# Valuable Connections: Design Anthropology and Co-creation in Digital Innovation

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This paper explores challenges and potentials for innovation and co-creation within an increasingly interconnected and digitalized world, and its affect on ethnographic practices within the field of design and business development. Our discussion is based on material from an interdisciplinary research and design project with a leading computer game developer, exploring opportunities of involving online gaming communities in innovation processes and product development. Based on our case, we argue that in a world with increasingly blurred boundaries between physical, digital and hybrid contexts, as well as design, production and use, we might need to rethink the role of ethnography within user centred design and business development. Here the challenge is less about "getting closer" to user needs and real-life contexts, through familiarization, mediation, and facilitation, and more about creating a critical theoretically informed distance from which to perceive and reflect upon complex interconnections between people, technology, business and design, as well as our roles as researchers and designers within these.

# ANTHROPOLOGY, DESIGN AND THE DIGITAL

Recently Blomberg and Karasti (2013) have argued for a renewed perspective on ethnography in design and development of new technologies, relating to the shifting contexts of the contemporary world. They point to the new opportunities and challenges of ethnography and participatory design relating to sustainable and long-term involvement with sites and participants of design, the spatial scaling of distributed environments and digital information systems, and the increasing spread of collaborative design encounters beyond commercial settings of user involvement. It is in this context, we argue, emerging perspectives on design anthropology may play a role in extending discussions of ethnography and anthropology in design and business development (Gunn *et al.* 2013; Smith 2013; Kjærsgaard 2011).

Ethnographers and anthropologists have been involved in design, innovation and product development for more than 30 years, adopting and developing various roles and interdisciplinary approaches. Some have worked from more traditional ethnographic positions, using fieldwork and ethnographic descriptions to render real-life settings and

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practices accessible for design (Button 2000; Heath & Luff 1992). These researchers tend to operate through a clear division of labour between ethnography and design describing 'what is' while leaving the 'what might be' to designers. Others have emerged themselves in participatory design processes taking on roles as mediators and facilitators of co-creation activities, as part of an interdisciplinary collaborative pursuit (e.g. Halse *et al.* 2010, Clark 2007). Others again, have been more preoccupied with how to understand and work with emergent relations between designed objects and use-practices, experimenting with various ways of combining understandings of and interventions in "use-contexts" (Blomberg *et al.* 2003; Suchman *et al.* 2002). What the different approaches seem to share is an interest in *proximity* and in minimizing *distance* between contexts of use and design, creating familiarity and empathy with 'the Other', in the form of *user*, *informant* or *design partner*, drawing things closer in order to see connections and create understandings of "real world" contexts.

The critique of much literature on ethnography in design is that even if collaborative approaches have become more sophisticated and understandings of the value of cultural insights more complex, ethnography in and for design is often based on a much too narrow and predefined conception of ethnography which tend to neglect its anthropo-logical roots (Otto & Smith 2013; Dourish 2007; Anderson 1994). The consequences of this limited scope on user experience and real-world context have entailed a mechanic under-standing of people's needs and life-worlds, and predefined ideas of what ethnography can deliver to the design team. As a result there has been a disproportionate focus on developing methods and techniques for research and collaboration (around the "implications for design"), while disregarding the potential of anthropological analysis and theory within larger contextual and socio-cultural frameworks.

With increased interconnectedness of various kinds (digital, economic, ecologic) the ethnographer's challenge is less about getting access to information and perspectives from a distant 'Other' in 'fields' separate from our own. Rather, the challenge we argue is progressively about creating an analytical distance from which to observe and understand not simply the 'other point of view', but the situated, complex and increasingly blurred relations between us and them, 'insides' and 'outsides', design and use.

In recent literature on human-computer interaction perspectives on culture have become increasingly important in the design and development of technologies (Dourish & Bell 2011; Rogers 2012; Smith 2013). Digital technologies and interactions are increasingly embedded across distributed physical and digital divides to form hybrid ecologies that merge both face-to-face interactions, and geographically distributed and fragmented interaction (Crabtree & Rodden 2008). Focus is no longer limited to the technological artifacts or interfaces, but incorporates the extended spaces, relations and environments in which technologies are developed and integrated. This affects not only the scope and context of ethnographic research in design but the whole notion and understanding of the *object of design*. As Balsamo maintains, "technologies are not merely objects: they are best understood as assemblages of people, materialities, practices and possibilities. To transform them requires the employment of a framework that can identify the complex interactions among all these elements" (2011: 31).

