University of Wollongong
Research Online

University of Wollongong in Dubai - Papers

University of Wollongong in Dubai

2008

Understanding the virtual community of gamers

Shafiz Mohd Affendi
University of Wollongong, shafiz@uow.edu.au

Publication Details

Mohd Affendi, S. 2008, 'Understanding the virtual community of gamers', in M. Manuela. Cruz-Cunha & G. D.. Putnik (eds), Encyclopedia of Networked and Virtual Organizations, Information Science Reference, Hershey, Pennsyavania. pp. 1714

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

*In M.Cunha & Putnik, **Encyclopedia of Networked and Virtual Organizations**, New York: Information Science Reference (forthcoming).*

Understanding Virtual Community of Gamers: The Quest for Power in the Social World of EverQuest

Shafiz Affendi Mohd Yusof
Department of Information Systems
College of Arts and Sciences
Universiti Utara Malaysia
shafiz@uum.edu.my

1.0 Introduction: The Virtual Community of Gamers

Virtual community can be defined as "a group of people who may or may not meet one another face-to-face, and who exchange words and ideas through the mediation of computer bulletin boards and networks" (Rheingold, 1993, p.1). With the use of CMC technologies such as listservs, bulletin boards, discussion forums, and chat rooms, the time zone differences become less critical and geographical distance and limitations diminish.

A virtual community is primarily a social entity where people relate to one another by the use of a specific technology (Rheingold, 1993; Jones, 1995; Schuler, 1996). As emphasized by Wood & Smith (2001), "people who use CMC technologies and people who study them are increasingly aware that the Internet is fostering relationships not just between two individuals but among many, many more people" (p.109). People can also form a 'close-knit' relationship (Hiltz & Wellman, 1997), though they are relatively more disperse as people can come from any parts of the world. The closeness or proximity in virtual community is a result of the social interactions that occur between the members. It is further suggested that the members of a virtual community are more heterogeneous in their characteristics and homogeneous in their attitudes (Hiltz and Wellman, 1997). Stolterman, Agren, and Croon (1999) refers to virtual community as a new social 'life forms' surfacing from the Internet and CMC in which individuals and groups seek social support (Walther & Boyd, 1997).

This chapter aims to present the social world of virtual gamers in EverQuest (EQ) using 'institutional' theoretical perspective. First, this paper begins with an overview of the phenomenon of virtual communities. Then, I will describe the background of online gamers by offering the historical-social analysis of EQ and the studies that have examined EQ as a context. Additionally, I will define the concept of community and virtual community, and then present the several types of virtual communities. The subsequent section of this chapter consists of a discussion from the perspectives of 'new institutional theory' as the main theoretical lens in this type of study. Subsequently, I will present a brief overview of potential future work on virtual community in general and online gamers in specific. Lastly, I will conclude the paper with some implications.

2.0 Background

2.1 EverQuest as a Virtual Gaming Community

The virtual community of gamers environment to be looked at is EQ. EQ is the world's largest premier three-dimensional (3D) MMORPG. It is a game that attracts an estimated 400,000 players online each day from around the globe and, at peak times, more than 100,000 players will be playing EQ simultaneously. The game's players interact with each other inside and outside the game for game playing, game-related and non-game-related interactions, and for buying and selling game-related goods. EQ, as a game, is characterized by well-defined social structures, roles, interaction rules, and power relations. EQ, as a virtual community, encompasses all of the different kinds of virtual community (see section 3.1). EQ is a virtual community of relationship, a virtual community of place, a virtual community of memory, a virtual community of fantasy, a virtual community of mind/interest, a virtual community of memory, and a virtual community of transaction.

The social world of EQ does not only comprise of hundreds of thousands of people playing the game but it also consists of people who are participating in social activities outside the game. It is also a busy crowded world. These people are players of the game, they interact between each other inside and outside the game for casual interactions. This has led to the spawning of online and outside of game social activity that is conducted through official and unofficial websites which serve as markets where goods and money are exchange, where guilds are formed, and where informal social interactions takes place. This is also where players seek information about the game in terms of latest news, updates, tactics, shortcuts, and strategies.

