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Temporal and spatial shifts within playful work

Carolyn Hunter
Loughborough University, Loughborough, UK
Dariusz Jemielniak
Kozminski University, Warsaw, Poland, and
Agnieszka Postuła
Faculty of Management, Warsaw University, Warsaw, Poland

Abstract

Purpose – The purpose of this paper is to present the results of a qualitative study of software engineers' playful behaviors at work. Design/methodology/approach – The interviewed software engineers come from two European
and three American companies. The research is based on ethnographical data, gathered in two longitudinal studies 2005-2008. The methods used in the study include open-ended unstructured interviews, participant observations, stories collection, and shadowings.

Findings – It is found that the currently dominant theory of normative control explaining software engineers workplace diminishes leisure and entertainment attributes of knowledge work. Fun at workplace is discovered to be an important, if not crucial, element of everyday programmers' job.

Originality/value – The study contributes to the literature by replying to the call for more research on high-tech organizational practices, and on non-job related behaviors at workplace. It reveals playful performance as a constituent for knowledge work and may contribute towards a better understanding of the role played by fun and playful behavior in creative problem-solving and inventing.

Keywords Software engineering, Organizational culture, Behaviour

Paper type Research paper

> The true way to render ourselves happy is to love our work and find in it our pleasure (Francoise de Motteville).

Traditionally, playing and working have been conceived as separate, unconnected objects of behavioral study of human interactions. However, some business gurus' and academics have suggested the conceptual and physical boundaries between leisure and work are becoming more permeable within contemporary organizations (Fleming and Spicer, 2004; Kane, 2004). Certainly, there has been a significant increase in the time spent at work for white collar workers over the last 20 years (Darrah et al., 2007; Schor, 1991), suggesting that time available outside of work for leisure activities may be decreasing. Although some accounts have disputed the decrease in leisure time (Robinson and Godbey, 1999) in case of knowledge-intensive professional work the temporal demands have clearly increased (Barley, 1997). At the same time, management texts are suggesting that leisure needs to be integrated into work, if only to avoid premature burnout syndrome and compensate for the increased working time. For example, Kane (2004) describes a "Play Ethic," or an approach to life and work which embraces play and pleasure. Viewing these trends, the time and space for "play" within society needs to be re-conceptualized, and in particular a consideration of how

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play at work takes place. What is at stake is the social division and labeling of spaces for acknowledged types of behavior-processes, which are usually emerging below the attention level of social scientists.

While play has recently seen a resurgence of interest in management texts such as Kane's (2004) "The Play Ethic," one should refer back to Huizinga (1949, p. 4), who first introduced "play theory" in his work Homo Ludens: A Study of the Play-element in Culture. Within his work, he attempted to "try to understand play as a cultural factor in life" rather than seeing play as an irrelevant activity, and although his study was historical and belonged to the more traditional humanities, its impact upon social science and general educated public was considerable:

> Summing up the formal characteristics of play, we might call it a free activity standing quite consciously outside "ordinary" life as being "not serious," but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means (Huizinga, 1949, p. 13).

Huizinga argued that play was central to understanding culture, and necessary for civilization. Within his work, play had several key elements: first it had to be freely undertaken; second play was not "ordinary" or "real" life, but a temporary interlude outside normality; and third as such it existed within specific limits of time and space. While, he viewed play as necessarily irrational, playful activities, according to him still contained order: mutually accepted and tacitly recognized temporary rules which guided the actions of play. Huizinga viewed play as largely competitive sort of an interaction, although the work of Caillois (1958) expands his theory to view games in particular as Agôn (competitive), Alea (chance), Mimicry (imitation), and Ilinx (disorder). Thus, Caillois theorized play along a spectrum from the luden, the rule bound formal games, and paidia, the anarchic, spontaneous play. Caillois's typology conceived play in relation to the way societies are organized, thus expanding the way play is expressed within different contexts and for different purposes. Caillois (1958, p. 6) rightly points out that games such as "bets and games of chance – for example gambling houses, casinos, racetracks, and lotteries – which, for better or worse, occupy an important part of the economy" and disputes Huizinga's proposition that play cannot material interest. Play within this context offers an opportunity to break the normality of work experience; providing a separate perception of time and space within which "play" rules apply and thus implicitly compensating for the oppressive limitations of a disciplined body and mind in a work situation.

