Chapter IV
Increasing Capital Revenue in Social Networking Communities:
Building Social and Economic Relationships through Avatars and Characters

ABSTRACT

The rise of online communities in Internet environments has set in motion an unprecedented shift in power from vendors of goods and services to the customers who buy them, with those vendors who understand this transfer of power and choose to capitalize on it by organizing online communities and being richly rewarded with both peerless customer loyalty and impressive economic returns. A type of online community, the virtual world, could radically alter the way people work, learn, grow consume, and entertain. Understanding the exchange of social and economic capital in online communities could involve looking at what causes actors to spend their resources on improving someone else's reputation. Actors' reputations may affect others' willingness to trade with them or give them gifts. Investigating online communities reveals a large number of different characters and associated avatars. When an actor looks at another's avatar they will evaluate them and make decisions that are crucial to creating interaction between customers and vendors in virtual worlds based on the exchange of goods and services. This chapter utilizes the ecological cognition framework to understand transactions, characters and avatars in virtual worlds and investigates the exchange of capital in a bulletin board and virtual. The chapter finds strong evidence for the existence of characters and stereotypes based on the ecological cognition framework and empirical evidence that actors using avatars with antisocial connotations are more likely to have a lower return on investment and be rated less positively than those with more sophisticated appearing avatars.

INTRODUCTION

The rise of online communities has set in motion an unprecedented power shift from goods and services vendors to customers according to Armstrong and Hagel (1997). Vendors who understand this power transfer and choose to capitalize on it are richly rewarded with both peerless customer loyalty and impressive economic returns they argue. In contemporary business discourse, online community is no longer seen as an impediment to online commerce, nor is it considered just a useful Web site add-on or a synonym for interactive marketing strategies. Rather, online communities are frequently central to the commercial development of the Internet, and to the imagined future of narrowcasting and mass customization in the wider world of marketing and advertising (Werry, 2001). According to Bressler and Grantham (2000), online communities offer vendors an unparalleled opportunity to really get to know their customers and to offer customized goods and services in a cost executive way and it is this recognition of an individual's needs that creates lasting customer loyalty. However, if as argued by Bishop (2007a) that needs, which he defines as pre-existing goals, are not the only cognitive element that affects an actor's behavior, then vendors that want to use online communities to reach their customers will benefit from taking account of the knowledge, skills and social networks of their customers as well.

According to Bishop (2003) it is possible to effectively create an online community at a click of a button as tools such as Yahoo! Groups and MSN Communities allow the casual Internet user to create a space on the Net for people to talk about a specific topic or Interest. Authors such as Bishop have defined online communities based on the forms they take. These forms range from special interest discussion Web sites to instant messaging groups. A social definition could include the requirement that an information system's users go through the membership lifecycle identified by Kim (2000). Kim's lifecycle proposed that individual online community members would enter each community as visitors, or "Lurkers." After breaking through a barrier they would become "Novices," and settle in to community life. If they regularly post content, they become "Regulars." Next, they become "Leaders," and if they serve in the community for a considerable amount of time, they become "Elders." Primary online community genres based on this definition are easily identified by the technology platforms on which they are based. Using this definition, it is possible to see the personal homepage as an online community since users must go through the membership lifecycle in order to post messages to a 'guestbook' or join a 'Circle of Friends'. The Circle of Friends method of networking, developed as part of the VECC Project (see Bishop, 2002) has been embedded in social networking sites, some of which meet the above definition of an online community. One of the most popular genres of online community is the bulletin board, also known as a message board. According to Kim (2000), a message board is one of the most familiar genres of online gathering place, which is asynchronous, meaning people do not have to be in the same place at the same time to have a conversation. An alternative to the message board is the e-mail list, which is the easiest kind of online gathering place to create, maintain and in which to participate (ibid). Another genre of online community that facilitates discussion is the Chat Group, where people can chat synchronously, communicating in the same place at the same time (Figallo, 1998). Two relatively new types of online community are the Weblog and the Wiki. Weblogs, or blogs are Web sites that comprise hyperlinks to articles, news releases, discussions and comments that vary in length and are presented in chronological order (Lindahl & Blount, 2003). The community element of this technology commences when the owner, referred to as a 'blogger', invites others to comment on what he/she has written. A Wiki, which is so named