A design anthropological approach to digital technology and hybrid environments, we argue, can incorporate such extended perspectives using both theoretical frameworks and

material design interventions to transform and reconceptualise relations between ethnography and design, technological development and use in complex contexts. This is done through both ethnographic approaches and material encounters between present realities and future opportunities.

# BEING CLOSE AND BEING CONNECTED - THE ETHNOGRAPHIC ENCOUNTER

The move from a focus on *ethnographic closeness* to the value of *anthropological distance*, prompted by the digital technologies, is evident in our case study into the world of a leading computer game developer, hereafter called 'Games'. As part of a design and research project on community-based innovation we conducted a four-month case study with Games aiming to investigate how online gaming communities might contribute to product innovation and business development at Games. Our studies were to inform and inspire on-going design activities within the company striving to develop a new kind of idea bank through which gamers would be able to help inspire and improve product development within Games.

Our research and design team consisted of two computer consultants, a sociologist and an anthropologist working closely together with community managers at Games. The case shows how moving from a focus on users and fans as a group or community in itself shifted attention towards the interconnections between use and design, community and company, and the various relations and structural logics at play between them.

At Games the boundaries between use and design have become increasingly blurred and relations between customers and company gradually more complex. Online gamers today no longer see themselves as passive consumers of pre-designed products but as active codesigners of the gaming experience. They organize in online communities where they discuss the game and exchange tricks, challenges and ideas for an improved gaming experience. Some of these communities have even gained a degree of presence inside the Games company who has hired people to monitor activities and manage relations with the communities. Games have a large online community of fans with whom they communicate on a regular basis, and whose discussions employees follow to learn about user practices, opinions and ideas.

In a classic ethnographic style we intended to study the on-line community of one of Games' most popular computer game series; a single player first person shooter game. It turned out that the community was not as coherent and easy to locate as we initially imagined. In fact there were various online social media sites (Facebook, Twitter, etc.) and fora in various languages based around this game. The company hosted some sites while others were initiated and managed by fans. We decided to focus our attention on a particular community run by fans and generally recognized as the 'unofficial official' forum. It was an English-speaking forum, which had attracted fans worldwide for more than a decade. Despite its estimated 40.000 members it was not the biggest of Games' communities, but probably the most active, well respected and influential among hard-core gamers as well as developers within Games.

We initially set out to conduct a kind of "netnography" (Kozinets 2010; Boellstorff et al. 2012) of this online forum, following discussions on the site to understand the workings of

this community while attempting to identify its assumed innovative potentials. As outsiders glancing in we had a hard time making sense of it all, with so many people engaged in various discussion threads on a broad range of topics in an engaged but often rough language. Albeit there was a sense of community, of being friends joking, exchanging insights and helping each other with game related issues. Segmentation, disagreements and various forms of positioning and hierarchy pervaded discussions and interactions within this community, as members attempted to push their own agendas, while competing for attention, recognition and influence. Each profile was explicitly ranked in terms of points and years of seniority. And while these numbers affected each member's status and influence within the community, less tangible qualities such as social manners, style of writing, level of argumentation, and knowledge of the game(s) also mattered in trying to make a name for oneself within the community. Cultivating a successful profile (Miller 2011) thus required both passion, social and technological skills, and a lot of work in order to balance the particular mix of friendship and rivalry holding this community together.