A discussion of play at work appears to be particularly relevant within contemporary society where organizations are highly reliant on employees' capacity through their knowledge and creativity. These positions however are also some of the most demanding in terms of employees' time at work. Some authors may perceive the changes in work time as a result of an advancing post knowledge and information society with the rising demand for knowledge-work (Bell, 1973; Stewart, 1997). For others, this is a clear example of side effects of normative control (Kunda, 1992), the time bind (Hochschild, 1997), as well as high randomness of planning and scheduling in this field (Brooks, 1995; Connel, 2001; Kesteloot, 2003). Nobody, however, denies the fact that that especially in software engineering the working week rarely ends at 40 hours,

and sometimes reaches 80. The ideology of commitment is hiding the relentless growth of length of time required from autonomous human individuals who are supposed to sacrifice their private time, their private life and emotions on the altar of company success (Czarniawska-Joerges, 1988; Hochschild, 1983).

Especially, in the environment of organizations "greedy" for the employee commitment (Coser, 1974), the worker's dedication to the post may be indeed very high. As noted previously, high-tech environment is particularly prone to normative control and, as such, is imposing norms of extreme devotion on IT professionals. This is so, because knowledge-work cannot be externally supervised: the process of work is impenetrable to a by-stander, and only the result of work can be evaluated. As a result, the professional standards and normative control take over the function of traditional managerial supervision (Kunda, 1992). A role of software engineer seemingly assumes very serious treatment of the job and disallows treating it lightly. However, the flexibility of time seen within the software to conduct social leisure/fun activities has been perceived as a strong characteristic of the industry (Kociatkiewicz and Kostera, 2003). Additionally, specialists quite often conduct their own, private programming projects on the side (which, by the way, could indicate, that they do so as a method of resistance to increased managerial ideological control). Many authors pointed to the incessant pressure software engineers are under (Kunda, 1992; Perlow, 1998, 2003), their animosity to managers, also over commitment to product quality (Jemielniak, 2007; Kunda and van Maanen, 1999), or the particulars of their workplace culture praising expert knowledge and professional merit (Kawasaki, 1990; Prager, 1999). However, this grave picture of an overworked and ideologically pressed worker does not include lighter and merrier aspects of software engineering, even though there is a growing body of evidence that fun is an essential part of high-tech workplace (Jemielniak, 2008b). In fact, we may be witnessing a major social change, where knowledge work is in avant-garde of transforming work into more joyful activity – but without any major social movement standing for and behind the metamorphosis (Magala, 1992).

Although work and fun are not necessarily opposite, it is still not intuitively obvious to reseaerchers that they could observe play within in professions most exposed to temporal pressure. It may be also interesting to understand how other forms of leisure can be enacted in such a pressurized social setting – when on one hand there is never enough time and the expectation to work is high, but on the other the worker spends almost all of their time on the job, rituals and ways to let the steam off are likely to appear. Perhaps, in this sense, when the boundaries of work and private spheres are broken down, it is more intuitive to find play within these organizations than would first appear likely, especially if play is as necessary to human behavior as Huizinga and Caillois would propose. The Fordist philosophy that:

> [...] when we are at work, we ought to be at work. When we are at play we ought to be at play. There is no use trying to mix the two (Beynon 1980, p. 40 cited in Fleming and Spicer, 2004, p. 78),

appears to be dissolving.

Culture management:

> [...] activities that challenge the meaning of work both inside and outside the firm so that employees no longer create a clear physical distance between employment, on the one hand, and home life, family or leisure, on the other hand (Casey, 1995; Fleming and Spicer, 2004),

suggest integrating the physical aspects of "fun" into the workplace. For example, a recent article suggests: "Bring humour into the workplace with you. Bring small toys or objects for your pockets or desk – and take time out to play with them," as such actions as "Having fun, laughing, telling jokes, engaging in banter [...] all these activities are alleged to be very beneficial to both the organisation and the employee" (Mann, 2009, p. 37).

