COPYRIGHT

Copyright © 2003 by authors, Utrecht University and Digital Games Research Association (DiGRA).
All rights reserved. Except for the quotation of short passages for the purpose of criticism and review, no part of this publication may be reproduced or utilized in any forms or by any means, electronic or mechanical, including photocopying, filming, recording, or by any information storage and retrieval system, without permission in writing from the copyright holders.

33.THE OTHER GAME RESEARCHER
PARTICIPATING IN AND WATCHING THE CONSTRUCTION OF BOUNDARIES IN GAME STUDIES

Marinka Copier

ABSTRACT

Game researchers are busy doing game studies: researching, writing and publishing articles, organizing conferences and creating a curriculum. I will argue that creating a new autonomous discipline such as game studies mainly involves constructing boundaries on different levels. In this article I would like to discuss how we can watch and analyze where and how these boundaries are being constructed, while realizing that I am also participating in this process. I mainly focus on the construction of borders between game studies and other disciplines and the ways in which a line is being drawn between game researchers, game designers and gamers. I will argue that Donna Haraway's concept of situated knowledge can help us to realize where and how knowledge is being produced. I will claim we have to look into the empirical situation of game research in order to see that we all produce knowledge from a certain (hybrid) position and perspective.

KEYWORDS

Science and Technology Studies, game researchers, game studies, constructing a discipline, boundary-work, situated knowledge, hybrid researchers

DOING GAME STUDIES

"I am as much of discursive object as the things I study are." [12]

Over the last few years a new breed of researchers has come into being: the game researcher. Most of these researchers want to create a new autonomous discipline called game studies.[1] They all enter the field of game studies from somewhere else: from other scientific disciplines such as anthropology, sociology and film studies but also from the background of a game designer and/or a gamer. They are all busy *doing* game studies: researching, writing and publishing articles, organizing conferences and creating a curriculum. While *participating in* this occupation myself it gradually became clear to me that creating a new autonomous discipline such as game studies mainly involves constructing boundaries on different levels.

On the content and paradigmatical level for instance this means constructing boundaries between what is a computer game and what is not and deciding

[1] Frans Mäyrä claims that: "Science is created by the scientific community: the verification of results, testing of hypotheses and continuation of research into similar or alternative directions all depends on the existence of a community of other researchers who understand the subject matter, the language and rationale of the research in question. Until then, the person will be writing into the void, having trouble getting research funded, published or getting any kind of serious feedback." [22]

which games should be studied. It involves drawing a line between the different methodologies and theoretical perspectives and deciding which methodologies and theories should be used, as well as constructing boundaries between game studies articles that are conceived as scientific and non-scientific. On the level of the researcher this implies constructing boundaries between who can be a game researcher and decide the above and who cannot. On an institutional level this means constructing boundaries between game studies and other fields and between different institutions involved in researching and 'getting to grips' with games (universities, art schools, industry) that can/are participating in game studies and the ones who are not. To sum up: doing game studies, creating a new discipline, means constructing various boundaries on content, researcher and institutional level and therefore participating in a process of inclusion and exclusion, of constructing the other ('othering') to construct oneself.

While organizing the *Level Up Digital Games Research Conference 2003*[2] and therefore participating strongly in the construction of these boundaries I became increasingly fascinated by the workings of this process of 'othering'. This article is a report of my first reconnaissance exercise in this chaotic process of boundary construction while doing game studies. By presenting some examples of how and where this constructing of boundaries takes place I will argue that we have to *watch* and be aware of this process while we are participating in it. Where are we constructing borders between game studies and other disciplines, between game researchers, game designers and gamers? Which claims belong to game studies? Who is a game researcher? What is game research?

BOUNDARY-WORK

To make more sense of this process of boundary construction I found that the work of Science and Technology Studies (STS) can be very useful. Amongst other things STS analyzes what scientists do as well and the role they play in society, history and culture. Especially the work on demarcating facts, standardization and constructivist notions of making technology and science, can be helpful in understanding how an epistemologically different field as game studies is coming into being and 'freezes' itself by inventing borders.

The STS theory which comes closest to what I would like to do is called 'boundary-work'. The boundary problem focuses on questions such as:

> "Where does science leave off, and society –or technology- begin? Where is the border between science and non-science? Which claims or practices are scientific? Who is a scientist? What *is* science?" [10]

Basically there are two perspectives within the STS boundary problem: essentialism and constructivism. Where essentialists search for the unique qualities that set science intrinsically apart from other cultural practices, constructivists argue that the separations of science from other knowledge producing activities are social asymmetrical conventions. Therefore they are examining and criticizing when how, and to what end the boundaries of science are drawn and defended. Such processes are known as boundary-work. "Essentialists *do* boundary-work; constructivists *watch* it get done by people in society [...]" [10]

---

[2] I found that organizing a conference especially means constructing boundaries and participating in a process of inclusion and exclusion. Conferences and associations like the Digital Games Research Association (DiGRA) are one of the key sites where game research as an autonomous discipline is being constructed. On the basis of which criteria should abstracts being accepted? Should a scientific conference work together with the gaming industry? Should participants be able to play games at a scientific conference on computer games? Should the university invest money in a conference on computer games? And who decides the above? While I'm writing this article we are still in the process of doing the conference, so these are just some of the issues I will try to analyze after the conference has taken place.

