Wargames – Hackers are gaming

Male identity construction and playful approaches to computers

With this text[1] some aspects of the construction of a gendered identity on the example of the figure „the hacker“ shall be addressed. My interest focuses on the hacker as an identity construction that is integrated in a technology centered, genderized context, where the hackers interact playfully with technology.

At the very beginning I would like to make some comments to prospectively avoid misunderstandings. The following debate about a male dominated youth cultures was from the very beginning on made possible by reading and discussing feminist empiric research. Although the argument is centered on men, it shouldn't be understood as ignoring women who are active in the field of hacking. It is rather grounded in the interest to develop a dedicated critique on male stereotypes, based on the feminist critique that emerged over the past years. The problem still is that the ongoing mentioning of man could re-produce „the men/ male as *the norm*“ again and again. It is problematic as well to use the dichotomy of male/female or men/ women, which makes it easier to discuss the whole thing but puts it at the risk of re-codifying a binary gender construction.

Wargames – the Movie

When the movie *Wargames* by John Badham entered cinema in 1983 it wasn't only a financial success. Rather this movie initiated a whole new generation of hackers. Reportedly the sales of modems and acoustic couples rose dramatically in the US after the movies' premiere. If this belongs to hacker folklore could not be verified – alone the existence of such an assertion establishes a basic idea of Wargames' importance in the 1980s. Wargames was the first movie about hackers which not just describes them positively (although a little moralizing), but explicitly shows and explains several hacking techniques, such as telephone phreaking[2] or the computerized dialing of whole telephone number ranges to find undocumented telephone lines, later to be termed *war-dialing*.
It was not alone Wargames that was crucial for the then developing social climate. The movie was rather embedded in a constant flow of publications and public discussion about computers and hacking. Among many others I'd like to high-lighten the 1982 movie „Tron“ which became a cult movie but never gained Wargames' popularity. Another publication, that is worth to mention is Steven Levy's 1984 book with the programmatic title „Hackers“.

Hackers or approaches that could be called *hacking* existed already earlier than that, but it took until the 1980s that they gained popularity through mass media. Wargames played an important role in this process.

The movie massively features all stereotypes that can be attached to the image of the hacker: They act on the „good side“, although sometimes a little illegally or dangerously. They are male, and as such enthusiasts in using technology and they are somewhere at the world's outer edge and at its center at the same time. They like to play and hacking is part of this game. They sometimes even got girlfriends and so on and so on. With a 20 years distance the

[1] The text is based on a lecture. In the original lecture movie sequences from Wargames were shown. Here they appear as excerpts from the movie script and screenshots.
[2] using a phone to talk without paying

constructiveness of this identity attribution is obvious, but within its time the movie was able to deploy an impact, which should not be underestimated, and which has sustainably shaped the computer oriented youth cultures of gamers and hackers.

First a short outline of the movie: After it has been asserted during a military simulation at NORAD, the aerial defense center of the USA, that 22% of those men, who were directly responsible to start the long distance missiles with atomic warheads (ICBMs), would doubt that their action could make any sense, the launch command gets transferred to the central computer called WOPR. The human material, vulnerable to mistakes, gets sorted out. WOPR is depicted as artificial intelligence that plays-through all kinds of atomic war scenarios, based on the steady stream of incoming data.
David Lightman penetrates the system by chance through a back-door, left by professor Faulken, the inventor of WOPR, and seems to find exactly what he was originally looking for: New and interesting games, from „chess“ to „atomic war“. David together with his girlfriend Jennifer decides, to step in on the Russian side and start an atomic first strike against Seattle and San Francisco. What looks for them like a simulation, gets reality through the cold war logic: The computer continues the game self-contained and thus causes the real thread of atomic destruction. To finally stop WOPR David forces the computer to play tic-tac-toe against itself. The computer finally „finds“, that there would be no winner in this game and now proves, if there could be any winner in the game „thermonuclear war“. In the end the artificial intelligence WOPR sums the situation up: „A strange Game. The only winning move is, not to play.“

At this point it could make sense to have a first glance into the movie. Professor Paul Richter introduces the WOPR to a military agency. One might consider the erotic relationship to technology; the WOPR gets petted several times.