The forum discussions often involved suggestions for improvements of the game, and discussions of new features to the games experience. Although it could be a tedious job to locate potentially valuable ideas hidden within the discussion threads, it was common for developers at Games to follow these in search of inspiration, or to get a better feel for their 'users'. What to the researchers seemed to be interesting stories and ideas from 'the field', hence were often trivial to the employees at the company who had been following the communities and their discussions for years. Although our initial attempts to understand this 'user group' was a necessary first step for us as a design team, we quickly realized that our discoveries on the practices and perspectives of 'the natives' were hardly news to developers and community managers within the company. Often these people had been in touch with these forums for years and even participated themselves before turning their passion for games into a profession. They already knew far better than we, as outsiders with limited time and access, what made these people tick as gamers and community members. Through fora and social media of various kinds (Facebook, Twitter, YouTube) they had access to data about the users, their opinions, their play-throughs and their suggestions for improvements of the game experience.

But how might they deal with all this information and these potentially valuable connections? Ethnographically informed knowledge of the users alone would not help us answer those questions. For Games the challenge was not about getting access to people and their ideas, or understanding their everyday worlds, but about the blurred boundaries and proximity between design and use, business and community, and how to navigate this unexplored territory of potentially valuable connections. Our design anthropological contribution therefore was not to bring new insights about the users, but to provide a theoretically based analytical distance from which to understand, re-frame and experiment with the digital and physical relations between fans and company, development and use.

# **BUSINESS AND COMMUNITY - ANALYTICAL DISTANCE**

Shortly after we began our work with Games they hosted a community event where they invited twelve fans (young men from 18 to 30 years of age) from around the world to

visit the company, hangout with the developers and test out a newly developed game shortly before its public release. The community event was a special occasion, not only for the invited fans and community of friends eagerly awaiting news about the upcoming game at the other end of the cable. But also for the developers and community managers at Games who had never done this before. For the company this started off as a marketing stunt, a staged peek 'behind the scenes' designed to create a feeling of exclusivity and a hype around the new game. But it developed into an experiment with the company's relationship to the community, and how this might be of value to them.

For us as designers and researchers the event was special too, to be treated as a kind of design experiment, an extraordinary occasion. Like a ritual it might not have shown us the everyday life of the people involved, but provided a glimpse into the structures and logics at play in their complex relations. The community event facilitated a shift of focus from the digital online forum as an ethnographic 'Other', to a focus on situated and embodied relations between community and company, and a design anthropological concern with how we might (re-)frame these relations.

# Co-dependence - Blurred boundaries between company and community

The community event provided a chance for us to talk directly to the gamers, and observe interactions between the gamers, as well as with developers and community managers at Games. Below is an excerpt from our field notes:

...one senses that both game designers and fans get something from this meeting. It is clear that they share a passion for the game, but also that Games depends on this group of 'lead-users' to create a positive vibe around the forthcoming release. The event seems to provide the developers with a welcomed opportunity to be celebrities for a day telling 'war stories' from the battlegrounds of game development in front of an appreciative audience. Everyone seems to enjoy themselves. Interactions between developers and fans are characterized by an understated idolization combined with a sense of equality. In fact fans and developers come across as quite similar, and one gets the impression that the developers are but passionate gamers who grew up to become game designers.

During the event it became clear to us that something interesting was at stake in the relations and interactions taking place at the *intersection* between community and company, and that the *boundary* between the online 'virtual' community of gamers and the 'real life' company might not be as solid as we had originally imagined. The ethnographic 'other' was not really 'another'. Borders were blurred in many ways. The company had both a direct and indirect presence within the community, not only did employees at the company take active part in conversations within the community. There was also a sense among community members of company representatives 'listening in', even when not explicitly contributing to conversations. When fans talk amongst themselves, they often do so with this invisible audience in mind. As one of the fans said:

I always assume that they [people from the company] are reading it [the forum posts], that they will read it at some point. Sometimes you forget, because sometimes, especially on certain topics where they can't talk about it, they won't contribute with their own posts. Sometimes you start to think, maybe they are not reading it, so you repeat yourself a couple of times. (Nitro, interview).