While there have been significant discussion about time in relation to contemporary society and in particular professional and knowledge intensive work, there appears to be little discussion about the effect space has in relation to time. Time and space have a long history of being explored within sociology (Urry, 2000), in particular influential authors such as Giddens (1979, 1984) for the relation of the individual to changes in time and space within contemporary society. However, only recently has the area of organizational analysis drawn attention to the construction of space within companies (Dale, 2005; Dale and Burrell, 2008). Taylor and Spicer (2007) having noted the privileging of time over space in organizational studies, propose a discussion of space as a distance, space as a manifestation of power and space as a lived experience. They note for example that it is the time spent "at work," the physical presence of the employee within a particular space to which employees are often judged. Dale and Burrell (2008) expand this discussion of space to note the way space is constructed around sociological concepts within organizations, as space both constructs the employees and is constructed by them. They note that time is interrelated within space, and through a discussion of the socially constructed interpretations of time within pre-industrial, industrialization and post-modernity:

> [...] give an appreciation that experiences of time are located within particular social and material relations, and that the mechanization, standardisation and commodification of time and space are interrelated, and inherent to "abstract space" (Dale and Burrell, 2008, p. 23).

Finally, Warren and Fineman (2008) discuss the role of aestheticization within a contemporary "play" culture, expanding to how employees interacted ambiguously with the materiality of the organization.

Thus, in the following article, we want to present the results of our research on work-leisure behaviors and perceptions among software engineers, based on two longitudinal, qualitative studies of small software companies in Europe and in the USA. Our findings reveal that "programming for fun" plays an important role in software engineers' workplace culture and is a form of reinstating the social status in the occupational hierarchy. They also show that for software creators programming often is an artistic endeavor (when performed for pleasure) in opposition to programming as engineering (when performed as work). Playing jokes and engaging into solely socializing activities proves to be a significant time-consuming activity among software engineers (Kociatkiewicz and Kostera, 2003). This paper will discuss these activities within a particular pattern of time and space.

Method

Data presented in this paper are the result of an ethnographic project conducted in Poland and the USA in five different high-tech companies. All analyses and conclusions are based on very homogeneous material, gathered by two independent researchers. While there were some differences between the Polish and the American

companies, the research below reflects some of the similarities that appeared in regard to time and space. The research focused on IT specialists (software engineers in particular) and their workplace culture. The projects analyzed a typical IT specialists' work day, including the behavior during breaks (observations) and after-work time (interviews). One of the benefits of our ethnographic approach was spending a lot of time informally socializing and chatting with informants. As a result, we had a unique opportunity to delve into the subject of play and leisure at work.

The research consisted of a mixture of open-ended, non-structured interviews, mainly ethnographic (unstructured and unstandardized) to allow interlocutors to express their thoughts freely (Fontana and Frey, 1994); non-participant and direct observations as well as shadowing, consolidating comparative data power (Kostera, 2007); and collected written narratives (Czarniawska-Joerges, 2000). In order to keep being open to the field, stay within the "anthropological frame of mind" (Czarniawska-Joerges, 1992) and to follow the social structures as perceived by the informants, we used both of the two typical methods of interviewees selection (Hammersley and Atkinson, 1995): "contact person"[1] method helped in finding new interlocutors and in general reconnaissance of the organization, while "snowball"[2] method was used to extend circles of interlocutors and deepen the topics.

All conversations were conducted in a manner as open and informal as possible. Interlocutors brought up topics themselves, without or with only few general directions from the researcher (Whyte and Whyte, 1984). Thus, the gathered material reflects the topics and notions particularly important for workers, and is not intended to fit into any prior theoretical framework. Thus, the research is performative, in Latour's (1986) sense of proposing that actors define society, rather than society being independent. All field material was analyzed and interpreted through categorizations, in grounded theory manner (Glaser and Strauss, 1967). As a result, the categories, among which play at work and different forms of leisure, emerged.

The studied interviewees come from various departments within the five companies and represent many IT specializations (mostly programmers, but also designers, administrators, IT consultants, and others). All, however, identified themselves within the software engineering profession. In total, 60 interviews were conducted. The research material includes over 1,000 pages of transcriptions and over 500 pages of field notes. Although only a part of them contains material relevant for this paper, even the sheer volume of text makes it impossible to present anything more than a few representative excerpts.