Screenshot 1: Prof. Richter introduces the WOPR

Paul Richter: The WOPR spends all its time thinking about World War III. 24 hours a day, 365 days a year, it plays an endless series of war games using all available information on the state of the world. The WOPR has already fought World War III, as a game, time and time again. It estimates Soviet responses to our responses to their responses, and so on. Estimates damage. Counts the dead. Then it looks for ways to improve its score…

Screenshot 2: Gently petting the WOPR

McKittrick: The point is that the key decisions of every option have already been made by the WOPR.

Agent 1: So all this trillion-dollar hardware is really at the mercy of those men with the little brass keys?

McKittrick: That's exactly right. Whose only problem is that they're human beings. But in 30 days we could put in electronic relays. Get the men out of the loop.

Screenshot 3: Visual output generated by WOPR at the NORAD central control rooms

Computer as Medium and Machine

What was demonstrated in this scene appears as the computer as a machine. A big black box with blinking lights, which industrially processes huge amounts of data. This image also leads to one of the origins of the hacker culture – the computers' transition from a data processing machine rooted in fordism[3] to an interactive, networked medium.

Heidi Schelhowe[4], a computer scientist, points out, that computers can be experienced as medium or as machine, whereas different uses are carried by different software concepts. The software functionality and the user interface can shift the emphasis either slightly towards the machine or more towards the medium. There are software concepts that enforce the *rationalization of work* as a major priority and thus enhance the machine-aspect of the computer. Other software concepts open *a possibility of intervention for the user*, through allowing a medium oriented, interactive approach.

The computer as a medium places emphasis on the aspects of communication, as well as the interdependencies, which exist among certain things (e.g. Hypertext/ WikiWikiWeb). So occurrences and information are not just getting formalized, but their embedding into a context gets visible.

While the WOPRs' external appearance is still rooted in its machine-like origin, the inner „values" refer to the computer as a medium: It can be used interactively and even produces (at least in the movies fiction) complex information displays.[5] Interactive usability basically means, that the user can directly affect the currently running software and instantly gets a visual reaction on his/her intervention. What nowadays seems self-evident for us, were future dreams until the end of the 1960s. Until the development of the first so called mini-computers programs were punched into paper tape, given to the system operator and after a while the user got a memory print out, which had to be interpreted as whether successful (which means it contained a result) or not (it contained the error message and the location, where the program stopped working). This time costly delay was anything else but interactive.

Thanks to the appearance of the still cabinet-sized so-called mini-computer, for instance the DEC PDP 10, direct access and the possibility of a trial-and-error approach became possible, enabling a playful hands-on approach to computer programming. This led to the growth of hacker cultures at those universities that could effort mini-computers, e.g. at the MIT, the Stanford University, or the Carnegie-Mellon University. The dimension of gender in the now possible playful use of computing technology is pointed out by media theoretician Barbara Becker: „With the computer as medium a playful interaction with technology catches on. Technology loses the character of exclusive target-orientation and gains much more the character of the undetermined. When using computers, men rather show the required playful acquaintance with technology, while women use computers more target-oriented."[6] At this point it becomes obvious that the term hacker is not necessarily connected to the illegal use of

---

[3] see Heintz, Bettina, 1993: Die Herrschaft der Regel. Zur Grundlagengeschichte des Computers, Frankfurt am Main, Campus

[4] Schelhowe, Heidi 1997: Das Medium aus der Maschine. Ein Beitrag zur Auffassung vom Computer in der Informatik, Frankfurt: Campus 1997

[5] The concept of the multi media computer was popularized through the introduction of the Apple MacIntosh in 1984, just one year after the first screenings of the movie. A description of the impact that the introduction of the Apple MacIntosh made, can be found at Ceruzzi 1998: A History of modern computing, MIT Press, 264ff.,273-376

[6] Becker, Barbara (1996) in Rizvi, Silvia/Klaeren, Herbert (Eds.) 1999: Informatik und Geschlechterdifferenz, Uni Tübingen, p. 47

computers, moreover it belongs to a paradigm change in the use and the access hierarchies of computers. Not until the mini-computer read/write permissions could be experienced by the users as limitations that directly affected them, as there was originally the system operator as an intermediate entity. Just since the emergence of the mini-computer users got able to deal interactively with the limitations, posed on them through read/ write permissions.

As an illustration we see the following excerpt from the movie, where David and Jenny visit the computer freaks Jim and Malvin. Film location was the Microsoft Campus in Redmond, California, spreading its very own charm. On the background of my recent remarks this scene – despite the obvious slapstick – is significant for the exclusion mechanisms, that women were confronted with through the early the hacker community.