This is why I propose to *watch* the construction of boundaries in games studies and the workings of 'othering' (which claims belong to game studies?). Before turning theories that try to explain the construction of boundaries, I will show what the issue of boundaries involves in game studies by giving some examples of these processes and ask questions about their workings. The examples I will be discussing consist of texts and discussions that I myself have thoroughly enjoyed, and I still find them inspiring for my own work.

The 'othering' of narratology

In 2001 the editorial of the first issue of Gamestudies, the international journal of computer game research (www.gamestudies.org), states: "2001 can be seen as the Year One of *Computer Game Studies* as an emerging, viable, international, academic field." [1]

With the establishment of this game studies journal[3] and the editorial statements Espen Aarseth as an editor tries to claim game studies as a new discipline. Hereby a process of constructing borders between game studies and other disciplines is started up. Establishing an academic journal means deciding which articles and authors get published, thereby drawing a line between who/ what is included in game research and who/ what is excluded. The main question is how this border is being constructed; what are the criteria and rules on which the board of reviewers (more than 30 researchers) participates in the peer-review process?

> "Our primary focus is aesthetic, cultural and communicative aspects of computer games, but any previously unpublished article focused on games and gaming is welcome. Proposed articles should be jargon-free, and should attempt to shed new light on games, rather than simply use games as metaphor or illustration of some other theory or phenomenon."
> http://www.gamestudies.org/about.html

The first Gamestudies issue constructs game studies as an autonomous discipline by focusing on questions such as: Are computer games are different from other media? From which perspective should computer games be studied? Who should study computer games? Computer games are different from other media:

> "It seems clear that these games, especially multiplayer games, combine the aesthetic and the social in a way the old mass media, such as theatre, movies, TV shows and novels never could." [1]

---

[3] Editors: Espen Aarseth (editor-in-chief), Markku Eskelinen, Marie Laure Ryan and Susana Tosca. Editorial assistant: Siobhan Thomas, PR: Torill Mortensen, review editors: Gonzalo Frasca, Jesper Juul and Lisbeth Klastrup. http://www.gamestudies.org/about_team.html

The conclusion of arguing that computer games are different from other media is that games cannot be studied from existing paradigms. Therefore Aarseth states that computer games cannot be analyzed as 'newest self-reinvention of Hollywood' because according to him this means forcing outdated paradigms onto new cultural objects and thereby ignoring the unique aesthetic and social aspects of computer games (Aarseth, 2001) The differences between narratologists and ludologists which is the main theme of this first Gamestudies issue, helps to clarify the distinctiveness of game studies as a new field. Jesper Juul argues :

> "As questions go, this is not a bad one: Do games tell stories? Answering this should tell us both *how* to study games and *who* should study them. The affirmative answer suggests that games are easily studied from within existing paradigms. The negative implies that we must start afresh." [18]

By asking these questions and in giving these answers he constructs the boundaries between a) studying games as stories (narratology) or b) games as games (ludology). The answer to the *who*-question is of course the narratologists or the ludologists. Aarseth makes this issue a political one by first arguing that games cannot be analyzed as a kind of cinema or literature from a narrative perspective and secondly by stating that game studies is being colonized by these fields of study:

> "Games are not a kind of cinema, or literature, but colonising attempts from both these fields have already happened, and no doubt will happen again. And again, until computer game studies emerges as a clearly self-sustained academic field." [1]

By using the negative spatial political metaphor of colonizing a boundary between game studies and other disciplines is consturcted. Aarseth states that games studies should be a new discipline. And let it be clear that I do not only agree with this ambition but I participate actively in it as well for instance by organizing the *Level Up* conference. Aarseth argues that computer games cannot be studied from the existing perspectives and therefore he has to explain why the existing perspectives are not sufficient. According to Aarseth the problem with narratology is that it ignores the essential features of computer games. This is what ludology, 'the discipline that studies game and play activities' [8], tries to capture. Gonzalo Frasca, who first applied the term ludology to computer games, by following Aarseth's arguments in *Cybertext*, states that:

> "Literary theory and narratology have been helpful to understand cybertexts and videogames. [...] However, there is another dimension that has been usually almost ignored when studying this kind of computer software: to analyze them as games." [8]

To do so Frasca turns to an analysis of traditional games. But he notes this research field has some flaws: a) unfortunately it is scattered across different disciplines b) games have less academic status than other objects and c) traditional game research lacks of clear definitions and theories. [6] He thus introduces traditional game theories from Johan Huizinga and Roger Caillois to computer game studies. Frasca argues that ludology helps us to focus on other game elements than narratology, but he calls both perspectives complementary:

> "Our intention is not to replace the narratologic approach, but to complement it. We want to better understand what is the relationship with narrative and videogames; their similarities and differences." [6]

Whereas Frasca leaves room for hybrids (combinations), Aarseth, opts to make the distinction more definitive: games should in the first place be studied as games and in the second place from other perspectives. Markku Eskelinen takes the argument a step further by stating that computer games are remediated games and not remediated narratives:

> "[…] stories are just uninteresting ornaments or gift-wrappings to games, and laying any emphasis on studying these kinds of marketing tools is just a waste of time and energy." [7]

He wants to locate crucial and elementary qualities that set computer games apart from dramatic and narrative situations.