Triangulation of data, researchers and methods was used to increase the richness of data, as well as to draw on other perspectives within the study (Fetterman, 1989). Data triangulation was based on using data from different organizations. Also interlocutors differed within their experience, skills, and specializations. We have spoken mainly with pure programmers but also with project managers, consultants, documentation specialist, and others (see Table AI in the Appendix). Researcher triangulation involved two independent scholars gathering data for about three years, with one of the research projects located in the USA and the other in Poland. Methodological triangulation was based on using several methods. There were 33 anthropological interviews to gather basic material, nonparticipant observations to reinforce data from the interviews, shadowing (two weeks with one person) to observe full working day of interlocutor and stories to develop a dialogue about particular issues. While being

aware of the current critique of triangulation (Blaikie, 1991; Denzin and Lincoln, 2003; Kleine, 1990), we still preferred to widen the picture, even at the cost of occasional incongruence. Our main objective was to reach the perception of play (after all, work can be understood as what we are paid for, while play is what we pay ourselves with), and to realize how organizational actors construct the meaning of fun and playful behaviors at workplace (Magala, 2009).

Professional fun

Within the observations, employees within these occupations appeared to find their work engaging and interesting, and were highly committed towards achieving the programming tasks set for them. However, at the same time, this work was accomplished in relation to a high level of play at work. In other words, commitment did not rule fun out. This play was largely informally organized, rather than managed by the organizations, and constituted an integral part of the workplace social dynamics. However, the "play" which was demonstrated appeared to be largely enacted around different temporal and spatial dimensions of the organization. These can be formed with three distinct contexts: the time spent at work; working on projects through play; time spent not at work but doing work-like activities such as programming; and finally the time spent at work "playing," through gaming, joking, drinking, and reading news. While play has traditionally been treated as separate, both temporally and spatially, from work, our data suggest that employees repeatedly and consciously broke down these boundaries.

Flexibility of hours, space, and activities

Software engineers declared they spend most of their overall time at work, and according to our observations ten-12 hour days were not unusual in any of the companies. Extreme as this may sound, when projects neared completion, programmers often stayed even longer, occasionally into the "graveyard shift," and in some cases overnight. Two of the companies studied had special rest facilities, allowing the employees to grab some sleep whenever necessary. In all cases food and coffee were well provided for the companies clearly recognized the need to make-work as convenient as possible. The fact that in none of the cases observed was time officially "measured" was hardly surprising: if most employees already worked longer than formally required, it would be unwise to tightly measure time and control their hours. As one of the project managers honestly admitted:

> In the previous company I worked for I received the system log for the whole team, what time each of them entered the building, what time they left, when they logged into the network, and so on. I treated this with due respect [...] when I was making a paper ball from it and threw it to the basket. I mean, it was stupid, I guess if I had even a word about these logs with my people they could start doing it by the book, come at 9, leave at 5, and naturally it'd be a disaster (Z).

In spite of the very heavy workload, paradoxically many of our interviewees pointed to flexibility as an important factor for staying with their current employer. Even though they had to work long hours, they appreciated not being strictly measured in this respect. A number of interviewees were happy to take ownership of their time: to come to work near noon and leave at night, or to take an hour or two for personal matters during the regular hours, whenever anything urgent unexpectedly turned up.

Naturally, the picture of software engineers having fun from morning till dawn would be not only far from reality and from what we observed, but also not true to the participants' perceptions, as many reported their work to be quite burdensome as well. Still, it is quite interesting to note that in their accounts of their working day, they referred mostly to leisure activities. Whenever, they described work, they commented on its being difficult, interesting, time-consuming, etc. When they were asked to speak about their daily routine though, they very often referred to the activities they did for pleasure.

This may be related to the fact that our informants unanimously positively related to their peers when talking about work. Play inherently necessitates certain social grouping, and here reinforced employees' ability to complete the social elements of their work. One of the joys they had from working in small organizations was making friends with their colleagues. Having friends at work and trusting all colleagues was often mentioned as important in staying with the company, in which the interviewees worked for. As we perceive this phenomenon, workers become more integrated when they have more in common besides work. All IT specialists' activities described in this paper can be helpful in creating good atmosphere at workplace. Moreover, our informants share fun not only of regular play and entertainment among themselves but also of work challenges and solutions of some problems. Thus, perhaps fun and play, paradoxically, take a disciplining role in contemporary workplace, and socialize better than the traditional structure and control.

