Agreeing to disagree - pre-game interaction and the issue of community

Jonas Heide Smith

Dept. of Digital Aesthetics and Communication, IT University of Copenhagen
Rued Langgaards Vej 7, 2300 Copenhagen S, Denmark
smith@itu.dk

Abstract. Playing online multiplayer games entails matching oneself with other players. To do so, players must typically employ various types of communication tools that are part of the game or of game-external matching services. But despite the centrality of these tools they receive little attention in discussions of game design and game HCI. This paper seeks to rectify this situation by presenting an in-depth analysis of two pre-game interaction systems which represent influential approaches. Whereas one of these games allows for high player control and thus inspires negotiation, the other allows player communication mainly to help players pass time between matches. The two approaches are discussed in the light of HCI researcher Jenny Preece's concept of "sociability" and zoologist Amotz Zahavi's demonstration of criteria for "honest signalling". The paper concludes with a discussion of the trade-off facing game designers between efficiency and community-supporting social interaction.

Introduction

Finding allies and opponents for multiplayer online games is central to enjoying the game experience. The players found must be of appropriate skill level [6] and depending on the game, the player may also be concerned with the moral fibre of opponents; i.e. he or she may wish to avoid "cheaters", "grief players" and other types of saboteurs [14, 16].

This underlines the importance of pre-game player matching systems and makes it unfortunate that these systems have received little attention in the literature on game design and game HCI. By analyzing two highly different approaches to player matching this paper seeks to illustrate the consequences of design choices determining the ways in which players can interact prior to the actual game.

The first game analyzed is the real-time strategy game *Age of Empires II – The Age of Kings* (Ensemble Studios, 1999; see **Fig. 1**). Here, one player sets up a game, inviting others to join and determining settings which may be changed until the actual game starts. This makes room for negotiation and also paves the way for potential cheating which may in turn increase suspicion among the other players. On the other hand, this approach also invites considerable communication affording some sense of community among the players.

The other game analyzed is the small-scale racing game *Turbo Sliders* (Jollygood Games, 2004; see **Fig. 2**). As is increasingly common with online action games little decision space is left to the players themselves as settings are determined on the game server level. This approach has multiple advantages in terms of establishing "swift trust" [8] between players but also creates a mostly functionalistic social space where inter-player communication is highly limited.

Fig. 1. *Age of Empires II* is a traditional war-oriented real-time-strategy game in which players vie for control over the game map.

Fig. 2. *Turbo Sliders* is a top-down racing game where 2-16 players compete to finish a given number of laps first.

These two games are chosen for analysis since their approaches arguably constitute two very different sets of opinions regarding the importance of community and the issue of trust in online gaming. While not representative of the entire population of online games they are positioned at each end of a spectrum.

In order to inform this game design sub-discipline and to illuminate links between game studies and other fully established fields, the analyses are discussed in the light of HCI researcher Jenny Preece's work on "sociability" [10] and zoologist Amotz Zahavi's theory of honest signalling [18, 19].

The analyses follow a brief discussion of related work and a general introduction to the functions of pre-game interaction. After the analyses, the paper briefly discusses opportunities for further research.

Related work

Computer-supported communities not directly game-oriented have been examined under the lens of collective action theory, a school of thought interested in the obstacles faced by groups whose individual members are torn between personal and collective goals [9]. Most directly, Kollock and Smith have studied USENET interaction from this perspective [5] and later commented upon other types of computer-mediated communication (CMC) [17] arguing that the principles emerging from the works of political scientists could be used to shape online social interaction. In a similar vein, Judith S. Donath, borrowing theoretical framework from Amots Zahavi whom I'll return to later, has described how CMC design features relate to trust as they make deception and subterfuge more or less likely [2]. However, these analytical tools have not (or have only indirectly) been brought to bear on games.

As regards games more directly, the observation that games often display novel approaches to interface design has sparked some interest within HCI circles over the years [3, 7, 11][1]. Such analyses, however, tend to focus on efficiency in terms of task-completion rather than how design influences social dynamics or the broader relationship between players. These latter questions have only been dealt with sporadically [4, 15].

In essence, game studies have yet to seriously consider games in the light of social dimensions not directly related to the actual in-game player status (fully competitive, semi-cooperative etc.) particularly for game types other than massively multiplayer games. Such attention would enable designers to make more informed choices about the tools made available to players for communication and for finding others to play with.

[1] For a brief review, see Jørgensen, A.H., Marrying HCI/Usability and computer games: a preliminary look. in *Proceedings of the third Nordic conference on Human-computer interaction*, (Tampere, 2004), ACM Press.