[Jennifer and David enter the room.]

David: Can you wait here?

Jennifer: Why?

David: Because these guys can get a little nervous.

Jennifer: OK

[David walks towards Malvins and Jims place, Jennifer waits at the entrance.]

David: Hi Jim.

Jim: Oh, Lightman.

Malvin: Hi Lightman.

David [hands over a sheet of paper to Jim]: I want you to have a look at this.

Screenshot 4: Malvin, Jim and David.

[Malvin comes closer and grabs the paper out of Jims hands before he even can have a look on it.]

Malvin: Hey what's that.

David: I wanted Jim to see that.

Malvin: Wow! Where'd you get this?

David: Protovision. I wanted to see the program for their new games.

[Jim looks angrily at Malvin]

Screenshot 5: Malvin, Jim, David and in the background Jennifer.

Jim: Can I have this back?

Malvin: I'm not through yet.

[Jim tries to grab the paper back from Malvin, his face turning red.]

Jim: Remember you told me to tell you when you were acting rudely and insensitively?

[Malvin nods.]

Jim: You are doing it right now.

[Jim gets the paper back and starts to read]

Jim: "Theatrewide biotoxic and chemical warfare." – This didn't come from Protovision.

Malvin: Ask him where it did come from, Jim! Looks military to me. Definitely. Probably classified, too.

David: If it's military, why does it have games like checkers and backgammon?

Jim: Those games teach you the basic strategy.

David: Jim, how do I get into that system? I want to play those games.

Malvin: That system probably contains the new data encryption algorithm. You'll never get in.

David: No system is totally secure. I bet you, Jim could get in.

Malvin: I bet you he couldn't!

Jim: You won't get through frontline security. But you might look for a back door.

Malvin [pointing to Jennifer in the background]: I can't believe it, Jim. That girl is listening and you talk about back doors!

[They continue to discuss backdoors and give David an advice, how the backdoor could be hacked.]

I'd like to add a cite from the brochure „Computer Science and Gender Difference", edited by Silvia Rizvi and Herbert Klaeren: „The students culture, being influenced strongly by the image of the hacker – even although hackers are not primarily to be met in computer science – seems to even consolidate the overestimation of programming in the beginning study. [...] It seems that self-consciousness and the ability to assert oneself has just to be explicitly and often exhaustingly adopted by female students, while it seems to be more naturally given to male students through their participation in computer culture. Male students adhere with a

similar implicitness on the point of view, that the technological aspect constitutes the constitutive core of computer science.“ [7]

Additionally to the emerging academic hacker culture in the 1960s, from the mid-1970s on the likewise male dominated youth culture of home computer users joins in. Technological precondition was the construction of the first integrated circuits by Intel in 1971, marketed as the Intel 4004 chip. This lead to a tremendous miniaturization compared with the previous transistor-based models, as well as to a tremendous cost reduction. The Altair 8008, an Intel chip based home computer, was produced by the MITS Corporation from 1975 on and could was available as a construction kit to be soldered by oneself. Radio amateurs and electronic hobbyists who read the periodicals that existed for this community embraced this concept and ordered the construction kits from their periodicals. After 1977 the Altair was even outnumbered by a clone which was available as a kit for 630$ or readily assembled for 900$. This home computer, the IMSAI 8080, gets also used in David's hackers den. In the following movie excerpt David tries to impress Jennifer through changing her bad biology mark in the remote connected school computer. He had found the password before in the principals' office, when he was called to there for bad behavior in class.

[Jennifer and David enter his room. Jennifer picks a book from the bookshelf, David sits down at his desk, picks a floppy disk and inserts it into the IMSAI8080 computer.]

Jennifer: You are really into computers, huh?

David: Yeah.

Jennifer: What are you doing?

David: I'm dialing into the schools computer. They change the password every couple of weeks, but I know where they write it.

[Jennifer gazes from far, then comes closer.]

Screenshot 6: Jennifer watching David accessing the schools' computer.

[7] Rizvi/Klaeren 1999: Informatik und Geschlechterdifferenz, Uni Tübingen, p.35

[David enters commands to list his grades.]

Jennifer: Are those your grades?

David: Yeah. … I don't think that I deserved an F, don't I?

[David changes his biology grade from F to C]

Jennifer: You can't do that!

David: Already done. … Do you have a middle initial?

Jennifer: K. – Katherine.

[David enters her name to list her grades.]

Jennifer: Those are my grades.