Play work and "just for fun"

The amount of time spent working is even more surprising when confronted with the fact that as many as 45 percent of the software engineers we interviewed admitted they occasionally, but regularly, wrote pieces of software just for a hobby. Employees appeared to be happy to replicated work-like behaviors to align with their own personal leisure programming activities (ScanSof11):

> Interviewer: Do you spend a lot of time thinking at home about the problems from work?
>
> Zenek: No, almost never. I usually don't have that much time left, and anyway if I do programming, it is usually something else.
>
> Interviewer: You mean you write software besides work?
>
> Zenek: Yes, my own stuff.
>
> Interviewer: But what kind of stuff is it? Like, to start your own company one day sort of stuff?
>
> Zenek: No, nothing like that. It's rather more for fun. For example, recently I wrote a program to display pictures randomly. I mean, there are portals to do that, but they don't offer exactly what I want. So I wrote this program and now if I want to post a gallery online, I do it exactly as I want it. No ads, no fancy features, everything as I planned. I want to allow my friends to use it, too, when I polish it off a little.

Only two of the interviewees said they planned for their side-projects to be commercialized in the future. Most declared off-their hours programming to be "just for fun" (in the exact words of five respondents).

In addition to programming after hours, online gaming was also a common activity in most of the companies. Although rarely done during regular office hours, in many

cases programmers all agreed to stay late to have a match of Quake, Starcraft or Wolfenstein: Enemy Territory, and others, with colleagues. What is quite interesting, is that the players usually had computers with at least equally good parameters at home, so they did not remain at work just because of the equipment available. This social activity was, in some occasions, exerting subtle peer pressure on the ones who wanted to go home. In one observed case, the workers who stayed addressed Maciej, who had to leave earlier, with such words:

> Jan: Just leave him alone, will you? He just can't stand being beaten down again, right? [sniggers]
>
> Maciej: Riiight, I'm so scared I can't breathe. Especially, of you, Grand Master! [laughs]
>
> Jan: The next time you won't chicken out that easily!

In general, however, gaming activities were not demanded from the members of the group. In three cases of software engineers who were fathers and (be it related or not) regularly left to home early, nobody joked about it. Occasional jeers were present only among those programmers who were active in playing. The gaming found within these programming groups displayed the social bonding around a shared identity, for instance around the shared language of gaming like "Grand Master". It also demonstrated the breakdown of personal and private spheres, with the allocation of after work hours and activities to be within the workplace and shared with work colleagues. For these employees "choosing" to remain at work and develop their leisure interests and skills in gaming required and allocation of "pleasure" to the spheres of work.

Work and play-times

In many ways "working hours" could have a leisurely feel. Although it was apparent that in all organizations studied software engineers worked hard and put in long hours, their descriptions of daily activities were often similar to the following one:

> You sit, you talk to other people for a while, then you check your email to see yet another joke posted [...], so you tell the joke to the other guys, or you forward it by email. Sometimes we take a half an hour break and play some games on the network. We take it easy, you know, something like that. Sometimes you throw off witty remarks and that's how it goes (A).

In the words of our interviewees, regular office hours did not appear exhausting as it would appear from simple time measure or from studies on engineering culture (Kunda, 1992; Perlow, 1997). What we found quite surprising was that for the overwhelming majority of the interviewees the description of their working day looked similar to the following account:

> Interviewer: Do you work without breaks, or is there anything else that you do in the office?
>
> K: As a matter of fact, the first two hours at work I spend at fun and eventually as a result I stay longer. [A:] And I'd say that, first of all, 20 per cent of my time is anyway meant to be spent on self-development, so it includes specialist literature [...] It means also surfing the Internet, reading portal news, forums, books. I normally go to work and I do [...] I have this 20 per cent on IT development mainly, but also [...]
>
> Interviewer: Counting these 20 per cent must be difficult?

A: I come in, I load several portals with news, interesting links, forums, developers [...]

K: And only after that he starts to work.

A: Oh, and there are emails, too.

K: I also spend the two first hours on fun only, so that's why I stay long at work.