To me it seems that the construction of boundaries between game studies and other disciplines/ fields combine two sets of arguments: content and definition of the object (games are games), institutional (wanting to have a discipline of one's own and resistance to other disciplines taking over). Of course there can be found a number of other related arguments involved such as economical issues.[4] One of them is the difference between game scholars and game designers and between game scholars and gamers.

The 'othering' of game designers and gamers

How are the boundaries between game researchers, game designers and gamers constructed? In his second editorial for Gamestudies Aarseth asked game research the question: *The dungeon and the Ivory Tower: Vive La Difference ou Liaison Dangereuse?* [4] He introduced the *Sim University*, a game wherein your objective is to establish a program in computer games within three years.

> "You can play the role of Humanist, Computer Scientist, Visual Artist/Designer, Social Scientists, Psychologist, or choose a hybrid background. Against you are the Public, the University Board of Directors, the Funding organizations, your department colleagues, Politicians, your computer lab admins, and one or two alien monster races. As allies you have undergraduates and industry designers." [4]

Aarseth tells us this game is not yet to be built but actually exists and is being played right now in several universities. In this editorial Aarseth introduces the computer game industry and the university as two separate worlds: the dungeon (the computer game industry) and the ivory tower (the university). In 2001 they got together to celebrate the beginning of computer game studies as an autonomous discipline of teaching and research. But one year later Aarseth is wondering if these worlds can actually work together, will it be 'vive la difference ou liaison dangereuse?' Aarseth argues that although the industry and the university work together they are intrinsically different:

---

[4] At the Manchester game conference Playing with the Future: developments and directions in computer gaming Jon Dovey brought in another interesting argument to this debate, namely that of generations. He stated that the boundary between narratology and ludology is also a generation boundary. Namely between 'older' researchers who work already within an existing paradigm (such as narratology), while the 'young' game researchers want to develop their own paradigm. As I recall this discussion was being held during the panel Playful Futures: Game Cultures and a "New Media Studies" in which Jon Dovey presented this paper "Intertextual Tie Ups: When Narratology Met Ludology", Seth Giddings presented: "Playing with Theory: The Technological Imaginary and a 'New Media Studies'" and Helen Kennedy presented: "Gender, Technicity and Play: Girl Gamers and Online Methodologies". http://les1.man.ac.uk/cric/gamerz/Default.htm

> "Research is (or should be) long-term, altruistic, slow, critical. The industry is (or should be) profit-oriented, competitive (in the closed sense), cutting-edge, artistic. Perhaps we only have one thing in common: an interest in the nature of games (and on both sides some of us might not even have that)." [4]

Within his *Sim University* game Aarseth is constructing boundaries between the various roles in game research and between the university and the game industry. But he has to acknowledge that sometimes researching and designing games can go together.[5] He mentions the game researcher/designer 'Leonardos':

> "[...] that happen to play one role but could play (and sometimes plays) the other role equally well, but they are a very small subset, and statistically insignificant." [4]

Firstly I would like to argue that Aarseth's 'Leonardos', hybrid game researchers/ game designers are more important than Aarseth suggests. In defence of the hybrid game researcher/ game designer I would like to point out an important example, probably the same Aarseth had in mind: Gonzalo Frasca, who is a game designer but who also developed the concept of ludology and is a game researcher. He, among others, started a debate between narratology and ludology on the basis of which the construction of game studies as an autonomous discipline takes place. Interesting are also some remarks made by game researchers (who are sometimes also designers) in the monthly Ivory Tower column published at the international game designer's website (IDGA). In the Ivory Tower a member of the Digital Games Research Association shares their thoughts, findings and insights on games:

> "Rather than an iconic barrier, this "Ivory Tower" will serve as a bridge among game developers and academic game researchers. The aim is to focus on fundamental game research issues, tying them to concrete examples and game development questions."
> (http://www.igda.org/columns/ivorytower/)

Janet Murray for instance focuses in her column on the considerable group of game researchers/ game designers hybrid:

> "[...] why individual designers and researchers need to seriously engage one another, and why we should nurture organizations like IGDA and DiGRA that are helping to provide the framework for focused dialogues. We are at a crucial time in the development of Game as an academic discipline. At this early stage, practice and theory are pretty close together, with many of those who are doing academic research about games also very active in making them. This model is not just true for the faculty (like myself and many other DiGRA

---

[5] In 2003 he writes in the Ivory Tower column: "One common pitfall, I think, is to regard the two sides [game industry and academia, MC] as monolithic; "the industry" on the one hand as a cash-loaded, anti-intellectual juggernaut with short attention span, and "academe" on the other as a "self- indulgent masturbatory navel-gazing" bunch of ... well, navel-gazers, I suppose. The Academy is really just another industry, with short term production goals (student credits), competition for market share, product launches (new courses) every six months, and if we are very lucky, a bit of creative research at the end of the day, or (more likely) in our spare time." [3]