Pre-game interaction

It is common to conceptualize games as competitive structures[2]. While not technically wrong, such a definition downplays the fact that multiplayer games rely on a form of social contract between players who must not only agree to disagree but also agree on *how* this disagreement should be played out. This is perhaps most obvious in analogue games. *Monopoly* players must not only agree to actually play the game (at the same time, in the same room etc.) but must also agree on an interpretation of the written game rules, negotiate house rules and manage to deal with rules that are implicit [13]. They are assisted in this process by the multi-modal nature of face-to-face communication.

Largely the same goes for offline multiplayer games (LAN or console-based) although here the core rules are processed by a computer rather than by the players. In online gaming, however, players must largely make due with the tools supplied by the designers[3]. These tools may vary greatly and their exact functions depend on the concrete game. Nevertheless, they share a number of common functions briefly described below. The relative importance of each function depends on the actual game setup – in general their importance correlate with the time requirement of the game (the player may care less if a single game requires a minimal time investment), the importance attached to winning or losing (matching skill levels attains high importance in games which save scores, for instance), and the perceived possibilities for in-game cheating etc.

Matching

Players must find allies and/or opponents, and generally look for others who match their own skill level. Some systems provide players with data on the prowess of others to let them choose for themselves, while other games offer more automated matching (see **Fig. 3** and **Fig. 4**).

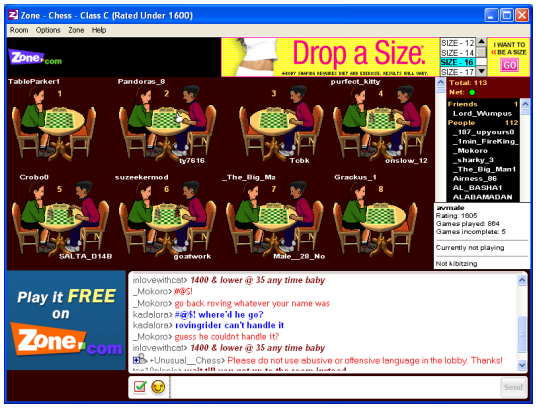

Fig. 3. A *Chess* player at Zone.com matches him- or herself with other players manually based on their scores.

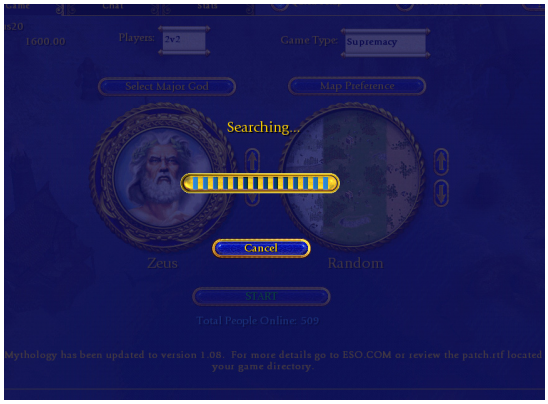

Fig. 4. *Age of Mythology* (Ensemble Studios, 2002) players may choose to have the game automatically set them up against suitable opponents.

In order to increase the universe of suitable opponents many systems calculate points as a function of the difference between the skill levels of the players. Thus, a highly experienced player may receive but a small number of points for defeating a newcomer while the newcomer may be extravagantly rewarded should he or she defeat the far more experienced opponent.

Negotiation of settings

Players look for games with settings matching their preferences. Different games offer different ranges of settings from particular victory conditions to team options, map types, game length etc. Settings are typically adjustable by the player hosting the game or by server administrators. In the former case players may demand that certain options be changed (map size, for instance) and depending on the host player's eagerness to get started he or she may or may not comply with such requests/demands. When playing on game servers outside individual player control changing settings may require contacting the

[2] See for instance the definitions analysed by Salen and Zimmerman in their *Rules of Play* (p71-83).
[3] Some players make use of third-party CMC tools while playing but these will not concern us here.

server admin (if he or she is not active in the actual game) or rallying support from the community to vote for a permanent change of settings. The latter is a common procedure in first-person-shooter communities concentrated around particular servers.

Negotiation of "house rules"

As noted above, computers do not eliminate the need to settle for certain "soft" rules. Generally, the more complex the game, the more soft rules are needed. In the first-person-shooter *Battlefield 1942* (Digital Illusions CE AB, 2002) players usually consider certain tactics (such as attacking the enemy home base in certain ways) very bad style or even grounds for banishment [16]. Similarly, abuse of in-game communication channels is almost always frowned upon even if such behaviour is arguably made possible by the game code (and thus could be construed as a game tactic).