A: In my case its not that long [...] I have a habit of going through the newspapers takes me 15 minutes, including portal news.

K: You've got to be kidding.

A: No, seriously, 15 minutes. Maybe later during the day I go through news again, I check if there is anything new in the politics, for instance. I don't think I'm really using this 20 per cent up for reading.

K: And I am pretty sure I spend at least 2 hours. Unless I have to work like hell and I'm so exhausted that I can't [...] When I know that I'll have to stay long anyway, but it happens rarely.

Also, many programmers honestly admitted that their workload is very irregular: quite light in the beginning and unbearably heavy near the end of the project:

Usually you have some deadlines [...] It is obvious, you have to perform tasks. But in the beginning the time flows rather slowly, only towards the deadline you realize there is little time and you have to [...] In the beginning you can play some games, sit back, browse some websites (Prz).

Many of the interviewees agreed that during regular working hours they are able to have some fun as well. As well as the morning news, e-mail reading and the evening network gaming activities, they managed to get some entertainment during the day as well:

P: mhm, in summer very often somebody throws off a remark "hey, we're having a barbecue". Then everybody goes to the barbecue, somebody gets some alcohol, somebody buys sausages, and we're grilling, and having a party, a whole day party. It is fun.

Interviewer: Spontaneously, sort of?

P: Yes. There is no planning, only somebody says "let's do it now" and we don't have lunch, but instead [...] You can get a sausage, go back to your computer, swallow it with a beer [...] If you open the fridge right now, you'll surely find some beers in there. So you can always go and get it, everything is fine.

Most of our interviewees emphasized they simply cannot work all day long and they spend up to 50 percent of their time in the office on different fun activities. The organizations studied appeared to recognize this and offered various attractions. Even within the smallest company, as well as network games, there was a table tennis room available to all employees. As one of the programmers confessed:

We were going to buy a snooker table too, but we decided to hold on that for a while, as it is not certain where to put it, and also the boss promised to subsidize it. We had dance classes, sort of paid by the boss – because I teach this class and for this time I am paid normally, as if I was working. [...] We have the swimming pool sponsored, so we're having fun, all in all

The table tennis slot was often occupied, as was the football table in another company studied. Other amenities such as refrigerators with free snacks and drinks were typical in all organizations. Interestingly, software engineers were aware that the companies offered them the nice leisure facilities as an attempt to make their jobs more likable:

> You see, it is like [...] You know, when I tell it people outside the company, they're saying it is not that cool, because the boss does it especially to keep people in the company, that these are his, somewhat, perfidious ways to make people stay. There is a vestige of truth in that. Here, people do not leave work because they like it here, just like that. And he is sort of basing on it, but on the other hand – what should his approach be? Keeping people in the company – he should exactly want that, shouldn't he? You see, I tell people I like it here and they reply "He only cares about you liking it here to hold you" [the interviewee knocks on the table] "solid, so that you wouldn't leave". I mean, sure, riiight, he holds us in prison, or something (Patrick).

Apparently, the common perception of software engineers' friends was that a workplace, although a fun place to be, must involve malicious intent. The concept of normative control apparently has gathered a wide popular readership. The programmers themselves were also well aware and self-reflective of the companies' probable intention nevertheless, they appreciated the companies' efforts. For many of them their office was even a preferred leisure site:

> I spend about 180 or 150 hours at work, but I work only about 100 of them. I mean, I often sit and don't work, I do something [...] I'm here, but I don't work, something like that. Or, for example, I'm sitting in some place on Sunday, and I decide "whatever, I'm coming here". I come to work, then I discover there is nothing to work on, because it is Sunday, so I go downstairs, set drums and play (Przemek).

Conclusions

> [Play] goes beyond the confines of purely physical or purely biological activity. It is a significant function – that is to say, there is some sense to it. In play there is something "at play" which transcends the immediate needs of life and imparts meaning to the action. All play means something (Huizinga, 1949, p. 1).

Western conceptions of ideal work are still fundamentally shaped by managerialist rationality: the effectiveness of individual efforts and results-based measurement of the worth and value of work. It is assumed that "play, leisure time and recreation are the opposite of work, and [...] it's impossible to combine the two aspects of life" (Strannega˚rd and Friberg, 2001, p. 87). In fact, even short research reveals shortcomings of this perspective. People not only like to play at work, but they also play in order to make sense of their time and space at work, to socialize with their peers and to construct an identity for themselves as programmers.