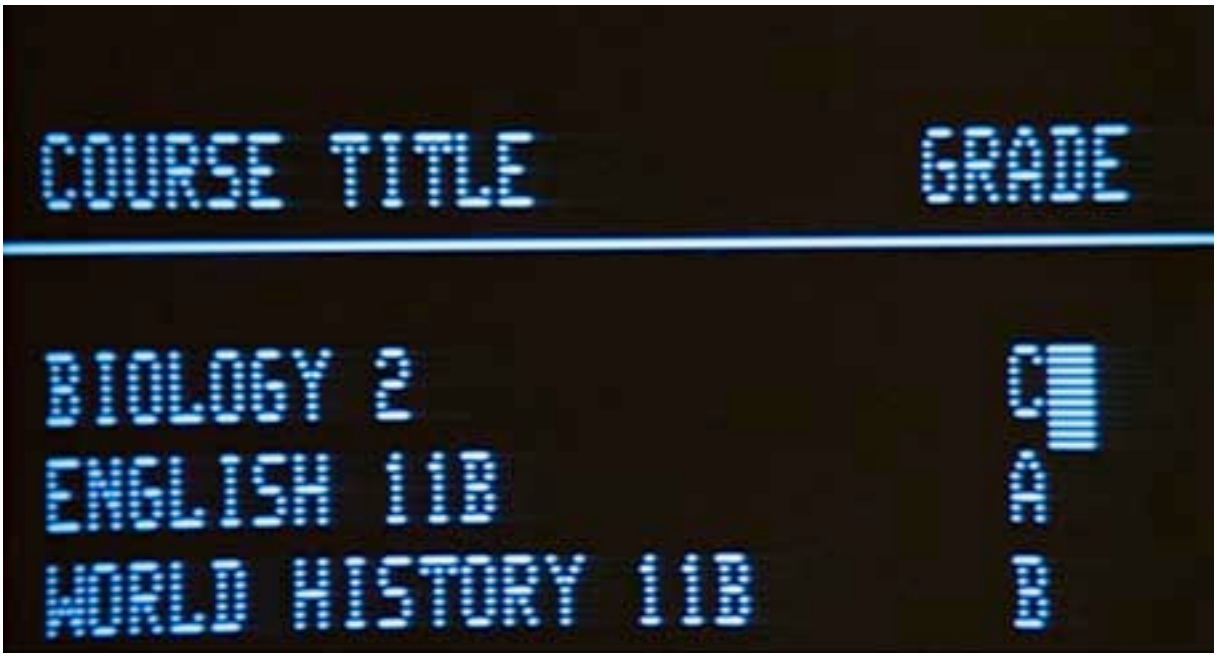
David: How can anybody get a D in home economics?

Jennifer: That's none of your business. Can you erase this?

David: No. It's to late.

[David enters something.]

Jennifer: What's that?



Screenshot 7: Screen output of the IMSAI8080. Changing of the F grade to a C.

David: I'm changing your biology grade.

Jennifer: No. You'll get me in trouble.

David: Nobody can find out. You got a C! Now you won't go to summer school.

Jennifer: [emphatic] Change it back.

David: Why? They can't…

Jennifer: [angry] I said change it back.

David: OK. OK.

[David changes the grade back to F. Jennifer leaves in an angry mood. David changes her grade back to C after she had left.]

The home computer and later the networked personal-computer, marks a break, a caesura in the technological progress. The media theoretian Claus Pias describes it as follows: „With the digital computer emerges in a way a secret or a ‚medial unconscious', something that, since it is unobservable, maybe ‚truly' happens and that could be brought to light, a fog of surfaces and abstraction layers, which possibly could be thrown apart. Digital computers open a space of suspicion."[8] This cite reveals why the culture of hacking inevitably gets thrown into power discourses and conspiracy theories. The home computer as a digital computer which is easily accessible at home is an important contribution to this. Male dominated hacker and gamer cultures are not just continuous-flow heaters for future system administrators, they often scratch the twilight zone between legality and illegality.

Between good and bad

There are several typings of hackers.
The „good hackers" are solely interested in the technical backgrounds, their leitmotiv is: „Information wants to be free". The already mentioned Steven Levy had formulated the so called „hacker ethic" in his book *Hackers*, which reportedly the GPL-pope Richard Stallman has promoted him. The „hacker ethic" includes the following requirements:

1. Free access to technology
2. Free access to information
3. Hierarchy free organization, i.e. hackers should be evaluated according to the quality of their hacks, not titles, age, sex, race or position
4. To do meaningful, non-destructive things
5. Computers are able to make things easier.