Evaluating opponent attitude

If stakes are high, either in terms of rating system or in terms of time invested in a single game, players may be interested in other players' sense of responsibility. In rated games having one's allies suddenly drop from the server may mean a loss of points and in more casual but still lengthy games having someone (either ally or opponent) drop may spoil the fun rendering the game outcome moot. Thus, pre-game interaction may allow players to gauge whether others are worth spending time with or whether it would be more prudent to seek out alternative players.

Other functions

Finally, pre-game interaction may serve much more indirect, even unplanned, functions. Firstly, chat may itself entertain as players strike up conversations, tell jokes or discuss the game. But it may also give the player a sense of social presence not achievable through systems which do not enable players to communicate. Thus, while negotiating settings etc. may be time-consuming and technically inefficient it may also be a catalyst for the formation of community and a sense of sociability within the game space. We shall return to this design trade-off after the game analyses below.

Two approaches: Game analyses

As mentioned *Age of Empires II* and *Turbo Sliders* represent remarkably different approaches to pre-game interaction. Below the two systems will be analysed primarily in terms of their structure and flow, after which the observations will be discussed in a theoretical framework.

Letting players speak: *Age of Empires II*

The real-time-strategy game *Age of Empires II - The Age of Kings* (*AOK* henceforth) is supported by the web-based Zone.com, a Microsoft-owned gaming portal. Here players create accounts through which their team affiliation and results are stored and to a large degree shared with other players (see **Fig. 5** and **Fig. 6**).

Fig. 5. "Info" page of a Zone.com player profile

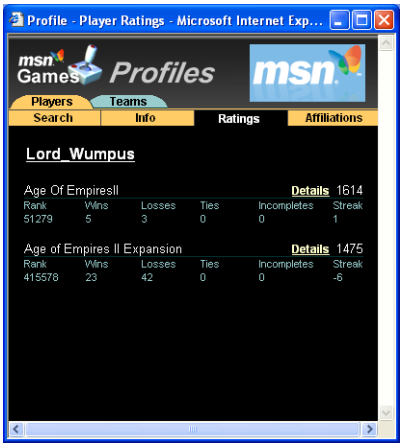

Fig. 6. "Ratings" page of a Zone.com player profile

Thus, by accessing another player's profile with a thorough understanding of the rating system one may get a reasonably accurate idea of that player's skill level.

Upon logging in, players are presented with an overview of current game "rooms" some of which have different victory conditions (see **Fig. 7**). Upon entering a room, the player gains access to the room chat channel and may join one of the existing "games" or choose to host a new one of his or her own (see **Fig. 8**).

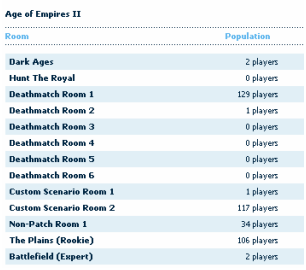

Fig. 7. The player chooses between available rooms

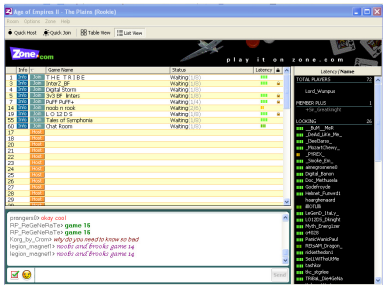

Fig. 8. The player is then presented with a list of actual games and a general chat channel

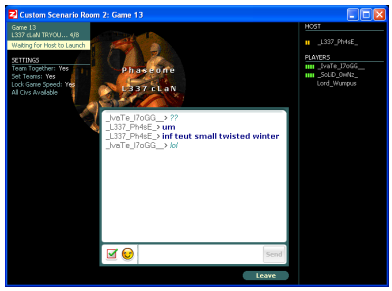

Fig. 9. Upon choosing a game the player is presented with information on game settings, other players and with a game chat channel

The general chat channel is typically used for aggressively advertising individual games rather than for dialogue.

Meanwhile, once inside a "game" (see **Fig. 9**), discussion generally becomes more focused revolving around game settings or suggestions for "soft" rules not imposable through the settings [15]. For instance, a player may suggest that certain in-game strategies such as very early attacks should not be used.