Playing is inseparably intertwined with work in software development. Sometimes it is only playing computer games during the breaks or after hours, sometimes it means picnics in midday, sometimes involves different kinds of sports and other forms of socializing and chit-chat, sometimes a lengthy press review, and sometimes writing programs for pure pleasure. The playing complemented work activities in software programming, for example writing code, which involves both solitary, knowledge-based work and social, problem-solving activities (Kociatkiewicz and Kostera, 2003).

The findings suggest that Huizinga's theory of play is relevant within the work of software engineers, throughout their working day and after working hours. Play appears to still form a separate time and space from that of perceived working time, when even those activities taking place within either the space and time of work. To some extent this can be explained by the perception of self-identity by the programmers, who appear to view their work activities and leisure activities as very similar. Both appeared to be integral with their perception of self. Especially, in knowledge intensive work, it is apparently important for the employee to stop thinking about work only and to let the mind wander, be it for fun or to rest, as the nature of the very job is intrinsically complex (Alvesson, 2004). The need for being extremely focused on code calls for getting over the boredom and fatigue of automated behaviors in extended periods of "doing nothing." In all cases, leisure time, as understood by our informants, is not only just rest. Play is also constructed as part of motivation, occupational high status, and freedom, which all-straight lead to improvement of entrepreneurial activities. For example, one of the managers repeatedly called playful activities of programmers "creativity boosters," he also insisted that his company is extremely good at nurturing employees' independence and, as he put it, "intrapreneurship." Such an approach was quite typical in the studied organizations. It could be argued therefore that part of the rules of play within these corporations was that play occurred during certain points in order that work could occur during others. The conflation of work and play for programmers suggests that they formed a workplace identity that paralleled the pleasure, leisure activities they conducted in their own time.

However, as was the case with the case study of Quickompany workers (Strannega˚rd and Friberg, 2001) our interlocutors seemed to treat their work as a play. The idealist perspectives of Huizinga and the more recent "Play ethic" literature asking would "playing together, instead of working together, be a saner, more fruitful way for highly capable 'knowledge employees' to find a liveable life within companies and institutions" (Kane, 2004, p. 257), and see work as something pleasant and creative surprisingly similar to accounts of our interviewees. The results of IT professionals' work are not only useful for the clients, but also bring satisfaction to the "players" themselves. It appears to be the case that the leisure activities which were integrated into "work" reflected the self perception of their everyday identity. Definitely, software engineers' occupational culture was very much in favor of interpreting coding as pleasure, perhaps similar to a pleasure of a craftsman in well-done job. It was a feeling compared to a satisfaction of completing a work of art or other artistic event as interlocutors stated. In fact, our informants seemed to favor responsibility towards "making a good product" in their own view and creating (as they called it) "beautiful code," rather than towards the client's demands, or cost-efficiency and deadlines imposed by the managers.

In several cases we observed, the programmers indeed were doing their best to write an excellent piece of software, but spent time on coding functions, which were not specified by the client, but only seemed "nice to have" (while in the same time the core required functionalities were yet to be implemented). It would seem as if many software engineers write for fun, and their daily jobs are a bearable way to make some money while following one's bliss. However, a level of cynicism is needed in that presuming this form of work is truly liberating in a Marxist sense. Workers remain

alienated from their work, as even they note themselves they are aware the leisure facilities and time at work are for the companies' benefit. The control structures remain in place within a normative (Kunda, 1992) or neo-normative structure (Fleming and Sturdy, 2009).

Freidson (2001, p. 108) states, a typical professional ideology promotes the view that:

> Members of professions work more for the satisfaction gained in performing their work well than for its role in providing them with good living.

This observation is confirmed in our study. Strannega˚rd and Friberg call this phenomenon a "serious game." In their view workers to some extent are serious about their jobs, but in the same time manage to find more frivolous aspects in their daily routine. This appeared to be the case with the IT specialists we spoke to as well. Apart from avid coding, they were laid-back and treated their professional responsibilities relatively easy. The role of people working mainly for pleasure resonated well with the small size of the studied companies. The occupational script that was enacted, and that was clearly accepted both by the software engineers and by the companies they were employed at, involved being passionate about work, but also treating it as one of the aspects of fun one can get.