EQ is a worldwide leader in massively multiplayer online games, and it is North America's biggest massively multiplayer online game. Since its launch in 1999, EQ and its expansions[1] have sold over 2.5 million copies worldwide. It continues to be one of the gaming industry's biggest and most influential titles (Radd, 2004) and it has been translated into seven languages. EQ is one of the largest and most dynamic online fantasy worlds ever created (Stratics, 2004). I chose to study EQ because of the incredible popularity of online gaming, which has numerous economic and societal implications.

Verant Interactive, an independent online gaming development studio that emerged from 989 Studios (formerly Sony Interactive Studios), began developing EQ in 1996. It was debuted on March 16, 1999 by Sony Online Entertainment, and has received numerous awards since its debut from such organizations as Entertainment Weekly (Top Ten Hall of Fame), Electric Games (1999 Online Game of the Year), Computer Games Online (Best Online Game of 1999), and Gamespot (Game of the Year for 1999). EQ allows players to create their own specialized characters by selecting from multiple races, classes, skills, physical appearances, and names. With 7 enormous continents and hundreds of death-defying zones to discover, the fantasy world of Norrath allows players to embark on exciting journeys.

Not only is the social world[2] of EQ comprised of the hundreds of thousands of people playing the game, but it also consists of people who participate in social activities

---

[1] There are altogether ten expansions of EQ since its debut in March 16th, 1999.

[2] I define the social world of EQ as the social milieu existing both in-the game and outside-the game.

outside the game. Game players interact with each other inside the game as they play the game, and they interact outside the game in numerous in-game and out-of-game social activities conducted through official[3] and unofficial[4] websites. These websites serve a number of functions in the social world of EQ. They are markets where goods are bought and sold, where guilds are formed, and where informal social interactions take place. These sites are also resources where players seek information about the game in terms of the latest news, updates, tactics, shortcuts, and strategies.

2.2 Research in Virtual Community

Over the past years, research in virtual community have grown and intensified. Moreover, with the expansion of computer-mediated communication (CMC), these technologies provide a platform and new ways for global society to meet, communicate, collaborate, socialize, and shop (Turoff, 1991; Burnett, 2000). Much of these works involve case studies, ethnographic studies, or personal interviews with community participants where researcher's content analyzed textual documents from the context.

For example, an interesting case study conducted by Radin (2001) looked at the issue of social capital and transformations of trust in breast cancer website. Radin found that there was a three-stage process in which (1) newcomers "lurk" in an environment that is rich with breast cancer information and observed the community at their leisure; (2) participants are offered several ways to share personal disclosures, thus building mutual trust; and (3) a variety of shared activities, both virtual and face-to-face helped to build trust. This study showed that these three stages are sequential in helping some participants to increase their trust levels. Furthermore, Ridings (2000) conducted a study using philosophical inquiry method to describe the role of computer networking in fostering electronic determinants of trust and its use in virtual communities. His study emphasized that trust has two dimensions, not three as had been found in some other settings. Trust was composed of trust in abilities and trust in integrity. These two studies seem to be important because institutional change and transformation rely on social movement and coalition building, which rely on the interface of trust for those pushing for change.

Other studies such as Wall (1999) conducted a comparative case study to understand how sense of community is created, perceived, and maintained by the membership of several synchronous on-line communities. Rosenblum (1998) carried out an ethnomethodology study to describe the ways four couples maintained their relationships primarily through online communication in synchronous Internet environments. By understanding the concept of sense of community and its impact on the relationship of online community members, the study provides insights on the underlying mechanisms that are involved in developing, stabilizing, and changing of institutions.

Furthermore, there are several other studies such as from Wick (1997) who examined the discourse of electronic mail listserv and Campbell (1995) who used an interpretive essay to examine how the replacement of face-to-face interaction by virtual communities modified the established social structures. These findings explained the ways members interact with each other and the influence of power on the interactions based on the two different social structures. In addition, it would be interesting to observe

[3] An official website is one sponsored by the game's owner -- Sony.
[4] An unofficial website is not sponsored by the game's owner.

the role played by the moderators in implementing rules and regulations to maintain social order in virtual communities, which are not investigated in these studies.