> members), but also for many of the graduate students. For example, two recent Georgia Tech masters degree graduates, Gonzalo Frasca and Chaim Gingold, are working in the games industry and also theorizing about games as an expressive form."[6] [24]

Secondly I would like to add the game researcher/ gamer to the breed of hybrid Leonardos. Not only Frasca crosses the boundary between game researcher, game designer and gamer[7]. At the *Power Up! Computer games and ideology* symposium in Bristol this summer (2003)[8] I found that a lot of presenters not only claimed the identity of a game researcher but also of a gamer by telling how many hours they spend playing *Buffy the vampire slayer* or *Zelda*, or by sharing their ideas about why they liked a game (without being good at it) from a gamers perspective. In his article *Cultural framing of computer/ video games* the game researcher/ designer Kurt Squire[9] argues that game research hopefully will get more sophisticated when:

> "[...] a generation of game players move into academic positions, perhaps such poorly defined research studies will be challenged and a more rigorous body of research will evolve." [25]

Furthermore he refers to his own gaming experience when explaining the violence debate in game studies:

> "The first generation of gameplayers is now in its 30s. Despite (and perhaps because of) the hundreds of hours I've spent playing war games, I'm pretty much a pacifist. I love Return *to Castle Wolfenstein*, yet I'd never own a gun." [25]

At the courses on computer games I taught over the last year a similar question was often brought to the fore: should a game researcher also be a gamer? The opinion of some students was that when you research games you have to play them; otherwise you can never be an expert on computer games. In her article *Playing with players: potential methodologies for MUDs* Torill Mortensen states the same: in order to analyze MUDs properly the researcher has to play MUDs. Mortensen refers to 'playing with players' as a potential methodology for MUD research:

> "In order to study what the actual player derives from a game, I have to use methods that permit me to go beyond the role-figures and the names used on the net, and interview the players I study. But to study the use of the games, how they are realised into texts or experiences through the activity of playing, I have to study that process from the viewpoint of a player. To study logs from the game as texts afterwards is like studying a description of an event rather than being present at the event." [23]

Last but not least I would like to argue that Jesper Juul is a great example of a hybrid game researcher/

---

[6] Murray also calls forth a number of game designers who are interested in doing game research: "Eric Zimmerman is following in the tradition of Chris Crawford and Brenda Laurel with his forthcoming book on game design. Others – like Hal Barwood, Noah Falstein, Doug Church, Warren Spector, Will Wright – have worked to establish a focused design discussion through conference presentations, articles, and interviews." [24]

[7] On his website Frasca states which games are on his console at the moment. www.ludology.org

[8] 14-15 July 2003. For the program visit: http://www.power-up.org.uk/

[9] Squire works as a research manager at MIT on the Microsoft-MIT funded Games-to-Teach Project.

game designer/ gamer who at the same time constructs and deconstructs the boundaries in game studies. Next to being a game researcher, he also designs games, one of which only can be found his list of computer game writings on his website. Juul calls this game a game about games:

> "(A world's first!) Game about theorising about computer games [...]"
> http://www.jesperjuul.dk/text/index.html
> He states: "As I see it, we need to acknowledge games as something unique. They may in some situations and in certain ways relate to well-described pastimes and forms of expression, but it is time to take them seriously on their own."
> http://www.jesperjuul.dk/gameliberation/

In this game called 'liberation', you are a game theorist (in a spaceship) and your object is to defend games from the imperialism of a number of theories. These theories will attack you in four different levels: narratology, psychology, film theory and pathology. Within this game Juul is strongly involving the player in the process of constructing boundaries between game studies and other disciplines. The player of the game has to defend oneself (game studies) by 'killing' the other theories and disciplines. At the same time the game can be seen as ironic and deconstructing because it is playing around with the debates between game studies and other disciplines. Juul is an example of a kind of hybrid between researcher, designer and gamer: he uses game theory to design, he uses design to develop his academic ideas and he uses play as way to explain and express his ideas.

In my opinion ideas about construction or crossing over (hybridization) of game researchers, game designers and gamers are about the involvement of the researcher in his/her own research. By constructing boundaries between these various positions game researchers decide who can produce academic knowledge on computer games and who cannot.