Software developers, in this respect, were treated much more like artists, than as engineers: both the clients and the managers accepted their pose of creative geniuses doing what they did for the joy of devising something new and beautiful, sometimes at the cost of time overruns, or producing something else than requested by the customer. Many programmers also talked about their work in artistic vocabulary (compare: Jemielniak, 2008a; Pin˜eiro, 2003).

This is often the case in creative occupations. Creativity is usually understood as a developing original ideas that have additional value to the ones existing prior to them (Styhre and Sundgren, 2005). Software development is, according to this definition and to the perception of our interviewees, beyond any doubt extremely demanding for creativity. As such, it requires a proper space for play/invention (Hjorth, 2004). Efficient programming, paradoxically, seems to be difficult without games, music, place to rest, and other forms of leisure. Each of the software engineers we talked to had his very own activity, which helped him to balance fun (and rest) with intensive labor. And, just like children in Hjorth's (2005, p. 392) article, "they often create space for themselves within the place [adults/others] have prescribed for them" which allows for imagination, play and resistance.

The metaphor of youthful play is quite useful to interpret programming work for one other reason as well. Juvenile attributes and activities give the software engineers possibility to concentrate on their doings without thinking about too far into the future, which is an important part of innovation process. Thus, IT professionals seem "prepared to be wrong" and make mistakes. Contrarily to contemporary universities (Greenwood, 2009), software development promotes rebellion towards hierarchy and status-quo, as this is the only way to foster creativity. Play and fun at programming work, therefore, may also be a side effect of organizational efforts to promote innovative ambience.

Just as the narration and occupational identity of managers is enacted and can be interpreted through works such as "American Psycho" (Hjorth and Steyaert, 2005),

the archetypical images of genius-programmers, cracking code just for pleasure, abundant in movies such as "Matrix," "Johnny Mnemonic," or in more general in the whole cyberpunk genre, definitely influence and/or mirror the professional self of many software engineers. Thus, treating work as if it was play is part of their occupational culture.

Finally, fun and leisure activities at work seemed also to support and develop atmosphere of trust among the team members. As software development is a task of particular uncertainty, and sometimes results in serious trust crises (Hertzum, 2002; Latusek and Jemielniak, 2007), the freedom and recreation aura, which we encountered in the studied companies, could in fact have been also partly a counter-reactive result of having to deal with unpredictability of the tasks, as well as with the wariness from the customers and the management. Also, it should be noted, that for our informants programming was an intrinsically social activity – they relied on each other in solving problems in many cases, and therefore, quite understandably, spent a lot of time on bond and trust creating chit-chat as well.

The role of play in programming calls for further study, but our research already shows that, apart from the mainstream view of programming work as stressful, demanding, and normative control, it is also full of leisure and fun activities, at least in start-up companies. Gaming, socializing and general recreation take at least as much time, if not more, than pure work, and the divisions between these activities are sometimes blurred. Our findings reveal that, at least in the studied cases of small software entrepreneurships, the view of programmers as driven to burn-out, forced to work double-time, and pressed by managerial demands, although in many cases true, is only one side of the coin. Leisure and entertainment constitutes an important part of software development, but is often omitted in the studies of this occupation. Therefore, the issue of play and work in IT companies definitely calls for further investigation.

Notes

1. Contact person sampling is a random method where one interlocutor becomes the main informant. He gives the researcher contacts to other members of the group (Babbie, 2001).
2. Snowball sampling is a random method used when it is extremely difficult or cost prohibitive to locate members of the group. Snowball sampling relies on referrals from initial subjects to generate additional subjects (Babbie, 2001).

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Appendix

Table AI.
Interlocutors' profile

First stage of the research		Second stage	Total
All interlocutors	18	15	33
Programmers altogether	17	11	28
Among them			
Testers	2		2
Project managers	7	5	12
Consultants	0	3	3
Documentation specialists		1	
Other employees	1		1
Running their own business	0	4	4

Corresponding author
Carolyn Hunter can be contacted at: C.Hunter@lboro.ac.uk