Another protagonist of the hacker ethic is Eric Steven Raymond, who says: „A hacker is somebody who creates, a cracker someone who destroys." Raymond has become well known, as the custodian of the *Hackers Dictionary*, a collection of hacker slang and folklore that gives a deep insight into the culture of hacking. There a hacker is described as a person, who: „enjoys exploring the details of programmable systems and how to stretch their capabilities, as opposed to most users, who prefer to learn only the minimum necessary." It's all about technical interest, that goes beyond the usual knowledge and isn't just oriented towards archiving results, it is a playful, technology centered approach. The hierarchisation over the DAUs, the „Dümmster Anzunehmender User" (abbr. for: „Most Stupid Assumable User") is fully intended and not coincidental.[9] In an interview for the e-zine *Frontline* an anonym hacker/ cracker answers to the question, why computers can become an obsession for all young guys coherently: „Well, it's the power at your fingertips."[10] As an additional footnote the comment may be permitted, that Eric Steven Raymond not just promotes the freedom of information, but in the same logic of a libertarian citizen he promotes the freedom to wear weapons as well.[11]

As honorable this hacker ethic is, the reality shows, that it isn't that bright. The good hacker-ego is in continuous danger through the bad hacker-ego which was placed into the following

---

[8] Pias, Claus: Der Hacker, http://www.xcult.ch/texte/pias/hacker.html, downloaded 21.May 2003
[9] This term is for instance used frequently at meetings of the CCC, the Chaos Computer Club a hacker and computerphile organization in Germany
[10] anon., Frontline, http://www.pbs.org/wgbh/pages/frontline/shows/hackers/interviews/anon.html
[11] TLC: Hackers Hall of Fame, http://tlc.discovery.com/convergence/hackers/bio/bio_13.html

typings: The cracker is described as a hacker who penetrates alien systems to destroy and not – how the good hacker would do it – to „free information“. Suspicious as well are those figures who illegally exchange software, remove copy protection or circulate viruses. While they still get a certain amount of respect from the community for their technical expertise, the so called script kiddies, who use pre-produced software scripts to cause damage without exactly knowing, how it really works, are understood to move along the bottom level of hacker ethic. A nowadays extinct hack is phone-phreaking, through which in the days of analogue (and not digital) phone networks one could call free of charge. The movie depicts how it works.

Screenshot 8: David opens the mouthpiece of a public phone.

Screenshot 9: He looks for a piece of metal and finds a small part of a tin can.

Screenshot 10: David closes the circuit and gets a dial tone.

In this scene David is in a squeeze. The FBI has traced his break-in into the WOPR and he is a soviet spy suspect. How can the poor guy prove that he is un-guilty, that he "originally" is on the good side?

This is a problem that nearly paradigmatically stands for the hackers' oscillating between "good" and "bad". Within the identity construction *hacker* the separation of the "bad" hacker-ego becomes necessary to enforce the hacker ethic through the "good" hacker-ego, because Hacker are in the possession of a special technological competence, which depending on the actual context strikes out into one of both directions. The context becomes even more important, as the computer turns out to be an "amoral" machine that potentially always can be used in another way than originally intended. This frame gets restricted, as Claus Pias mentions, by juristic or economic conditions, it gets encoded by normality and established by institutions. The problem that follows is that the knowledge, which was "freed", can instantly be rededicated into *Herrschaftswissen* (knowledge for the sake of action or control), through closing the existing flaws on a juridical level.

It isn't just a question of growing up that the transition from penetrating alien systems to becoming the protector of those systems occurs. If one describes, as Claus Pias does, hacking as game, then the hackers on the one side and the system administrators on the other side become two competing game parties: "The hacker of the previous generation therefore becomes [as a system administrator – F.H.] the toy producer and pedagogue for the following generation, providing languages and equipment, […] to be used for this game."[12]

[12] Pias, Claus: Der Hacker, http://www.xcult.ch/texte/pias/hacker.html, downloaded 21.May 2003

On the sociology of gaming

I think it makes sense to return the hacker David Lightman again. In a longer excerpt from the movie, the intersections of hacking, gaming and gender stereotypes gets apparent. In the movie, we see a desperate David, who still hasn't cracked the password for the backdoor he had found before – and this although all the effort in searching libraries and archives for information on professor Falken, WOPRs' creator. He finally finds out the password when Jennifer reads an article from the newspaper that mentions the name of Falkens son Joshua. He starts to play the game thermonuclear war.