The in between-ness of hybrids

A similar discussion was raised about within fan culture studies and concerned the hybrid positions of scholar/fan and fan/scholar. It questions the perspective of the objective academic subject, which presupposes that researchers produce objective knowledge. Fan culture researcher Matt Hills calls this transcendental position the *imagined subjectivity* of researchers. He claims researchers may want to have this subject position but that they can never take it in reality. In a similar vein game researchers may strive for such imagined subjectivity whilst creating a strong demarcation between themselves as researchers and the game designer and gamer as 'imagined other'. In the same way the game academic can be seen as the imagined other from the perspective of gamers and game designers. According to Hills the concept of imagined subjectivity helps to construct various boundaries:

> "Such mutual marginalization would suggest that fandom and academia are co-produced as exclusive social and cultural positions. The categorical splitting of fan/ academic here is not simply a philosophical or theoretical error, but it is also produced through the practical logics of self-identified 'fans' and 'academics'." [17]

By analyzing the hybridization between academics and fans, Hills concludes that the imagined subjectivity of academics tends to win from the fan subjectivity:

> "First, academic accounts consistently produce a version of fandom which seems indistinguishable from the interpretive, cognitive and rational power of the 'good' academic (Jenkins 1992;

> McLaughlin 1996). Second, in a petulant revolt aimed at building 'symbolic capital' (i.e. securing a reputation for one's self), academic accounts throw their lot –in with the imagined subjectivity of fandom and seek 'love', 'excessive positioning' (Burt 1998; see also Hills 1999a for an example of this). Or, third, academic accounts toy with the idea of magically abolishing the difference between 'fan' and 'academic' knowledges before finally retreating to the superiority of an academic position (Hunter 2000; Hartley 1996). And finally, recent academic accounts have started, deliberately and purposefully, to confuse fan and academic subjectivities (e.g. Doty, 2000; Brooker 2000; Green, Jenkins and Jenkins 1998). [17]

The same issues can be found within game research. An example would be when a game researcher uses an analysis a gamer made of him/ herself as research material, or when academics claim a gamer-identity either by magically abolishing the difference or by deliberately but uncritically mixing both identities.

Hills concludes that there are not only scholar/fans but also fan/scholars, for instance students who are fans but also analyze and publish work on their fandom:

> "The scholar-fan and the fan-scholar are necessarily liminal in their identities. That is, they exist between and transgress the regulative norms of academic and fan imagined subjectivities. This between-ness is what underpins the defensiveness and anxiety of both groups, since both are marginalized within their respective primary communities." [17]

Therefore Hills suggests:

> "Any and all attempts at hybridings and combining fan and academic identities/ subjectivities must therefore remain sensitive to those institutional contexts which disqualify certain ways of speaking and certain ways of presenting the self." [17]

In my opinion by defining the hybrids scholar/fan and fan/scholar as in-between Hills is also constructing boundaries. He locks these hybrids between the existing categories of academics and fans. I would like to claim that there are more fruitful ways of thinking about the crossing of boundaries and the concept of hybridization. Therefore I would like to take a closer look at STS and especially Thomas Gieryn's ideas of boundary-work, Bruno Latour's conception of the actor-network theory (ANT) and the concept of situated knowledge as coined by Donna Haraway.

SCIENCE AND TECHNOLOGY STUDIES

To get more sense of the context in which Thomas Gieryn, Bruno Latour and Donna Haraway developed their ideas, I will shortly introduce the three main theoretical strands in STS as described by David Hess in his introduction to STS [16]: the philosophy of science, the sociology of science and the sociology of scientific knowledge [16]. Within the philosophy of science I will discuss the ideas of Karl Popper, Thomas Kuhn and feminist epistemologies by Sandra Harding [15] and Donna Haraway [13, 14]. Within the sociology of science I will discuss Thomas Gieryn's theory of boundary-work and within the sociology of scientific knowledge I will discuss the ideas of Bruno Latour.[10]

The philosophy of science

Hess introduces Karl Popper and Thomas Kuhn as two of the most famous philosophical essentialist interpreters of science. Their theories on the demarcation problem became a way to explain and defend the superiority of science in producing truthful claims about the external world. Popper invented the idea of falsification instead of verification to justify theories or generalizations. The ideas of Thomas Kuhn are based on the concept of paradigm. In his opinion paradigmatic consensus can be seen as a demarcation principle. Constructivist studies of science as knowledge and practice raise questions about the ability to separate science from non-science as proposed by Popper and Kuhn. Constructivists subscribe to the idea that scientists do not discover the world but impose a structure on it or in some sense construct a world and demarcation within it. [16] Therefore they do not ask how true knowledge claims about the external world are possible. Instead they research how scientific knowledge is being made or constructed.

Feminist studies of science started out by asking: what is the place of women and gender in science? It analyzes how culturally rooted definitions of science have affected women and gender differences and how boundaries of scientific methodologies can be rethought in a less gender-biased way. Hess calls feminist philosophers like Sandra Harding and Donna Haraway moderate constructivists:

> "[...] they hold that in order to be able "to detect the values and interests that structure scientific institutions, practices and conceptual schemes," and therefore to move to better but nevertheless ultimately fallible and culture-bound accounts, one good strategy is to begin research with the perspectives of marginalized groups." [16]

Harding developed the concepts of 'standpoint theory' and 'strong objectivity'. In standpoint theory Harding claims that knowledge is always constructed by the standpoint the researcher and that standpoints from the margins produce more critical knowledge than center standpoints. Therefore she proposes a form of strong objectivity which involves problematizing not only the 'object of knowledge' (the issue or people to be investigated) but also the 'subject of knowledge' (the position of researchers themselves) [15] Furthermore Harding argues that scientific questions have to be formulated from the marginal perspective. The main problem of standpoint theory is that it can become essentialist when social identity is so closely connected to knowledge production. In effect this means that a researcher who has a center position (white male researcher) can never produce knowledge from a marginal position such as a black woman.