Similarly, the community has a presence and a voice within the company. Community managers employed by the company have a bridging role between the official company and community, in making sure that voices from the community are raised within the company. They follow activities within various communities, partly to protect the company's brand from rumours running wild, but also to sustain an interest in the game during long spells between game releases. Sometimes community managers will 'leak' inside information about an upcoming game to create a hype, but they also simply hang-out and listen to complaints, ideas or assist with game related problems. In the community they are seen as less official than other representatives from the company, almost like friends, but with a particular authority to verify or falsify information and rumours about the game. Community managers and game developers have a kind of celebrity status within the community whose relationship to them resembles that of sport-fans to a football team. The company depends on the support and recognition from their fans, and on their ability to keep the brand alive over time. As an independent community their credibility is strong among other gamers, hence their opinions and game reviews matter, often more than official reviews. As a collective the community is able to assert some degree of influence on the company. This became clear when the company wanted to change the voice of a central character in the game and a strong and persistent critique from community made them change their mind.

Marcus' (1998) argument about complicity; that the 'insides' and 'outsides' are implicated in one another is a condition of fieldwork in a modern and connected world, became very clear in our fieldwork. In this setting it meant that community and company were intertwined in many ways, and could not be studied and understood in isolation. As design anthropologists to make sense of these hybrid, yet situated, relations we had to move beyond a focus on empirical *use* contexts to include the wider contexts of design and business development and the connections between these.

# Co-design - Blurred boundaries between design and use

The blurring of boundaries between company and community extended beyond individual connections and interactions to the relations between product design and use, as community members seemed to engage in various ways in the design process. Not only did the Gamers offer critique and extensive lists of ideas for improvement of existing games at the forum, they also shared individual creative ways of playing and tweaking the games. Design seemed to continue in use (Suchman 2007), as players gave each other challenges or modified the game in various ways. In fact, an original feature in the recent edition of Games' most popular game was inspired by such innovative usages. In this context, gamers

tend to see themselves not simply as consumers of pre-designed object, but as co-designers of the gaming experience, as Nitro (one of the fans) so eloquently puts is:

..with a game it is sort of almost an agreement between the developer and the player, the developer says 'here is a set of rules that we are giving you, and you play within those and you make the best experience you can for yourself ' ... But the way I think about it when I play a game; I try to imagine that someone is watching me play and I want to put on the best show possible, and it is me and the developer working together to put on that show... with other forms of creative art where it is really the artist vision that you as an audience, you take it or leave it. But here you are working together with the artist and the audience to make something together.

Hence it makes sense to see the fans not only as 'users', but as a kind co-designers if not of the product, the actual software, then of the gaming context and experience. Suchman and Ingold have in various ways described the difficulties involved in distinguishing between design and use, pointing out how design continues in use (Suchman 2007) and how objects and forms continuously grow out of and are changed through our material engagements in the world (Ingold & Hallam 2007; Ingold 2012). With digital products like computer games such distinctions between community and business, use and design seem even more fickle.

## Framing relations - Between market economy and gift exchange

The connections described above are interesting, because they challenge our preliminary assumptions about company, community, design and use, and the relations and boundaries between them, and open up for new ways of understanding these relations and their potentials. Rather than understanding community and company as separate entities, worlds, or 'others' it seems more interesting to approach them as neither separate nor one.

Inspired by classical anthropological theories of exchange (Mauss [1925] 1990; Bohanan 1967; Appadurai 1986), we might think of community and company relations as played out through and formed by interactions within and across different spheres of exchange and different regimes of value (Appadurai 1986:15). One sphere primarily operates according to the practices and logics of market economy, while the other follows the principles of gift exchange (Mauss [1925] 1990). Exchanges take place and relations are formed within and across these spheres, as employees within Games work towards maximizing company interests through developing the brand and the business, while fans strive for recognition and social capital (Bourdieu 1986) through cultivating their profile (Miller 2011) and building a name for themselves at the Forum in ways resembling those of the Trobriands engaged in the Kula exchanges (Mauss [1925] 1990; Appadurai 1986). For the fans the increment being sought is "in reputation, name, or fame, with the critical form of capital for producing this profit being people rather than other factors of production" (Appadurai 1986:19). Employees at Games and community members might have different goals and base their actions on different logics, but they are able to use each other in their different pursuits. Thus street credit, social capital, recognition are exchanged for ideas, engagement, branding

work and loyalty in an arrangement that seems to work to everyone's benefit and satisfaction.