Screenshot 11: Screen output of the IMSAI8080 - David chooses the Russian side in "Thermonuclear War".

Jennifer [points with her finger on the screen]: What is all that stuff?

David [reads from the screen]: Trajectory headings for multiple-impact re-entry vehicles.

Jennifer: What does that mean?

David: I don't know. But it's great!

Jennifer: Are these bombs? Which are the bombs?

David: Submarines.

Jennifer: Blow them up!

David: Blow them.

Jennifer: What's a trajectory heading?

David: I've no idea.

Screenshot 12: "What is a trajectory heading?" - "I have no idea".

Screenshot 13: Jennifer and David.

The trying, unplanned, playful moment of hacking becomes apparent in this scene, when Jennifer asks David, what he is doing there and he answers, that he doesn't know exactly what he does, but it is just amazing. This refers to Barbara Beckers' empirical analysis after which playful approaches to gaming can be more often observed with men than with women.[13] Before women – with an overall more planning approach – have touched the keyboard, men already have homily taken the place following the motto „Let's see what happens."

[13] Becker, Barbara (1996) in: Rizvi, Silvia/Klaeren, Herbert (Hg) 1999: Informatik und Geschlechterdifferenz, Uni Tübingen, p. 47

Just along the way the movie demonstrates, although with a moralizing undertone, which real consequences can result from the originally just symbolic action at the computer. If David would have ratiocinated the potential results of his exploration of unknown territory, he might have chosen another less dangerous game.

To further round out the mosaic, some more thoughts on the sociology of games shall be addressed. Therefore let's detach the discussion from the *computer game* for a while, and approach it from a more general perspective of the *sociology of gaming*.
The sociologists Werner Haegele describes the game according to Buytendijk and Piaget as a set of rules, as a free, collaborative cooperation among miscellaneous individuals, who agree about the voluntariness of their actions, and who see the game rules as a free agreement. Communication and cooperation play a decisive role in it as the goal of the game – although the potentiality of a personal victory – is not in the instrumental-factual success but in the affective-emotional satisfaction of the player. Yet, a goal is always given. This affective-emotional satisfaction distinguishes game from work, which is oriented on instrumental-factual operations.
A basic structuring principle of the game is the circular reaction, because the agents do not seek the finishing of the game but rather to „re-experience" the feelings of luck associated with the game. This circular reaction gets realized in the game through a continuous change of tension and relaxation, whereas surprise and luck can become critical factors for the game. Restrained excitement leads the gamer in the best case to forget the surrounding space and the real-time – an effect, which is well known from computer gaming and hacking (in the meaning of playful programming) as well. Haegele says, that in the history of gaming a tendency could be observed over the last decades, where the border between game and work more and more gets blurry. Hacking as a programming style is a talkative witness of this ongoing change.

Open Source as a gigantic continuous-game

Open Source was a trend over the past years that the „good" hacker could identify with. The Open Source community consciously uses the rhetoric of the hacker ethic, which is *free access to information, voluntary cooperation, self-realization* and so on. It is not just a coincidence, that the rhetoric which has developed into an ideology of the open source community, and which contributes with its technology centering significantly to the modernized identity construction „hacker", heavily resembles the main features of games as outlined above. What has started playfully in the youth sub-cultures of the 1980's has manifested itself from the mid-1990's on as the open source community in the collaborative production of Linux, an UNIX-resembling operation system. The overlapping of the above outlined sociology of game and the hacker ethics by Stallman and Levy are more than just a coincidence as well. They are grounded in the logic of the hackers' ego-splitting into „good" and „bad" and represent the „good" aspect.

In this setting David Lightman in Wargames in hindsight becomes a positive identification figure, a role model for the good hacker. That the (standard-)hacker is male and as identification figure transports an androcentric identity-construction is another effect of Wargames. I haven't heard yet of movies, which constructed women as hackers, alone the artist Cornelia Sollfrank has featured women hackers in an artistic documentary. A women as role model is featured in the less known movie „Conceiving Ada" by Lynn Hershman (1993–97) that attempts to reconstruct the live of the mathematician Ada Lovelace. A few movies feature women as positive identification figures of the computer youth culture, as for instance Lara

Croft in „Tomb Raider“[14] or Kate Archer in „No one lives forever“. This amounts little against the male identification figures that attract boys – it is not by chance that movies like „Tron“, „PI“, „23“, or the cyberpunk novels of William Gibson belong to the classical identity construction of a male dominated hacker culture.