Interestingly, at this point the game host may still choose to leave certain settings unsettled. This may be done in order to more easily attract players to the game but it may also have the consequence that those players who do enter will turn out to have incompatible game preferences. When enough players have entered the game the host chooses to launch the game. This leads to yet another setup screen, the final one before the actual game (see **Fig. 10**).

Fig. 10. The final setup screen. Settings not previously settled upon must now be set.

Again, players are given a chat channel and thus the chance to discuss the final game settings. Typically, once things have progressed this far discussions will not centre on basic issues like victory conditions but revolve around map type or size and team setup. Once players have progressed to this point they will often have spent considerable time searching for a suitable game and most are reluctant to leave even if game settings do not turn out to match their preferences entirely.

Over all, it is clear that actually starting up an *AOK* game requires considerable patience and effort[4]. From a functionalistic point of view the process is less than efficient. Thus, we might assume that online *AOK* play is less than attractive. It may surprise us, in this light, to observe how online play remains popular even today, more than four years after the game's release (although most now play with the game expansion *Conquerors* from 2000). The number of players online rarely drops below 1000 and one of the game's most popular web forums (at http://aok.heavengames.com/) still sees considerable activity and has received a total of well over 400.000 posts. Although surely this must partly be attributed to the qualities of the game it also suggests that while technically quite inefficient, the pre-game interaction system has other qualities. We'll return to this point after examining the very different approach used by Turbo Sliders.

Hard-coded interaction: *Turbo Sliders*

The low-budget, and quite technologically modest, top-down racing game *Turbo Sliders* is usually played on one of around 15 publicly available game servers[5]. The servers are not under player control and hence settings are not up to debate. From a central list the player is informed of server settings, player population etc. and chooses which one to access (see **Fig. 11**). Since the game depends on fast reflexes and motor skill, server latency will clearly be of importance (second column on **Fig. 11**). Next, players will generally look for populated servers and avoid those with no other players (fourth column). Column seven and eight shows whether cars can collide on the track ("Gho"=no means that cars are not ghosted; that they *can* collide) and whether "Pro rules" are activated on the server.

The Pro rules are a somewhat controversial feature introduced to combat certain playing styles thought to be detrimental to the enjoyment of other players. Before this feature was introduced, some players would find it entertaining to drive in the non-intended direction to ram into other players who would then be seriously disadvantaged. However, the new feature could not simply disable such behaviour as one must sometimes backtrack to get free of obstacles etc. Thus, instead the new rules punish players who collide with another player who is too far ahead (on the assumption that this difference is a sign of someone not really trying to compete). This approach, however, has some unfortunate consequences as being far behind another car can also be a sign of inexperience, in which case the superior player may use the Pro rules as a weapon.

---

[4] Add to the processes described above the considerable technical difficulties encountered in many sessions, revolving around router port settings, firewalls and incompatible versions of the game.

[5] Players may also run their own servers but this is rarely done. At least such servers are rarely accessible through the central server list.

Fig. 11. The server list (selective enlargement).

Fig. 12. Chat room where players wait between races.

The implementation of the Pro rules is an example of an approach which seeks to avoid anti-social play through code.

As players join a server they can usually enter the ongoing cup even if arriving between races. As players on a server wait for the next race to begin (a process fully controlled by the server) they are offered a chat channel. This channel is quite often used for brief spouts of small-talk and frequently carries offensive comments directed at named players.

Generally, actually getting to play *Turbo Sliders* online is a simple and fast process. Compared to the choices and multiple screens facing *AOK* player the *Turbo Sliders* system is far more efficient. However, the gaming experience is also quite different in another sense as one's interaction with the other players is extremely limited. Now, obviously this is partly a function of the gameplay. In general action gameplay does not allow for much in-game communication as this would not be compatible with trying to win the game. But it is also obvious that recent action games tend to prioritize ease of access and to downplay pre-game interaction if that is even made possible by the game designers. Popular games like *Counter-Strike* (Valve, 2000) and *Battlefield 1942* for instance, use a setup quite similar to that of *Turbo Sliders*.

The limited pre-game interaction caters to a certain, rather functionalistic style of play. If getting to the actual game is considered the prime task facing players then this highly automated approach will surely do best from a usability perspective. However, making players interact may carry with it different advantages.

Pre-game interaction, community and trust

In the following, I will argue that while the *Turbo Sliders* approach solves many of the problems inherent in the *AoK* approach, it does so at the expense of the social atmosphere of the gamespace. While the *Turbo Sliders* system is high on trust, it is low on sociability, which suggests that lessons learned from game-spaces that are more open may not be unproblematic and that the issue should be given more careful consideration.