2.2.1 Types of Virtual Community

Borrowing from the work of Robert Bellah (1986) in his book titled "Habits of the Heart," Kowch and Schwier (1997) introduced the notion of that there are four types of virtual community with concomitant purposes such as: 1) virtual community of relationship; 2) virtual community of place; 3) virtual community of mind; and 4) virtual community of memory. In the same year, Hagel and Armstrong (1997) classified virtual community by basic human needs into four types: 1) virtual community of interest which is similar to the virtual community of mind; 2) virtual community of relationship which is similar to the virtual community of relationship; 3) virtual community of fantasy; and 4) virtual community of transaction. Therefore, based on the two ideas above, I propose six types of virtual community: 1) virtual community of relationship; 2) virtual community of place; 3) virtual community of fantasy; 4) virtual community of mind or interest; 5) virtual community of memory; and 6) virtual community of transaction (see Table 1.0).

The first is the *virtual community of relationship* is a community built on relationships that promote special kinds of connections among people. These connections might be based on a shared concern, issue or learning problem with an emphasis on the relationships built among participants. For example, the emergence of support groups for women on the World Wide Web can be seen as this type. Women have developed web sites for dealing with abuse, single parenting and harassment in the workplace.

The second is the *virtual community of place* where it represents and relates to an actual physical place that exists in this world. It could be a country, a city, a town, a village, a university, or a building. In a similar vein, the third category is the *virtual community of fantasy* where individuals enjoy a common habitat or locale. Both the second and third types of virtual community can offer a place to share with others the sense of security, commonality, and heritage. People from all over the world can gather in one virtual place on the Internet. An example of a virtual community of place is 'Syracuse', an official website of the city of Syracuse. At the site, people could find information regarding the city tourist attractions and many more. While a virtual community of fantasy is 'Age of Empires', a computer-based network game, in which participants meet in a virtual location and exploit it in a competition.

The fourth is the *virtual community of mind/interest* as it reinforces people's commitment to other people, common goals, shared values and shared conceptions of being and doing. Examples of a virtual community of mind are often found in academic communities, where researchers come together to grapple with a shared research issue or problem.

The fifth is *virtual community of memory* which is based on a shared past or a common sense of history. This community connects people who might otherwise be alone, and also provides a focal point for interpreting and understanding commonly experienced events. A very powerful example of this is found with the Holocaust survivors' network on the Internet. Survivors and descendants of survivors can engage in discourse with others whose lives have been touched by this tragedy.

The sixth is the *virtual community of transaction,* which primarily facilitates the buying and selling of products and services, and deliver information related to those

transactions. Participants are encouraged to interact with one another in order to engage in a specific transaction that can be informed by the input of other members of the community. Visitors to this community may want to buy used car or golf equipment or they may want to consult with other community members before doing so.

Table 1.0: A Summary of the Types of Virtual Communities

Types of Virtual Community	Purpose	Examples
1.Relationship	To builds a community based on relationships that support special kinds of bonds or associations among people	People from all ages, man and woman come together to establish friendship and relationship through a social platform called 'Friendster.'
2. Fantasy	To benefit from a common habitat or locale where people from all over the world can gather in one virtual place on the Internet. In this respect, it offers people a sense of security, commonality, and heritage	'Everquest,' a computer-based network game, in which participants meet in a virtual location and exploit it in a competition.
3. Place	To represent and relate to an actual physical place that exists in this world. People can create their meeting place remotely in which the place differs geographically as well as in time zones	An example of a virtual community of place is Syracuse, an official Web site of the city of Syracuse. At the site, people could find information regarding the city tourist attractions and much more. It could be a country, a city, a town, a village, a university, or a building.
4. Mind & Interest	To share similar interest and value by reinforcing people's commitment to other people, have common goals, shared values, and shared conceptions of being and doing	Scientific academic communities, where researchers come together to grapple with a shared research issue or problem.
5. Memory	To *s*hare past or historical events together where people has common sense of belonging	Tsunami survivors
6. Transaction	To facilitate buying and selling of products and services and deliver information related to those transactions	People engaged in e-commerce with vendor such as 'eBay,' they can purchase products and services virtually. Consumers can also learn about the behavior of the sellers through the information they obtained related to those transactions.