Playful approaches

In the open source community, which identifies itself strongly with hacking, accordingly participate only 2% women (FLOSS report 2002 / Europe). This is the disillusioning reality of a hacker ethic, which likes to claim they would not orient on titles, age, sex, race or position but rather, as stated by Stallman and Levy, on the quality of a hack. Otiose to mention that the major part of open source programmers are white male, who belong either as students or as programmers in their main occupation (66%) to the social privileged classes.[15]
The „blindness“ regarding the low percentage of women, that none of the „good“ hackers bothers to mention at all, may be explained with the following cite from the brochure „Computer Science and Gender Difference“ by Silvia Rizvi and Herbert Klaeren: „Through the assumption, that technology would be neutral, the problem is seen as a problem of women and they get demanded, that they should adjust to technology. The male gets addressed as the norm, and woman should adjust to this norm.“[16] Reacting to the lecture, this text is based on, some men were arguing that the access to technology and information would be free and therefore women were so to say self responsible for their absence. This claim was partially intensely defended, whereas the same energy also could have been used for a critical self-reflection.[17] In the use of technology or in the communication about it one can act excluding or including. Pre-condition for this is still that exclusion mechanisms are being ratiocinated and that it becomes clear that including others can not be achieved through solely technological solutions.[18]

To the same implicit male norm also belongs the playful approach towards programming, as sociologist Sabine Collmer points out: „While for men obviously the concentration on the self-contained world of the game space seems to be seductive (see Eckert at. al 1991), some of the female interviewees expressed emphatic rejection against computer gaming. As persons with narrow time resources gaming seems to them as a waste of time.“[19]

The playful approach of the hacker programming style is characterized by an interaction, which is linked to a direct feedback, based on the „trial and error“ principle. The self-acquired expertise goes along with power sensations and is seen as a intuitive, fast, partly even inelegant approach, where rules and guidelines can be undermined. The potentially endless amount of game possibilities in programming gives the gamers – the hackers – the feeling, they would