Table 1. Advantages and disadvantages of specific online community genres

Genre	Advantages/Disadvantages
Personal Homepage	Advantages: Regularly updated, allows people to re-connect by leaving messages and joining circle of friends Disadvantage: Members often need to re-register for each site and cannot usually take their 'Circle of Friends' with them.
Message Boards	Advantages: Posts can be accessed at any time. Easy to ignore undesirable content. Disadvantages: Threads can be very long and reading them time consuming
E-mail Lists and Newsletters	Advantages: Allows a user to receive a message as soon as it is sent Disadvantages: Message archives not always accessible.
Chat Groups	Advantages: Synchronous. Users can communicate in real time. Disadvantages: Posts can be sent simultaneously and the user can become lost in the conversation.
Virtual Worlds and Simulations	Advantages: 3-D metaphors enable heightened community involvement Disadvantages: Requires certain hardware and software that not all users have
Weblogs and Directories	Advantages: Easily updated, regular content Disadvantages: Members cannot start topics, only respond to them
Wikis and Hypertext Fiction	Advantages: Can allow for collaborative work on literary projects Disadvantages: Can bring out the worst in people, for example, their destructive natures

through taking the first letters from the axiom, 'what I know is', is a collaborative page-editing tool with which users may add or edit content directly through their Web browser (Feller, 2005). Despite their newness, Wikis could be augmented with older models of hypertext system. A genre of online community that has existed for a long time, but is also becoming increasingly popular is the Virtual World, which may be a multi-user dungeon (MUD), a massively multiplayer online role-playing game (MMORG) or some other 3-D virtual environment.

Encouraging Social and Economic Transactions in Online Communities

According to Shen et al. (2002), virtual worlds could radically alter the way people work, learn, grow, consume and entertain. Online communities such as virtual worlds are functional systems that exist in an environment. They contain actors, artifacts, structures and other external representations that provide stimuli to actors who respond (Bishop, 2007a; 2007b; 2007c). The transfer of a response into stimuli from one actor to another is

social intercourse and the unit of this exchange is the transaction (Berne, 1961; 1964). A transaction is also the unit for the exchange of artifacts between actors and is observed and measured in currency (Vogel, 1999). Transactions can be observed in online communities, most obviously in virtual worlds, where actors communicate with words and trade goods and services. Research into how consumers trade with each other has considered online reputation, focusing on how a trader's reputation influences trading partner's trust formation, reputation scores' impact on transactional prices, reputation-related feedback's effect on online service adoption and the performance of existing online reputation systems (Li et al., 2007). According to Bishop (2007a), encouraging participation is one of the greatest challenges for any online community provider. There is a large amount of literature demonstrating ways in which online communities can be effectively built (Figallo, 1998; Kim, 2000; Levine-Young & Levine, 2000; Preece, 2000). However, a virtual community can have the right tools, the right chat platform and the right ethos, but if community members are not participating the community

will not flourish and encouraging members to change from lurkers into elders is proving to be a challenge for community provider. Traditional methods of behavior modification are unsuitable for virtual environments, as methodologies such as operant conditioning would suggest that the way to turn lurkers into elders is to reward them for taking participatory actions. The ecological cognition framework proposed Bishop (2007a; 2007c) proposes that in order for individuals to carry out a participatory action, such as posting a message, there needs to be a desire to do so, the desire needs to be consistent with the individual's goals, plans, values and beliefs, and they need to have to abilities and tools to do so. Some individuals such as lurkers, may have the desire and the capabilities, but hold beliefs that prevent them from making participatory actions in virtual communities. In order for them to do so, they need to have the desire to do so and their beliefs need to be changed. Traditional methods, such as operant conditioning may be able to change the belief of a lurker that they are not being helpful by posting a message, but it is unlikely that they will be effective at changing other beliefs, such as the belief they do not need to post. In order to change beliefs, it is necessary to make an actor's beliefs dissonant, something that could be uncomfortable for the individual. While changing an actor's beliefs is one way of encouraging them to participate in a virtual community, another potential way of increasing their involvement is to engage them in a state of flow which might mean that they are more likely to act out their desires to be social, but there is also the possibility that through losing a degree of self-consciousness they are also more likely to flame others (Orengo Castellá et al., 2000).