The studies of Yee (2001) and Jakobsson & Taylor (2003) have focused on EQ as a context. Yee is an undergraduate at Haverford College and he has looked at aspects such as motivational factors, building relationships, dynamics between players, gender issues, addiction, demographics and characters. The research method taken by Yee was a survey and the analysis was done statistically. Another study done by Jakobsson &

Taylor (2003), observed how players form their social networks while playing the game. To date, studies in general online gaming have examined many issues such as addiction (Yee, 2001; Danforth, no date), aggression (Griffith, 1999), depression (Young & Rodgers, 1998), archetype and cultural values (Lai, 2003), gender issues (Gilmore, 1999; Cassell & Jenkins, 1999), and empowerment (Flanagan, 1999). Lee and Tiedens (2001) assert that power, as a concept has not been fully defined in the various literatures such as sociology, psychology, economics, and many more fields, but not extensively and adequately in the virtual community literature.

Currently there are hundreds of these online games in the market and hundreds more still in testing and development phase. The impact of these games has made social researchers question the potential of the games towards people behaviors and attitudes. This is because the majority of the research is still inadequate and inconclusive after years and years of intermittent study has only focused on the potential negative aspects of game play, primarily those relating to aggression and violence. According to Griffiths, Davies, and Chappell, for Internet-based games, there is even less research on even the most basic aspects of online gaming (2003, p.90). As Williams (2003) proposed,

> "*the main limitations in the research have been a reliance on older theories developed for passive media and studying populations that are not always representative. These may explain in part why the field has produced inconsistent findings regarding the negative effects of game play."*

3.0 Perspective: Applying New Institutional Theory

In this chapter, the theoretical lens that I will be using is derived from a sociological approach which is called the 'New Institutional Theory.' By applying the lens to the online gaming environment, this institutional approach looks at the social processes. I will examine the rules, regulations, norms, and conventions that have effects on the gamers' social behaviors. As illustrated by DiMaggio and Powell (1991), they emphasize that the new institutional approach as "…the ways in which action is structured and order made possible by shared systems of rules that both constraint the inclination and capacity of actors to optimize as well as privilege some groups whose interests are secured by prevailing rewards and sanctions" (p.11).

It is useful tot note that the new institutional theory combines the constraints and enabler faced by social actors in organizations. As an approach to the study of organizations as social worlds, new institutional theory has proven powerful in describing how institutions affect the actors and vice versa. The new institutionalism theory enables us to: 1) acknowledge the fact that reality is socially constructed, 2) acknowledge the fact of institutional priors, 3) acknowledge that the actor is capable of rational and improvise actions not as slave, 4) look at the role played by incentives and sanctions in regulating social behavior, and 5) proof the usefulness in the study of the formation, stabilization, and transformation of institutions. Institutional priors relate to the culture that an individual has in them. An individual is not free to act as they want because they are constraint with prior structures. An individual has the choice to maintain institutions, in which he or she may choose to change institutions or may choose to destroy it. According to Friedland and Alford (1991), "…individuals do not approach the world in an

instrumentally naïve way, but rather learn routines, that their individual strategies and behaviors contain within them certain institutional priors" (p.251).

The strength of this new institutional theory lies in its explanation of stability in social structures and social order. The theory has implications for actions because it relates to the ways existing institutions affect the ability of actors to act. Primarily, the theory of new institutional explicates the concept of structure and action at length. As Fligstein (1999) illustrates, "new institutional theories are concerned with how fields of action come into existence, remain stable, and can be transformed" (p.6). The word 'fields' is referred to conditions where organized groups of actors get together and structure their actions with one another (Fligstein, 1999). The actors' goal is ultimately to produce stable patterns of interaction within an institution. This is because the process of building an institution takes place when powerful actors attempt to create rules of interaction in order to stabilize their situation with other powerful and less powerful actors. This process also transpires when actors face some type of controversial social interactions or when they struggle for scarce resources within actors at different levels of power.