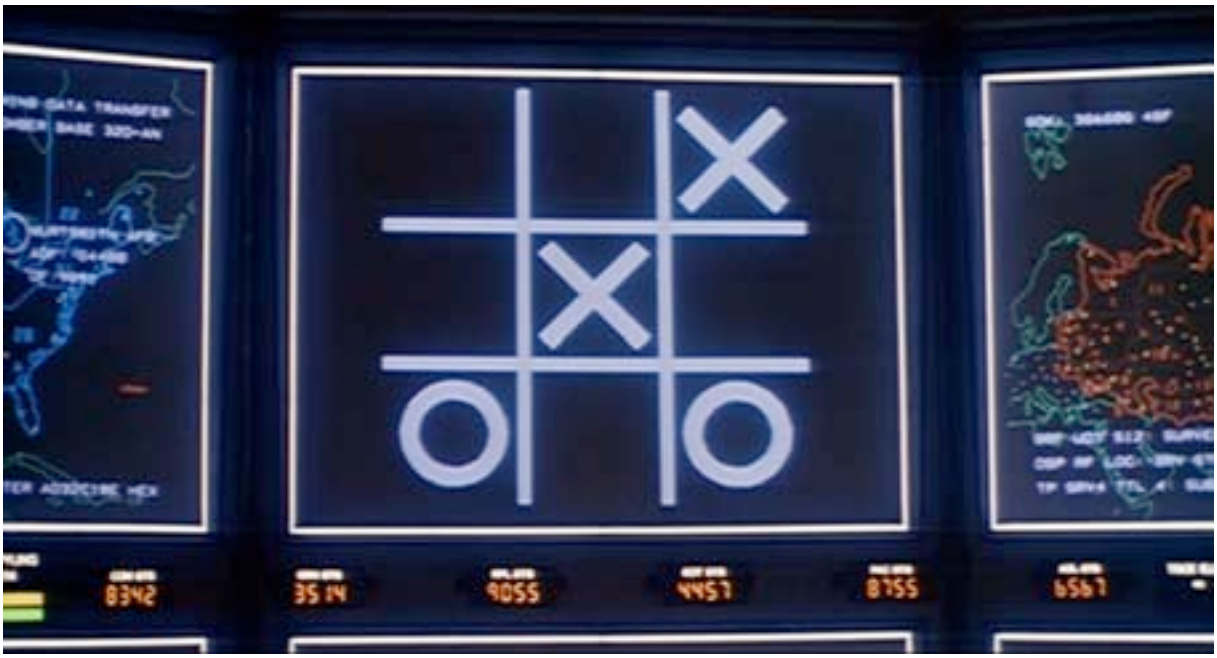
---

[14] For an introductory discussion of Lara Croft as a Role Model see: Schleiner, Anne-Marie: Does Lara Croft wear fake polygons? Gender Analysis of the „3rd Person shooter/adventure game with female heroine“ and Gender Role Subversion in Game Patch, http://opernsorcery.net/lara2.html
[15] For statistics on the (European) Open Source Community see FLOSS report, http://www.infonomics.nl/FLOSS/report/Final4.htm
[16] Rizvi/Klaeren 1999: Informatik und Geschlechterdifferenz, Uni Tübingen, p.41
[17] It was really strange to realize, that the possibility that they might not automatically be „on the good side“ never came into their mind. It seems self-evident to people who „resist“ Microsoft [add all the standard open source rhetoric here] that they are part of a progressive community.
[18] In discussions of social problems people in the hacker community seem to favor technological solutions, which I could observe several times at the annual meetings of the Chaos Computer Club, a German hacker and technophile organization.
[19] Sabine Collmer 1997: Computerkultur und Geschlecht. Die Aneignung des Computers aus der Sicht von Frauen und Männern. In: Christina Schachtner 1997: Technik und Subjektivität, Suhrkamp, FFM, p. 157

be explorers in an unknown territory. "I think hackers in general are explorers. They're exploring new territory", says the hacker Count Zero of the hacker group Cult of the Dead Cow, whose software „Back Orifice“ allows the access to Windows computers through security holes, in an interview. The source code of „Back Orifice“ is published as open source. The hacker-explorer seems to re-appear as a modernized variant of the conquering explorer of alien continents, for whom Robert Clive (1725-1774) substitutionally stands for, who by force colonized Bengal from 1757 on for the British Crown, which became the core of the Indian colony of the UK. When subsequently the hacker Craig Neidorf talking about the game „Adventure” which was written in 1972 by William Crowther, says: „This process - finding something that wasn't written about, discovering something I wasn’t supposed to know - it got me very interested“ [20] it is an obvious reference to the male coded role model of the classic explorer and conqueror.
David Lightman as the explorer of the unknown continent „thermonuclear war“ gets a clear demonstration of the repercussions of his explorations. The last extract from the movie shows, how the WOPR tries to consequently finish the game. David and the NORAD staff try to stop WOPR from actually starting the atomic weapons.

Screenshot 14: David „convinces“ the computer to play tic-tac-toe as this is the only thing he (and everybody else) can get a login.

[20] See http://www.fusionanomaly.net/craigneidorf.html



Screenshot 15: WOPR plays tic-tac-toe against itself.

Screenshot 16: David at the keyboard.

[The computer realizes, that in tic-tac-toe there is no winner. It „learns“ and starts to play all variants of the war games.]

Screenshot 17: WOPR screen output "Winner: None".

Screenshot 18: WOPR stops the launching process and outputs his „reasoning“: „A strange game. The only winning move is not to play.“

Against the admiration of Hackers

Intellectuals, artists and those who are interested in progressive or anti capitalist thoughts have admired the hacking community and its surrounding culture over the last years. The same thing can be stated for the open source community. I felt attracted by both communities for some time until a certain malaise grew stronger. This text is part of an attempt to understand the set of causes for this malaise.

Concluding it can be said, that the hacker and open source subculture enqueue in a line with other subcultures that provide easy identity construction for the individual. Belonging to a

group provides a manageable image of the world and simpler reaction patterns. The danger however lies in the point that those who think of themselves as being part of an anti-something or a revolutionary thing, tend to think of themselves as more progressive, or maybe being part of an other or better world.[21] The male dominated hacker and open source community is part of a project, which provides the appearance that one would „live rightly in wrong life“. It is an illusion.

Francis Hunger (francis@irmielin.org) Mai 2005

[21] Still a potential for social change growing from subcultural communities can be observed. This however doesn't say anything about the changes' outcomes, which might turn out to be progressive or regressive.