A CHARACTER THEORY FOR ON-LINE COMMUNITIES

Kim's membership lifecycle provides a possible basis for analyzing the character roles that actors take on in online communities. Existing character theories could be utilized to explore specific types of online community (e.g., Propp, 1969) or explain to dominance of specific actors in online communities (e.g., Goffman, 1959). Propp suggested the following formula to explain characters in media texts:

$$\alpha a^5 D^1 E^1 M F^1 T a^5 B K N T o Q W$$

Propp's character theory suggests that in media texts eight characters can be identified; the villain who struggles against the hero; the donor who prepares the hero or gives the hero an artifact of some sort; the helper who helps the hero in their expedition; the princess who the hero fights to protect or seeks to marry; her father the dispatcher; and the false hero who takes credit for the hero's actions or tries to marry the princess. While Propp's theory might be acceptable for analyzing multi-user dungeons or fantasy adventure games, it may not be wholly appropriate for bulletin board-based online communities. Goffman's character theory according to Beaty et al. (1998) suggests that there are four main types of characters in a media text: the protagonists who are the leading characters; the deuteragonists who are the secondary characters; the bit players who are minor characters whose specific background the audience are not aware of; and the fool who is a character that uses humor to convey messages. Goffman's model could be useful in explaining the dominance of specific types of online community members, but does not explain the different characteristics of those that participate online, what it is that drives them, or what it is that leads them to contribute in the way they do.

Bishop's (2007a; 2007c) ecological cognition framework (ECF) provides a theoretical model for developing a character theory for online communities based on bulletin board and chat room models. One of the most talked about types of online community participant is the troll. According to Levine-Young and Levine (2000), a troll posts

provocative messages intended to start a flame war. The ECF would suggest that chaos drives these trolls, as they attempt to provoke other members into responding. This would also suggest there is a troll opposite, driven by order, which seeks to maintain control or rebuke obnoxious comments. Campbell et al. (2002) found evidence for such a character, namely the big man, existing in online communities. Salisbury (1965) suggests big men in tribes such as the Siane form a de facto council that confirms social policy and practices. Campbell et al. (2002) point out that big men are pivotal in the community as, according to Breton (1999), they support group order and stability by personally absorbing many conflicts. Actors susceptible to social stimuli activate one of two forces, either social forces or anti-social forces. Actors who are plainly obnoxious and offend other actors through posting flames, according to Jansen (2002) are known as snerts. According to Campbell, these anti-social characters are apparent in most online communities and often do not support or recognize any of the big men unless there is an immediate personal benefit in doing so. Campbell et al. (2002) also point out that the posts of these snerts, which they call sorcerers and trolls, which they call tricksters, could possibly look similar. Differentiating between when someone is being a troll and when they are being a snert although clear using the ECF, may require interviewing the poster to fully determine. Someone whose intent is to provoke a reaction, such as through playing 'devil's advocate' could be seen theoretically to be a troll, even if what they post is a flame. An actor who posts a flame after they were provoked into responding after interacting with another, could be seen theoretically to be a snert, as their intention is to be offensive. Another actor presented with the same social stimuli may respond differently. Indeed, Rheingold (1999) identified that members of online communities like to flirt. According to Smith (2001), some online community members banned from the community will return with

new identities to disrupt the community. These actors could be labeled as e-venegers, as like Orczy's (1904) character the scarlet pimpernel, they hide their true identities. Driven by their emotions, they seek a form of personal justice. A character that has more constructive responses to their emotions exists in many empathetic online communities according to Preece (1998), and may say things such as "MHBFY," which according to Jansen (2002) means "My heart bleeds for you," so perhaps this character type could be known as a MHBFY Jenny. Using the ecological cognition framework there should be also those actors that are driven by gross stimuli, with either existential or thanatotic forces acting upon them. Jansen (2002) identified a term for a member of an online community that is driven by existential forces, known to many as the chat room Bob, who is the actor in an online community that seeks out members who will share nude pictures or engage in sexual relations with them. While first believed to be theoretical by Bishop (2006), there is evidence of members of online communities being driven by thanatotic forces, as reported by the BBC (Anon., 2003). Brandon Vedas, who was a 21-year-old computer expert, killed himself in January 2003. This tragic death suggests strongly that those in online communities should take the behavior of people in online communities that may want to cause harm to themselves seriously. This existence of this type of actor is evidence for the type of online community member who could be called a Ripper, in memory of the pseudonym used by Mr Vedas.