#### Close but not too close - Borderlands and moral dangers

Being 'close' and being connected was valuable to both company and fans, if for different reasons. The closer the better it seemed, as this meant more recognition, inside information and stardust to the fans and more loyalty, insights, hype and ideas to the company - at least up to a point. One could also get too close, so as to threaten the very classificatory distinctions upon which these connections and exchanges were based, as a fan, Quinn, discovered after the community event. In a heated dispute on the forum some fans felt that with the new game the company had let them down and sold out on 'core values of the game' in order to attract a broader market. When Qiunn, who had been at the community event (and posted extensively from it at the forum) defended the game he was accused of having become too close to the company and their business interest. Fans insinuating that he had been bought with money, merchandise or attention at the event. His credibility was at stake, and his status as an independent and 'pure' (in Douglas' (1966) sense of the word) fan was questioned. Although exchanges took place and relations were formed across different spheres and value regimes, these remained morally and classificatory separate. As Appadurai, Bohannan and Barth have pointed out conversions of 'objects' between different exchange spheres and regimes of values presents entrepreneurial possibilities, but they are also charged with moral dangers (Appadurai 1986: 27; Bohannan 1967; Barth 1967). In this case navigating these borderlands was thus a matter of finding the delicate balance involved in being close but not too close, or in being neither separate - nor one.

The community event made us aware of the blurred boundaries between company and community and the need to extend our focus beyond users and use context to include the company and business context. In the following we describe how we introduced material design activities into the setting, in order to further explore the company's opportunities. Working theoretically as well as practically with the joint development of analytical frameworks and design concepts we were able to establish the analytical distance needed to critically explore and (re)frame community and company relations, their values, potentials and challenges.

## **RESEARCH AND DESIGN - MATERIAL EXPLORATIONS**

Through a series of workshops with gamers and company employees, we developed a set of design concepts, in the form of prototypes and scenarios. These prototypes were as much analytical and exploratory tools as product ideas. Working with the prototypes was partly a way for us to conceptualize (in a tangible and material way) what was at stake here, as well as to re-frame and challenge taken for granted assumptions about community, company, design and use and the relations between them. Our design concepts served as way for us to engage in a material dialogue with 'the field' about our understanding of it and of its design potential.

Our design task was to provide Games with ideas as to how they might involve on-line communities in game design and business development. The dream was some sort of idea bank where fans could post suggestions for game improvements, and where the good and popular ideas could easily be located and 'harvested' perhaps through some sort of voting system. Based on insights from our initial studies we developed 3 design concepts to be further explored through workshops and interviews involving both fans and employees. Our interest was with the blurred borders, complex relations and situated exchanges between *community* and *company*, and the way they might be framed as *neither separate nor one*. To be able explore this phenomena our prototypes challenged traditional borders between game and use, company and community in order to provoke reactions and discussions on this topic.

There were three interconnected design concepts. The first was called 'feedback mode'. This concept suggested that the original computer game could be played in two different modes, as a regular game, or in 'feedback mode'. In feedback mode it would be possible to leave tags directly in the game for the company or other players to see. Tags could be comments on the game, new ideas, challenges for other players, or whatever gamers might come up with. With this concept we were trying to make explicit how product and community, design and use where not necessarily separate phases and realms. In 'feedback mode' game, community and user generated contents were mixed. Here we played with the idea of gamers as co-creators rather than simply consumers, exploring how collaborations and exchanges taking place in 'feedback mode' might become valuable within and across the different spheres and regimes of value.

Tags created in feedback-mode did not simply belong within the game, but also with the person who created it. It could be extracted from the game and serve as objects of exchange to be shared with friends and other gamers across various social media platforms and communities. All tags would also be accessible via a central hub called 'the tag collector' serving as a more traditional kind of idea-bank and discussion forum. Here gamers might comment on tags and vote for the ideas they liked. Ideas that seemed particularly interesting and attractive either to other gamers or to the company might then be selected and taken to 'the greenhouse' where a selected group of gamers and employees with special interest and expertise regarding this particular idea could work together to develop it into a more substantial concept and eventually a new feature, game, product or service.