In addition, the new institutional theory does place a high emphasis on structure and action. However, this theory generally neglects the existence of institutions, the evolution of structures, and the creation of a constitutional social world. Due to this limitation, the theory fails to adequately explain the notions of power, interest, contests, competition, struggle, and actors itself. This is because the former institutional theories have looked at issues that are only concerned with the stabilization of institutions; hence the new institutional theory aims at explaining other phenomena and concepts.

Fligstein (1999) further emphasizes, "…most versions of new institutional theory in sociology lack a real theory of interaction and power, and have no way to make sense of how institutions emerge in the first place" (p.12). The actors are often viewed as being unconscious of institutions and acting generally out of habit and structure their interactions by using readily available scripts that comes from governments or professionals (Fligstein, 1999). Based on this illustration, it is more useful to use a combination of the former and new institutional theory in order to get a more holistic understanding of the social phenomenon in EQ.

3.1 Issues: Why study power?

Through several decades, social researchers have studied and examined power significantly. Power is an essential concept that describes the process of constructing human relationships and the dynamics of their social behaviors. This concept has been studied in many fields of social science such as sociology, psychology, organizational, anthropology, political science, communication, and many more.

To underline the importance, Fligstein has made the argument that power is very important in building institutions especially in the formative stages of institutions. He also affirmed that actors must possess power to structure and stabilize interactions in order to produce rules. But, Fligstein did not define what power really means in his discussion using the new institutional theory. The key question is why would one want to have power? In life, people seek and acquire power because it allows people to accomplish something. It is the capacity to decide upon and carry out a course of action related to one's growth and development even in situations where resistance occurs.

Raven (1992) describes reasons like need for dominance, for status, role requirements, desire to adhere to social norms, concern for image, and desire for attaining extrinsic goals. A philosopher, Bertrand Russell writes, "of the infinite desires of man, the chief are the desires for power and glory" (p.11).

Power is a universal and complex phenomenon (Dye, 1975; Sillince & Mouakket, 1997), which is reflected, in virtually all forms of human interaction. Power is intimately related to many other key concepts and ideas in the social sciences such as personality, behavior, aggression, role, authority, control, benefit, culture, change, institution, ideology, and many more (Dye, 1975). There are many definitions and perspectives of power. Power is defined as the ability to get someone to do something against his or her will (Dahl, 1957). Sillince and Mouakket (1997) argued that power can be seen from five perspectives in the development of information systems: 1) zero sum power; 2) processual power; 3) organizational power; 4) structurally constrained power; and 5) socially shaped power.

4.0 Future Trends

In the context of EQ, I believe that the processual power and structurally constrained power are two useful concepts to explain the encompassing phenomenon of power in virtual communities. The 'processual view' of power is concerned with power as social relationships rather than an attribute of a person (Sillince & Mouakket, 1997). With this understanding of social behaviors in the online gaming environment in the quest of power, it is anticipated that there are several potential future empirical research works that can be examined on the growing phenomenon of online gamers as a virtual community. For example, this chapter describes the sociological aspects of power where the concentration is not only on individuals, but also on the relationships within the social environment of EQ. It is thus suggested that future studies can look further into the concept of power and its impact on the social relationships as well as the formation of social capital and knowledge sharing in virtual communities.

Another aspect of this research area is to examine how people react towards the governance structure and the institutionalization process of power within the social world of EQ. The institutionalization issue is closely related to the structurally constrained view of power. Sillince and Mouakket (1997) state that this views of power "is concerned with how the goals and assumptions of the powerful or the powerless operate at a super-organizational level" (p.372). It is important to look at this level in order to describe and understand some of the structural influences on behavior within organizations, including class perceptions and ideologies (Willmott, 1987 cited in Sillince & Mouakket, 1997). Although the above mentioned scholars looked at the behaviors within the organizational setting, it could also be applied to the communal settings such as virtual community. In essence, for future empirical work, researchers can explore and provide rich descriptions on the interaction between the technological and social world of online gaming to better explain the social stability and changes that occur in the online gaming context.