One reason why game designers may be tempted to eliminate pre-game communication is the problem of distrust between players.

The *AoK* approach clearly leaves room for strategic communication and downright subterfuge. This structural property is likely to affect a player's perception of statements (or actions) made by others. In terms of signalling, statements from *AoK* players are generally not trustworthy as players have few options to actually back up their claims. For instance, claiming to be a responsible player (e.g. one who does not suddenly leave his keyboard), claiming that one's custom made map is fair etc. may be met with scepticism as the system does not grant the player ways to support his or her claims [15].

More formally, zoologist Amots Zahavi has distinguished between *conventional signals* and *assessment signals* [19]. The former are mere statements (e.g. "I am honest"), while the latter are statements, in a broad sense, which prove themselves (e.g. spending large amounts of money as a signal of wealth). Sending trustworthy signals generally involves some cost or handicap (in terms of energy expended, time used, money spent etc.) since an uncostly signal is one that anyone can send. A common way to send such trustworthy signals is by actually limiting one's options, for instance by

having a mutually trusted third party (such as a bank) actually carry out an exchange. Another is to place oneself in a situation where breaking a promise would bring down a punishment on one's head (as when two parties sign a legally binding contract). Within the structure of the *AoK* pre-game system it is quite difficult to incur such a cost even if one is quite willing. To a large degree statements within this system cannot be backed up by clear evidence.

The opposite is true in the *Turbo Sliders* system. Here, the very process of logging on to a server can be described as an assessment signal about one's intended behaviour. Logging on to a server where all settings are essentially hard-wired means limiting one's options almost entirely and there will be little reason for players to be wary of each other as one person's actions do not seriously affect the other people's game outcomes[6].

But while trust is important in online play, we may also consider the issue in terms of community. Now, initially one might be tempted to think that players go online to *play* and not to *talk* but in fact a large majority of online gamers find communication/chat with other players to be an appealing part of online gaming [14]. And given the fact that at least some players presumably go online to play (while they could also have chosen single-player entertainment in the comfort of their homes) *because* of the social nature of the former experience, the characteristics of the social experience arguably become important. Put differently, the notion of "sociability" becomes relevant. Sociability, according to Jenny Preece [12], is the way in which a multi-user software product supports favourable social interaction – particularly such interaction as inspires the formation of community. As Preece has noted, designing for sociability is often quite different from designing for usability:

> "… many communities have joining requirements. Though still open to everyone, having to register, provide a login name and password, and then wait several hours or days for acceptance does deter less-serious and unscrupulous people from casually dropping into the community." [12]

While this process is clearly quite difficult and inefficient in terms of task-completion it may have community-beneficent side-effects. While one may design a highly efficient pre-game process it should be emphasised that stripping away requirements or possibilities for inter-player communication is not only a solution to a problem but also a trade-off between improvement on the functional level and possible negative effects on the social level.

In this light, it becomes interesting that *AoK* developers Ensemble Studios chose an approach quite similar to that of *Turbo Sliders* for their subsequent title *Age of Mythology* (see **Fig. 4**). This indicates an attempt to avoid the social problems accompanying the earlier system, but it is thought-provoking that this was achieved by eliminating the possibility, and certainly the need, for communication altogether.

For future designers of pre-game interaction systems it may be worthwhile attending to the possibility of combining the virtues of these two approaches; to support both trust and sociability. As I have argued elsewhere [15] there is nothing *inherently* impossible in raising the level of trust in a gamespace reliant on player communication.

Discussion and suggestions for further research

In 1996 Judith Donath argued that

> "…the future success of virtual communities depends on how well the tools for social interaction are designed. If they are poorly designed, the on-line world may feel like a vast concrete corporate plaza, with a few sterile benches… If the tools are well designed, the on-line world will not only be inhabited, but will be able to support a wide range of interactions and relationships, from close collaboration to casual people watching." [1]

Since then great strides have been taken in the design of social software and in research within Computer-Supported Cooperative Work. But with the possible exception of MMORPGs it is not obvious that this development has fully benefited the design of multi-player games.

Clearly, the two games discussed above differ on a host of variables other than those of the matching systems. Hence, it is not reasonable to compare the popularity of the two games to determine which approach appeals more to players in general. Nevertheless, although the initial observations made above are theoretically founded, it is important that the actual behavioural effects of various approaches

[6] This is a slightly idealized description as the earlier description of the Pro rules indicates.

to pre-game interaction be studied empirically in future work. Due to the vast number of variables which potentially influences player behaviour (genre preferences, expectations of the concrete title, online gaming experience, input devices, time since game launch etc.) such studies would most likely have to combine quantitative and qualitative methodological approaches. By doing so, such research would shed light on a much under-appreciated aspect of online game design and would help pave the way for the sharing of experience between the areas of game design and the design of social software more broadly.