As material engagements with the 'field' our design concepts served three purposes:

- They provoked (re-)actions and eliciting insights into current affairs and future potentials, by making implicit ideas, practices and perspectives tangible, visible and discussable.
- They re-framed understandings and changed conversations within the project and the company
- They facilitated collaboration and co-creation

The gamers reactions, discussions and modifications of the design concepts gave us a more nuanced understanding of the gaming community, their classification of various sorts of community content, and the people they might share it with. For gamers information and ideas exchanged were inalienable and closely linked to the people sharing it. Hence, it

mattered who the sender was, and it was important be able to divide people and content accordingly. This lead us to the co-development of various forms of filters and groupings of both tags and people within 'feedback mode'. Through our design activities it became clear to us, and to the company, that for gamers exchanging ideas, tagging and posting was all about the social, about the relations, interactions and recognitions vis a vis other players and the company. What made 'feedback mode' appealing to the gamers, was not the ability to provide 'feedback' and good ideas to the company, as much as the social interactions and co-creations of experiences and content that it opened up for. As in Kula-type exchanges what really mattered here was not the 'objects' exchanged as much as the building of relations and reputations that such exchanges facilitated. Being heard, seen and recognized by the company and by other gamers was important. As one gamer said about the possibility of getting recognition and feedback for contributing with ideas:

To be able to get ones name in the game would be awesome...just to be part of it somehow, I mean, even if it was just written on a pack of noodles by the sink" (comment from gamer in the workshop)

Expressing an interest in the Greenhouse as a concept that challenged more traditional ideabank type approaches to involving user in business development another gamer commented:

This is clearly what I find most interesting, this is also what would make me want to invest [my time] in it, the thought of being able to enter into some kind of dialogue, or something that goes beyond simple feedback that might or might not be read (comment from employee at Games).

With concepts such as 'feed-back mode' and the 'greenhouse' relations between company employees and gamers were re-defined as reciprocal long-term investments based on different motivations and intents, involving but distinguishing between both *social values* and *economic market values*. Through theoretically informed and materially engaged (re-)framings our initial inclination to focus our attention on the community as a separate entity and an 'ethnographic other', gave way to a an interest in the forming of relations across interconnected spheres of exchange and a more nuanced understanding of relations between company and community, design and use as being neither separate nor one. Our design task changed accordingly. It was no longer about finding ways for the company to extract knowledge and ideas from the community through the development of an idea bank, but about exploring ways in which relations, ideas and products could grow from interactions between gamers and company in a way that might become valuable to both if for different reasons.

The design concepts facilitated a dialogue with 'the field' and re-framed ways of thinking about relations between design and use, company and users, which contributed to changing perspectives and conversations within the project as well as within company. With these frameworks and insights in mind the company now continues their work, developing business strategies, relations and products at the intersection between company and community, use and design.

# RE-THINKING THE ROLE OF ETHNOGRAPHY IN DESIGN AND BUSINESS DEVELOPMENT

Our case suggests that within a world with increased interconnectedness and blurred boundaries between design and use, company and users, us and them, 'insides' and 'outsides' we need to rethink the role of ethnography within design and business development. Through our case we have illustrated the value of analytical distance combined with material engagement of a design anthropological approach to co-created innovation. Here we extend the focus beyond ethnographic closeness to users and 'real life' contexts, to connections and points of discourse at the intersections between use and design, community and business, expanding the role and opportunities for anthropology in design. Our approach may be framed as a holistic and critical approach to research through design - or design through research:

- Which extends beyond empirical use contexts to include the contexts of design and business development and the complex and potentially valuable connections between them
- Where material engagements and design activities serve as ways to explore and understand both current and potential connections and their value.
- Where the value of (design) anthropology is not simply located in the end product, but in its ability to reframe connections and challenge discourses on a more fundamental level with effects in a design or business setting.

As we see it the aim of design anthropology - as field of practice, research and knowledge production situated between anthropology and design (Gunn et al. 2013; Otto & Smith 2013) - is not ethnographic description, workshop facilitation or user advocacy (even if this might be part of the methodological approach), rather it is establishing other points of discourse (Kjærsgaard 2013, Rabinow et.al 2008) by engaging critically, theoretically and materially in the design activities and conversations (Kjærsgaard 2012).

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