There are two more characters in online communities, driven by action stimuli that results in them experiencing creative or destructive forces. Surveying the literature reveals a type of actor that uses the Internet that are prime targets for "sophisticated technical information, beta test software, authoring tools [that] like software with lots of options and enjoy climbing a learning curve if it leads to interesting new abilities" (Mena, 1999),

who are referred to as wizards. There is also the opposite of the wizard who according to Bishop (2006) seeks to destroy content in online communities, which could be called the iconoclast, which according to Bernstein and Wagner (1976) can mean to destroy and also has modern usage in Internet culture according to Jansen (2002) as a person on the Internet that attacks the traditional way of doing things, supporting Mitchell's (2005) definition of an iconoclast being someone that constructs an image of others as worshippers of artifacts and sets out to punish them by destroying such artifacts.

These eleven character types, summarized in Table 2, should be evident in most online communities, be they virtual worlds, bulletin boards, or wiki-based communities.

Investigating the Proposed Character Theory

Some of the most widely used methods for researching online are interviewing, observation and document analysis (Mann & Stewart, 2000). Ethnography offers a rigorous approach to the analysis of information systems practices using observational techniques, with the notion of context being one of the social construction of meaning frameworks and as a research method, ethnography is well suited to providing information systems researchers with rich insights into the human, social and organizational aspects of information systems development and application because as ethnography deals with actual practices in real-world situations, it allows for relevant issues

Table 2. A character theory for online communities based on the ecological cognition framework

Label	Typical characteristics
Lurker	The lurker may experience a force, such as social, but will not act on it, resulting in them not fully taking part in the community.
Troll	Driven by chaos forces as a result of mental stimuli, would post provocative comments to incite a reaction.
Big Man	Driven by order forces as a result of mental stimuli, will seek to take control of conflict, correcting inaccuracies and keeping discussions on topic.
Flirt	Driven by social forces as a result of social stimuli, will seek to keep discussions going and post constructive comments.
Snert	Driven by anti-social forces as a result of social stimuli, will seek to offend their target because of something they said.
E-venger	Driven by vengeance forces as a result of emotional stimuli, will seek to get personal justice for the actions of others that wronged them.
MHBFY Jenny	Driven by forgiveness forces, as a result of experiencing emotional stimuli. As managers they will seek harmony among other members.
Chat Room Bob	Driven by existential forces as a result of experiencing gross stimuli, will seek more intimate encounters with other actors.
Ripper	Driven by thanatotic forces as a result of experiencing gross stimuli, seeks advice and confidence to cause self-harm.
Wizard	Driven by creative forces as a result of experiencing action stimuli, will seek to use online tools and artifacts to produce creative works.
Iconoclast	Driven by destructive forces as a result of experiencing action stiumli, will seek to destroy content that others have produced.

to be explored and frameworks to be developed which can be used by both practitioners and researchers and also means that researchers can deal with real situations instead of having to contrive artificial situations for the purpose of quasi-experimental investigations (Harvey & Myers, 1995). While Yang (2003) argues that it is not feasible to spend a year or two investigating one online community as part of an ethnography, this is exactly the type of approach that was taken to evaluate the proposed character theory, partially due to the author receiving formal training in this method. Yang's approach, while allowing the gathering of diverse and varied information, would not allow the research to experience the completeness of Kim's (2000) membership lifecycle, or be able to fully evaluate the character theory and whether the characters in it can be identified.

Location and Participants

An online community was selected for study, this one serving Wales and those with an interest in the geographical locations of Pontypridd and the Rhondda and Cynon Valleys in South Wales. Its members consist of workers, business owners, elected members, and expatriates of the area the online community serves. This online community, known to its members as 'Ponty Town', with 'Ponty' being the shortened term for Pontypridd, was chosen by the author due to his cognitive interest in the Pontypridd constituency and his belief that he would be a representative member of the community and fit in due to holding similar personal interests to the members. This is in line with Figallo (1998), who argues that similar interests is what convinces some members of online communities to form and maintain an Internet presence. The members of the community each had their own user ID and username that they used to either portray or mask their identity. They ranged from actual names, such as 'Mike Powell' and 'Karen Roberts' that

were used by elected representatives, names from popular culture, such as 'Pussy Galore', to location-based and gendered names, such as 'Ponty Girl', 'Bonty Boy' and 'Kigali Ken'.