5.0 Implications and Conclusions

The emergence of online game has enabled hundreds or thousands of players to simultaneously interact in a game world. People (players) are simply connected and interacted via the Internet. However, this 'social world' phenomenon of online gaming is

still under research. Very limited studies have attempted to understand the primary rationale as to what extend the technological aspects of the online gaming has developed and stabilized, and why and how people interact, and establish social structures online. Primarily, the role of power, a neglected area in online game research is generally the critical aspects to understand in the technological and sociological construction of the game world. In a nutshell, in order to examine and further explore the online gamers' phenomenon, several issues can be addressed such as:

(1) How online gamers of virtual communities started out and get stabilized?
(2) What are the rules and regulations developed in order to institutionalize the social relationships? And how and who develops the rules and regulations?
(3) How do online gamers construct their social relationships in order to form a community that is virtually established?

Bibliography

Bellah, R.N. (1985). *Habits of the heart: Individualism and commitment in American life*. New York: Harper Collins.

Bellah, R.N., Madsen, R., Sullivan, W.M., Swidler, A. & Tipson, S.M.(1996). Habits of the heart: Individualism and commitment in American life. Berkeley, CA: University of California Press.

Burnett, G. (2000). Information exchange in virtual communities: A typology. *Information Research*, 5(4). [On-line]. Available: http://www.shef.ac.uk/~is/publications/infres/paper82.html.

DiMaggio, P. (1986). Structural Analysis of Organizational Fields: A Blockmodel Approach. In Staw, B. M and Cummings, L. L. (Eds.) *Research in Organizational Behavior*. Greenwich, Connecticut: JAL Press. 8, p. 335-370.

DiMaggio, P. (1988). Interest and Agency in Institutional Theory. In Zucker, L. G. (Ed.) *Institutional Patterns and Organizations: Culture and Environment*. Cambridge, MA: Ballinger Publishing Company, p. 3-21.

DiMaggio, P. (1991). Constructing an Organizational Field as a Professional Project: U.S. Art Museums, 1920-1940. In Powell, W. W. and DiMaggio, P. (Eds.) *The NewInstitutionalism in Organizational Analysis*. Chicago: The University of Chicago Press, p. 267-292.

DiMaggio, P. J. (1998). The new institutionalisms: Avenue for collaborations. *Journal of Institutional and Theoretical Economics*, 696-697.

DiMaggio, P. J. and Powell, W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*. 48, p.147-160.

DiMaggio, P. J. and Powell, W. (1991a). Introduction. In Powell, W. W. and DiMaggio, P. (Eds.) *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press, p. 1-40.

DiMaggio, P. J. and Powell, W. (1991b). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. In Powell, W. W. and DiMaggio, P. (Eds.) *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press, p. 63-82.

Dyer, W.G. & Wilkins, A.L. (1991). Better Stories, Not Better Constructs, To Generate Better Theory: A Rejoinder To Eisenhardt. *Academy of Management Review*,16. (3), 613-619.

Fligstein, N. (1997). Social Skill and Institutional theory. *American Behavioral Scientist*. 40 (4), p. 397-405.

Fligstein, N. (1998). Markets as politics: A political-cultural approach to market institutions, American Sociological Review, 656-673.

Friedland, R. and Alford, R. R. (1991). Brining Society Back In: Symbols, Practices, and Institutional Contradictions. In Powell, W. W. and DiMaggio, P. (Eds.) *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press, p. 232-263.

Garton, L., & Wellman, B. (1995). Social impacts of electronic mail in organizations: A review of the research literature. *Communication Yearbook*, *18*, 434-53

George, A. (1979). Case Studies and Theory Development: The Method of Structured, Focused Comparison. In G.Paul, (ed.), *Diplomacy: New Approaches in History, Theory, and Policy*, Lauren, NY: Free Press.

Griffiths, M. D., Davies, M. N., & Chappell, D. (2003). Breaking the Stereotype: The Case of Online Gaming. *CyberPsychology & Behavior, 6*(1), p. 81-91.

Hagel, J., and Armstrong, A. G. (1997). *Net gain: expanding markets through virtual communities*, Boston, MA: Harvard Business School Press.

Hillery, G.A. (1955). Definitions of community: Areas of agreement. Rural Sociology, 20.

Hiltz, S.R., & Wellman, B. (1997). Asynchronous Learning Networks as Virtual Communities. *Communications of the ACM*, p.44-49.

