC. SING STAR (2004), SCEE, Playstation 2.

Biography



Rolf F. Nohr, PhD

Dean of the Media Studies Program and Professor for Media Aesthetics and Media Culture at HBK Braunschweig

Research:

Management Techniques and Strategic Action in Popular Computer Games

http://www.hbk-bs.de/hochschule/personen/rolf-f-nohr r nohr@hbk-bs.de

Publications:

- 'Die Auftritte des Krieges sinnlich machen'. Johann C. L. Hellwig und das Braunschweiger Kriegsspiel (with Stefan Böhme), Braunschweig: Appelhans 2009
- Shooter. Eine multidisziplinäre Einführung, ed. (with Serjoscha Wiemer and Matthias Bopp), Münster: LIT 2008.
- Die Natürlichkeit des Spielens. Vom Verschwinden des Gemachten im Computerspiel, Münster: LIT 2008.

Response

Rolf Nohr's focus on processes of naturalization is highly relevant to games and gaming practices. In a certain sense, this is precisely what computer games are; they are learning machines, which demand from the player who seeks to master the game that a specific domain of knowledge (in the hands as well as in the mind) be internalized and made second nature. Nohr's ideological critique shows how this can be seen as a process of naturalization through aesthetization, through a playful appropriation of knowledge.

Nohr's focus on the concept of *specialized* knowledge also seems very relevant. Compared to other leisure activities like, for example, football, television or film, gaming (at least a large and dominant category of gaming) is a more specialized field. Unlike people who do not like football or bother to watch much film, people who do not play computer games really have no clue what it is about or what is demanded from the player.

As I see it, Nohr's analysis invites two main points of criticism. Firstly, the analysis implies that two different kinds of appropriation are treated as parallel mechanisms, almost as if mapped onto each other: a process of translation between specialized discourse and common sense *also* works as a process of naturalization. However there is very little explicit argument – although there vaguely seems to be a parallel – as to how a movement from the specialized to the common is at the same time a movement from the manufactured and contingent to that which appears natural, invisible and inevitable. This mapping of one mechanism of appropriation onto another also seems to imply, rather problematically, that in computer game play, whereas the game industry represents specialized knowledge, the player somehow represents common sense; from a position located

in (at home in) the domain of common sense, the player's task is to translate the specialized into 'interdiscourse', thereby realizing the game itself into the 'interspecial' domain.

Secondly, the notion of play itself. Looking at play as a process of naturalization is a relevant and valuable approach. One could argue that play, by definition, is a strategy for coming to terms with, appropriating, and internalizing in a certain sense, that which may be alien, threatening or forbidden; through play, we are able to engage with something without engaging with it, naturalizing our relationship to it while not only avoiding (or minimizing) risk, but also, as Nohr points out, hiding or 'cloaking' the connection between play and seriousness, between as-if action and real action.

On the other hand, the relationship between play (which would include fiction, if we follow Bateson) and ideology seems ambiguous in Nohr's account. Is ideological naturalization, which presumably must be linked to the exercise of power, inevitably part of play itself, independently of any particular economic and social structures in a society? Is play being appropriated and framed as ideology (in videogames, in fiction, in cinema) or is play by definition an ideological framing? If the latter is the case, and if we follow Bateson's central argument that play is at the heart of the evolution of language, the operations of power through ideology become epistemologically inescapable. This is in itself not necessarily problematic (depending on your general critical leaning), but it tends to make the more specific characteristics of different media and genre discourses less important. On what level can we observe, as Nohr does, that the ideological operations of computer games work 'just like' Hollywood's convention of transparent storytelling? What are the unique aspects in how computer games reproduce, for example, regulatory norms of play and work, management and planning, warfare, or violence?