In a reaction to Hardings standpoint theory Haraway introduced the concept of situated knowledge:

> "[...] which analyzes theories, theorists, and sciences by giving them a social address or location. "unmarked knowledges" are those characterized by a presumption of objectivity that usually obfuscates their social embeddedness in white, male or other dominant cultural perspectives." [16]

[10] I could be argued if Haraway's ideas belong to the category of the philosophy of science. This discussion is out of the scope of this article. I will use the categorization as proposed by Hess [16].

The idea of situated knowledge argues against the traditional idea of the researcher as transcendental subject. Rather situated knowledge is a bottom up concept, because it makes visible the 'real' constructed situation the researcher is in. For Haraway situatedness is a way to

> "[...] get at the multiple modes of embedding that are about both place and space in the manner which geographers draw that distinction" [12]

When introducing her concept of situated knowledge Haraway plays with the western metaphor of vision. She claims that situated knowledge doesn't mean *reflection* of a passive object-world but *diffraction* of non-innocent relations between subject and object. Diffraction and reflection are both an optical phenomena, but whereas reflection always mirrors the end result, diffraction captures a dynamic process:

> "[...] when light passes through slits, the light rays that pass through are broken up. And if you have a screen at the on end to register what happens, what you get is a record of the passage of light rays onto the screen. This "record" shows the history of their passage through the slits. So what you get is not a reflection; it's the record of a passage." [12]

At the same time Haraway aims to record historical processes as well as the present situation. Therefore situated knowledge shows how knowledge is actually produced as well as which knowledge is produced. Haraway's argues for the pleasure in confusion of boundaries. She claims a scientist can never tell the whole story but can only create a portal or entry point; academic texts are open-ended instead of closed texts. Furthermore Haraway's claims vision is always situated and embodied, but that this situatedness and embodiedness is not fixed. Between them partial connections can be made, which she describes using the metaphor of the game cat's cradle:

> "Critical theory should rather be like an open-ended collective game with no winners or losers, in which each player constructs his/her own patterns and knots, to pass them onto others, who may transform, unravel or embroider them further." [14]
>
> For the researcher as subject this means: "The knowing self is partial in all it's guises, never finished, whole, simply there and original; it is always constructed and stitched together imperfectly." [14]

As she proposes hybridity as an important critical approach, her own texts are such hybrid products as well. Her texts are not only inter- or transdisciplinary, she also mixes established academic and personal modes of telling her story. She rejects the academic 'style of no style' in which the author remains invisible as if he/she was a transcendental subject instead of someone who produces situated knowledge. Therefore Haraway's concept is not only a way of looking at the world (from the constructed empirical situation) but also a complex productive style of writing in which boundaries get messed up.

The sociology of science

The sociology of science more or less started when the American sociologist Robert Merton made his description of what came to be known as the four 'Mertonian norms' (universalism, communism, disinterestedness and organized skepticism). He saw science as a self-regulating social system with a complex ethos of norms and values. Hess argues that the institutional autonomy of science is by no means guaranteed, and scientists have to actively defend this position. [16] He describes how Thomas Gieryn, a student of Merton, "[...] developed the idea of 'boundary-work' to describe the ways in which scientists establish and police their boundaries and thereby defend their autonomy." [16]

Gieryn introduced four types of boundary-work: 1) monopolization (when scientists claim a unique cultural authority for their theory or method), 2) expansion (when insiders push out the frontiers of their cultural authority into spaces claimed by others), 3) expulsion (when insiders expel not real members from their midst) and 4) protection (when scientists attempt to prevent outside invasion in their resources and privileges. [16] Gieryn makes an important separation between essentialists who *do* boundary-work and constructivists who *watch* it get done. To watch boundary-work being done is to focus on

> "the attribution of selected characteristics to the institution of science (i.e., to its practitioners, methods, stock of knowledge, values and work organization) for purposes of constructing a social boundary that distinguishes some intellectual activity as non-science." [10]
>
> This means that according to Gieryn: "Science is a kind of spatial "marker" for cognitive authority, empty *until* its insides get filled and its borders drawn amidst context-bound negotiations over who and what is "scientific". [10]

He adds that this means that the unique features of science, the qualities that distinguish it from other knowledge-producing activities, are to be found not in scientific practices and texts but in their representations. This does not mean that once boundary-work is being done we have an everlasting map of a specific scientific practice. Boundary-work is a repeating process because

> "[...] people have many reasons to open up the black box of an "established" cartographic representation of science – to seize another's cognitive authority, restrict it, protect it, expand it, or enforce it." [10]

The sociology of scientific knowledge

The sociology of scientific knowledge focuses on the content of science. According to Hess content refers to:

> "[...] theories, methods, design choices, and other technical aspects of science and technology." [16]