Hirsch, P. M. (1972). Processing Fads and Fashions: An Organization-Set Analysis of Cultural Industry Systems. *American Journal of Sociology*. 77, p. 639-659.

Hirsch, P. M. (1975). Organizational Effectiveness and the Institutional Environment. *Administrative Science Quarterly*. 20, p. 327-344.

Hirsch, P. M. (1997). Review Essay. Sociology Without Social Structure: Neoinstitutional Theory Meets Brave New World, *American Journal of Sociology*, 102 (6), p. 1702-23.

Hirsch, P. M. and Lounsbury, M. (1997). Ending the Family Quarrel. *American Behavioral Scientist*. 40 (4), p. 406-418.

Howard, R. (1993). *The Virtual Community: Homesteading on the Electronic Frontier.* Revised edition**.** MIT Press.

Jacobsson, M., & Taylor, T.L. (2003). *The Sapronos meets Everquest: Social networking in massively multiplayer online games.* Paper Presented at the MelbourneDAC, The 5th International Digital Arts and Cultural Conference.

Jepperson, R. L. (1991). Institutions, Institutional Effects, and Institutionalization. In Powell, W. W. and DiMaggio, P. (Eds.) *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press, p. 143-163.

Jones, S. (Ed.) (1995a). *Cybersociety: Computer-mediated communication and community*. Thousand Oaks: Sage.

Jones, S. (1995b). Understanding community in the information age. In S. Jones (Ed.) *Cybersociety: Computer-mediated communication and community* (pp. 10-35). Thousand Oaks: Sage.

Kaplan, B. and Maxwell, J.A. (1994). Qualitative Research Methods for Evaluating Computer Information Systems, In J.G. Anderson, C.E. Aydin and S.J. Jay (Eds.), *Evaluating Health Care Information Systems: Methods and Applications,* , Sage, Thousand Oaks, CA, pp. 45-68.

Kling, R. (1989). Social Analyses of Computing: Theoretical Orientations in Recent empirical Research, pp. 504-518 in *Perspectives on the Computer Revohttiorc* (2nd ed).. Zenon Pylyslayn and Liam Bannon (ed.) Norwood, NJ.: Ablex Publishing Co.

Kling, R., & Lamb, R. (1996). *Bits of Cities: Utopian Visions and Social Power in Placed-Based and Electronic Communities*. CSI Working Paper.

Kowch, E., & Schwier, R. (1997). Building learning communities with technology. Paper presented at the *National Congress on Rural Education.* Saskatoon, Saskatchewan, Canada, February 21, 1997. EDRS # ED408 857.

Lee, A. S. (1991). Integrating Positivist and Interpretive Approaches to Organizational Research, *Organization Science* (2) 4, 342-365.

Micheals, K. (2004). EverQuest Celebrates its Fifth Year. *Gaming Horizon*. [Online]. Available: http://news.gaminghorizon.com/media/1079403786.html

Munch, R. & Smelser, N. (eds.) (1992). Theory of Culture. Berkeley and Los Angeles: University of California Press.

Myers, M. D. (1997) Qualitative Research in Information Systems. *MISQ Discovery*, 2, http://www.misq.org/discovery/

Nelson, L., Ramsey, C. E., & Verner, C. (1960). *Community structure and change*. New York: The Macmillan Co.

Powell, W. (1991). "Expanding the Scope of Institutional Analysis." In Powell, W. W. and DiMaggio, P. (eds.) *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press. p. 183-203.

Powell, W. and DiMaggio, P. (1991). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields, In W. Powell and P. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis*, University of Chicago Press: Chicago, p. 63-82.

Rheingold, H. (1992). *A Slice of Life in my Virtual Community*, URL: gopher://gopher.well.sf.ca.us/00/Community/virtual_communities92

Rheingold, H. (1993) *Virtual Communities*, Secker & Warburg, London

Rothaermel, F. T., and Sugiyama, S. (2001). Virtual internet communities and commercial success: individual and community-level theory grounded in the atypical case of TimeZone.com, *Journal of Management*, 27 (3), p. 297-312.