Furthermore, the value placed on social interaction in gamespaces should be further investigated. It is important to examine how players value different types of interaction outside the core game and equally interesting to discover how much players agree on the relative importance of communication and core-game activities. It might well be the case that player preferences differ greatly on this issue which would make the design challenge one of catering to very different interaction styles.

Conclusions

This paper has argued that player interaction outside the core game is too important to be ignored by those involved in designing games. Pre-game interaction has a number of crucial functions, but while many of these can be automated in a way that makes the interaction flow much more streamlined such streamlining does not come without sacrifice in the form of diminished communication and sense of community.

This has been illustrated by an analysis of two radically different approaches to pre-game interaction. Whereas one invited problems related to trust the other is merely a pseudo-solution to this problem as it represents the stripping away of almost all non-game interaction between players, interaction which we know to be appealing to many players.

The design of many modern games seems to suggest that game designers concern themselves mainly about classical usability in a very limited sense. Since players also come online to interact with others, and indeed to have a social experience, such a narrow focus may have unfortunate consequences.

References

1. Donath, J. Inhabiting the Virtual City – The design of social environments for electronic communities, Massachusetts Institute of Technology, 1996.
2. Donath, J.S. Identity and deception in the virtual community. in Kollock, P.S., Marc ed. Communities in Cyberspace, Routledge, New York, 1999.
3. Dyck, J., Pinelle, D., Brown, B. and Gutwin, C., Learning from Games: HCI Design Innovations in Entertainment Software. in 2003 Conference on Graphics Interface (GI'03), (Halifax, 2003).
4. Koivisto, E.M.I., Supporting Communities in Massively Multiplayer Online Role-Playing Games by Game Design. in Level Up - Digital Games Research Conference, (Utrecht, 2003), Utrecht University.
5. Kollock, P. and Smith, M. Managing the Virtual Commons – Cooperation and Conflict in Computer Communities. in Herring, S.C. ed. Computer-Mediated Communication: Linguistic, Social, and Crosscultural Perspectives, John Benjamin, Amsterdam, 1996.
6. Koster, R. A Theory of Fun. Paraglyph Press, Scottsdale, 2005.
7. Malone, T.W., Heuristics for designing enjoyable user interfaces: Lessons from computer games. in Proceedings of the 1982 conference on Human factors in computing systems, (Gaithersburg, Maryland, 1982), ACM Press.
8. Meyerson, D., Weick, K.E. and Kramer, R.M. Swift Trust in Temporary Groups. in Kramer, R.M. and Tyler, T.R. eds. Trust in Organizations - Frontiers of Theory and Research, SAGE Publications, London, 1996.
9. Olson, M. The Logic of Collective Action - Public Goods and the Theory of Groups. Harvard University Press, London, 1971.
10. Ostrom, E. Governing the Commons – The Evolution of Institutions for Collective Action. Cambridge University Press, New York, 1990.
11. Pausch, R., Xerox, R.G., Skelly, T. and Thiel, D., What HCI Designers Can Learn From Video Game Designers (in Conference Companion). in CHI '94, (Boston, 1994).
12. Preece, J. Online Communities - Designing Usability, Supporting Sociability. John Wiley & Sons, Ltd., New York, 2000.
13. Salen, K. and Zimmerman, E. Rules of Play - Game Design Fundamentals. MIT Press, London, 2004.
14. Smith, J.H. Avatars you can trust - A survey on the issue of trust and communication in MMORPGs, www.game-research.com, 2003.
15. Smith, J.H. The games economists play - implications of economic game theory for the study of computer games. In review.

16. Smith, J.H., Playing Dirty - Understanding Conflicts in Multiplayer Games. in 5th annual conference of The Association of Internet Researchers, (The University of Sussex, 2004).
17. Smith, M.A. and Kollock, P. Communities in Cyberspace. in Smith, M.A. and Kollock, P. eds. Communities in Cyberspace, Routledge, London, 1999.
18. Zahavi, A. The cost of Honesty (Further Remarks on the Handicap Principle). Journal of Theoretical Biology, 67. 603-605.
19. Zahavi, A. and Zahavi, A. The Handicap Principle: A Missing Piece of Darwin's Puzzle. Oxford University Press, 1999.