This idea contrasts with more discursive and institutional elements that are being studied by the philosophy and sociology of science. Latour describes this as the constructivist process of 'opening the black box'. Latour and Callon coined the actor-network theory (ANT), which states that science and technology is constructed along with the social relations and structures in the wider society. [16]

> "As formulated in the actor-network theory, a principle of extended symmetry is the basis for treating social agents, objects, and texts as "entities" (actants –MC) on the same level in a heterogeneous, sociotechnical network." [16]

This idea overlaps with Haraways idea of hybrids and the cat's cradle. Unfortunately the ANT is not very good at explaining why some actors are excluded from the game and why the playing field is not level. [16] Hess's attempt to draw the above theories together in his concept of critical and cultural studies of science and technology is therefore very interesting, especially when watching boundary-work being done in game studies. Hess argues that social studies of scientific knowledge need to move to a direction that grants a more prominent role to power and culture: power as it is embedded in historical structures of class, race, gender and so forth, and culture as a contested system of meanings for actors. [16]

If we want to watch boundaries as they are being constructed in game studies and if we want to take the various hybrid positions as methodological points of departure, I would argue that we also have to bring together the concepts of Haraway, Gieryn and Latour. Latour's and Callons ANT helps us to understand the various relations in the knowledge network of actants. Haraway's concept of situated knowledge indeed helps to explain why some actors are excluded from the game and why the playing field is not level. She claims that a researcher can never be a transcendental subject 'out there overlooking the world'. For Haraway the knowing subject is always situated and embodied *inside* culture – inside the actor-network. Gieryn's concept of boundary-work helps to watch how the various boundaries in the knowledge network are being constructed. Furthermore Haraway's ideas help us to realize that constructed boundaries between the different positions: science/non-science, game studies/ other disciplines, game researcher/ gamer/ game designer are never fixed. The borders are shifting, while various hybrids come in to being.

CONCLUSIONS

My goal is constructing a theoretical framework for my research from which I can analyze and deconstruct how game researchers are *doing* game research. This means I take a look at myself as well: I am also part of this process. Since game studies is establishing itself as autonomous discipline, I want to be aware of the fact that in doing so we construct various boundaries which are not neutral or static. Game researchers and our discussions are actants and knowledges that are situated within cultural, academic, political and economical power structures.

In this paper I have drawn a picture of the various ways in which boundaries are being constructed in game studies and the workings of 'othering'. Hereby I largely focused on two different but intertwined boundaries that are currently being constructed in game studies. The first kind of boundary-work I discerned is the construction of the boundaries between game studies and other academic disciplines and methodologies. The second kind of boundary-work is the construction of the boundaries between game researchers, game designers and their industry and gamers. We construct these boundaries on the different levels of content, researcher and institution.

When looking at the construction of the first boundary through the perspective of Latour's and Callon's ANT we have to see the empirical reality of everyone and everything involved in game studies. From the ANT perspective one can distinguish actors and actants active in the construction of game studies: academics from various disciplines, game designers, gamers, consoles, universities, the DiGRA, Gamestudies journal etcetera. When taking a look trough the perspective of Haraway's concept of situated knowledge, all these researchers are part of game studies, but ludologists construct a boundary between narratology and ludology for instance because they want to construct another boundary namely that between game studies and other disciplines. I would state that from Haraway's perspective ludology and narratology are merely other perspectives (situated knowledges) on the same object whilst not being acknowledged as such. Each of these perspectives produces a different kind of knowledge, which means that the 'clash between game and narrative'[11] is merely a political clash to construct a new academic discipline.

Secondly I have proposed to take a closer look at the construction of a second boundary, namely the lines that are being drawn between game researchers, game designers and gamers, through the complementary perspectives of Latour and Haraway. This also involves looking at the empirical reality of game research and noting that game researchers, game designers and gamers are all actors in the same network of game culture and game research; which means that every researcher is always involved in his/her own object of research. When taking a close look to the situatedness of game researchers we will see that most of them are hybrids partly involved in academic practices and other sides of game culture. Various arguments explain why such a hybrid position is interesting, necessary and shouldn't be neglected. Henry Giroux claims that cultural studies researcher should participate in cultural production themselves:

> "Doing cultural studies means being active as a cultural producer and doing your own theorizing about the culture around you." [11]

Nick Couldry claims in *Inside culture*, a study on the methodology of cultural studies:

> "How we speak about others and how we speak personally must be consistent with each other, if our theory is to be fully accountable. We cannot oversimplify the cultural experiences of others, without caricaturing our own." [6]

> "Arguing for the importance of the 'personal' perspective, then, does not mean affirming a simple universal subject; it is rather a question of insisting that particular selves – with al their uncertainties and contradictions – should be recognized, listened to and accounted for in the types of claim we make about cultures and cultural experience." [6]

I my opinion the personal position of the researcher is fascinating and important and should be made visible in the conducted research. It is interesting to see how your own knowledge is situated across borders that you are simultaneously constructing. This helps to see how boundaries are being constructed and makes you aware of the power structures that are being involved when constructing an autonomous discipline: who decides how and by who games are best being studied and can the discipline legitimately officially extent itself over the borders of the University? The boundary-work I have watched in this paper were mere examples of boundary constructions in game studies. As for myself my situatedness and hybridity lies partly in the facts that as a researcher working on Fantasy Role Playing Games and the construction of space and identity, I'm living on the edge between different worlds that are crucial for conducting my research: the academia, the computer games scene and the fantasy scene. While my research continues I'll probably stay fascinated by the ways in which the various boundaries are being constructed.