Rosen, P. (1993). The social construction of mountain bikes: Technology and postmodernity in the cicle industry. *Social Studies of Science*, 23, 479-513.

Russell, S. (1986). The social construction of artifacts: A response to Pinch and Bijker. *Social Studies of Science*, 16, 331-346.

Sanders, I. T. (1975). *The Community*. New York: John Wiley and Sons.

Schuler, D. (1996). *New community networks- wired for change*. New York: Addison-Wesley.

Scott, W R. (1987). The Adolescence of Institutional Theory. *Administrative Science Quarterly*. Vol.32, No.4: 493-511.

Scott, W R. (1991). Unpacking Institutional Arguments. In Powell, W. W. and DiMaggio, P. (eds.) *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press. p.164-182.

Scott, W R. (1994a). Institutions and Organizations: Toward a Theoretical Synthesis. In Scott, W. R. and Meyer, J. W. (Eds.) *Institutional Environments and Organizations: Structural Complexity and Individualism*. Thousand Oaks, CA: Sage Publications. p. 55- 80.

Scott, W R. (1995). *Institutions and Organizations*. Thousand Oaks, CA: Sage Publications.

Scott, W. R. and Meyer, J. M. (1991). The Organization of Societal Sectors: Propositions and Early Evidence. In Powell, W. W. and DiMaggio, P. (Eds.) *The New Institutionalismin Organizational Analysis*. Chicago: The University of Chicago Press: 108-140.

Smith, M. A., (1996) *Voices from the WELL: The Logic of the Virtual commons*. Available: http://www.sscnet.ucla.edu/soc/csoc/virtcomm.htm

Smith, M., & Kollock, P. (1997). *Communities in cyberspace: Perspectives on new forms of social organizations*. Los Angeles: University of California Press.

Sproull, L. & Kiesler, S. (1986). Reducing social context cues: Electronic mail in organizational communication. *Management Science*, 32 (11), p. 1492-1512.

Stolterman, E., Agren, P-O., & Croon, A. (1999). *Virtual communities: Why and how are they studied*. (http://www.vircom.com/virtualcommunities.html)

Stratics. (2004). *Sony Online Entertainment's EverQuest Celebrates its Fifth Year and Over 2.5 Million Units Sold Worldwide.* [Online]. Available: http://eq.stratics.com/content/contest/eq_5years.php

Sudweeks, F. & Rafaeli, S. (1995) How do you get a hundred strangers to agree? Computer-mediated communication and collaboration. In Harrison, T.M. & Stephen, T.D. (Eds.) *Computer networking and scholarship in the 21st century university* (pp. 115-136). New York: SUNY Press.

Taylor, R. S. (1986). Value Added Processes in Information Systems. Norwood, NJ: Ablex Publishing Corporation.

Turkle, S. (1996) "*Virtuality and its Discontents: Searching for Community in Cyberspace*" The American Prospect, 24, p. 50-57. Available: http://epn.org/prospect/24/24turk.html)

Valtersson, M. (1996). Virtual Communities. Masters Thesis, Department of Informatics, UMEA University, Sweden. [On-line]. Available: http://www.informatik.umu.se/nlrg/valter.html.

Williams, D. (2002). Structure and Competition in the U.S. Home Video Game Industry. *The International Journal on Media Management, 4*(1), 41-54.

Williams, D. (2003). The Video Game Lightning Rod. *Information, Communication & Society*.

Wood, A.F. & Smith, M.J. (2001). *Online Communication: Linking Technology, Identity, and Culture*. Mahwah, NJ: Erlbaum.

Zucker, L. G. (1977). The Role of Institutionalization in Cultural Persistence. *American Sociological Review*. 42, p. 726-743.

Zucker, L. G. (1987). Institutional Theories of Organization. *Annual Review of Sociology*. 13, p. 443-464.

Zucker, L. G. (1989). Combining Institutional Theory and Population Ecology: No Legitimacy, No History. *American Sociological Review*. 54 (4), p. 542-545.

Zucker, L. G. (1991). The Role of Institutionalization in Cultural Persistence. In Powell, W. W. and DiMaggio, P. (Eds.) *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press, p. 83-106.