---

[11] The title of Juul's master thesis (2000).

The game researcher, as well as any other academic, is always part of the reality he or she studies. Therefore it is important to think from this empirical reality instead of from the essentialist constructions of disciplines or academic identities. In my opinion it is obvious that game studies is more than a new discipline in the traditional university structure. As Aarseth already noted game studies is made up from Humanists, Computer Scientists, Visual Artist/ Designers, Social Scientists, Psychologists, the Public, the University Board of Directors, the Funding organizations, department colleagues, Politicians, computer lab admins, undergraduates and industry designers [4]. I would like to add to this equation the various hybrids that exist between or beyond the above. Especially I would like to add the neglected hybrids between game researchers, game designers and gamers. The ANT and Haraway's concept of situated knowledge help us to think methodologically from these hybrids instead of making them invisible or, worse, abandoning this interesting breed of researchers.

ACKNOWLEDGMENTS

Thank you! Supervisors: Prof. Dr. R. Braidotti and Dr. M.L. Waaldijk, colleagues: Dr. J.F.F. Raessens, Dr. S. Lammes, H. Marckmann, I. van der Tuin and the students of our BA and MA courses in computer games for keeping me focused.

REFERENCES

1. Aarseth, E., Computer Game Studies, Year One. in: *Gamestudies*, http://www.gamestudies.org/0101/editorial.html, 2001.

2. Aarseth, E., *Cybertext: Perspectives on Ergodic Literature*. Johns Hopkins University Press, 1997.

3. Aarseth, E. Do we need a commom language? in: The ivory tower, http://www.igda.org/columns/ivorytower/ivory_Jul03.php, july 2003.

4. Aarseth, E., The Dungeon and the Ivory Tower: Vive La Difference ou Liaison Dangereuse? in: *Gamestudies*, http://www.gamestudies.org/0102/editorial.html, 2002.

5. Callon, M., J. Law and A. Rip ed, *Mapping the dynamics of science and technology : sociology of science in the real world.* MacMillan, 1986.

6. Couldry, N., *Inside Culture : Re-imagining the Method of Cultural Studies.* Sage, 2000.

7. Eskelinen, M., The gaming situation. in: *Gamestudies*, http://www.gamestudies.org/0101/eskelinen/, 2001.

8. Frasca, G., Ludology meets narratology: Similitude and differences between (video)games and narrative. Finnish version originally published in Parnasso#3, Helsinki, 1999. http://www.jacaranda.org/frasca/ludology.htm

9. Gieryn, T.F., *Cultural Boundaries of Science: Credibility on the Line*. University of Chicago Press, 1999.

10. Gieryn, T.F., Boundaries of science. in: Jasanoff, S. ed., *Handbook of Science and Technology Studies*. Sage, 2002.

11. Giroux, H., *Impure Acts : The Practical Politics of Cultural Studies*. Routledge, 2000.

12. Goodeve, T., *How like a leaf: an interview with Donna Haraway*. Routledge, 1999.

13. Haraway, D., *Primate Visions: Gender, Race and Nature in the World of Modern Science*. Routledge, 1989.

14. Haraway, D., *Simians, Cyborgs, and Women: The Reinvention of Nature*. Routledge, 1991.

15. Harding, S., *The Science Question in Feminism*. Cornell Univ Press, 1986.

16. Hess, D.J., *Science Studies: An Advanced Introduction*. New York University Press, 1997.

17. Hills, M., *Fan cultures*. Routledge, 2002.

18. Juul, J., Games telling stories? –A brief note on games and narratives. in: *Gamestudies*, http://www.gamestudies.org/0101/juul-gts/, 2001.

19. Latour, B., *Science in Action: How to Follow Scientists and Engineers Through Society*. Harvard University Press, 1988.

20. Latour, B., *We Have Never Been Modern*. Harvard University Press, 1993.

21. Latour, B. and Steve Woolgar, *Laboratory Life*. Princeton University Press, 1986.

22. Mäyrä, F., Pac-man and the ivory tower. in: *The Ivory tower*, http://www.igda.org/columns/ivorytower/ivory_Mar03.php, march 2003.

23. Mortensen, T., Playing with players: potential methodologies for MUDs. in: *Gamestudies*, http://www.gamestudies.org/0102/mortensen/, 2002.

24. Murray, J.H., The more we talk, the smarter we get: the conversation between game designers and researchers. in: *The Ivory Tower*, http://www.igda.org/columns/ivorytower/ivory_Jun03.php, june 2003.

25. Squire, K., Cultural framing of computer/ video games. in: *Gamestudies*, http://www.gamestudies.org/0102/squire/, 2002.