Equipment and Materials

A Web browser was used to view and engage with the online community, and a word processor used to record data from the community.

Procedure

The author joined the online community under investigation and interacted with the other members. The community members did not know the author personally, however, he utilized his real name. Even though the author could have posted under a pseudonym it would have made the study less ecologically valid and more difficult for the author to assess the reaction of the participants. The author carried out activities in the online community by following the membership lifecycle stages, which manifested in not posting any responses, posting a few responses on specific topics to regularly posting as an active member of the community. Additionally, data collected by Livingstone and Bober (2006) was used to understand the results.

Results

Undertaking the ethnography proved to be time consuming, though revealing about the nature of online communities and the characteristics of the actors that use them. Of the eleven characters identified in the proposed character theory, eight were found in the investigated online community.

Lurkers could be identified by looking at the member list, where it was possible to find that 45 of the 369 members were lurkers in that they did not post any messages.

The Troll

The troll was easily identified as an actor that went by the pseudonym Pussy Galore, who even managed to provoke the author.

This Bishop baiting is so good I'm sure there will soon be a debate in the Commons that will advocate abolishing it. – Pussy Galore, Female, Pontypridd

Some of the troll's comments may be flames, but their intention is not to cause offence, but to present an alternative and sometimes intentionally provocative viewpoint, often taking on the role of devil's advocate by presenting a position that goes against the grain of the community.

There is some evidence of the troll existing in the data collected by Livingstone and Bober (2006), as out of a total of 996 responses, 10.9% (164) of those interviewed agreed that it is 'fun to be rude or silly on the internet'.

The Big Man

Evidence of actors being driven by order forces was also apparent, as demonstrated by the following comment from a big man.

I don't think so. Why should the actions of (elected member) attacking me unprovoked, and making remarks about my disability lead to ME getting banned? I am the victim of a hate crime here. – The Victim, Male, Trefforest

The example above clearly demonstrates the role of the big man as absorbing the conflicts of the community and having to take responsibility for the actions of others. While the big man may appear similar to the snert by challenging the actions of others, their intention is to promote their own worldview, rather than to flame and offend another person. The big man may resemble the troll by continually presenting alternative view-

points, but their intention is not to provoke a flame war based on a viewpoint they do not have, but to justify a position they do have.

The Flirt

In the studied online community, there was one remarkable member who posted mostly constructive posts in response to others' messages, known by her pseudonym Ponty Girl who was clearly identifiable as a flirt. Her comments as a whole appear to promote sociability as she responds constructively to others' posts. The flirt's approach to dealing with others appears to differ from the big man who absorbs conflict as it seems to resonate with the constructive sides of actors leading them to be less antagonistic towards the flirt than they would be the big man.

Yes, I've seen him at the train station on quite a few occasions," "A friend of mine in work was really upset when she had results from a feedback request from our team - I'd refused to reply on the principle that she is my friend and I would not judge her, but a lot of the comments said that she was rude, unsympathetic and aloof. She came to me to ask why people thought so badly of her. – Ponty Girl, Female, Graig

The Snert

There were a significant number of members of the community that responded to posts in an anti-social manner, characteristic of snerts. While members like Stinkybolthole frequently posted flames, the online community studied had one very noticeable snert, who went by the name of JH, whom from a sample of ten of his posts, posted six flames, meaning 60% of his posts were flames.

Nobody gives a shit what you want to talk to yourself about. Get a life," "I'm getting the picture. 'Fruitcake Becomes Councilor' is such an over-

used newspaper headline these days," "Sounds like you've won the lottery and haven't told us. Either that or your husband is a lawyer, accountant or drug dealer,, "The sooner we start to re-colonize ooga-booga land the better, then we'll see Britains (sic) prosperity grow. Bloody pc wimps, they need to get laid. – JH, Male, Trallwn

The existence of the snert is evident. The data collected by Livingstone and Bober (2006) reveals that from a sample of 1,511, 8.5% (128) of individuals have received nasty comments by e-mail and 7% (105) have received nasty comments in a chat room. Of the 406 that had received nasty comments across different media, 156 (38.42%) deleted them straight away. One-hundred twenty-four (30.54%) tried to block messages from the snert, 84 (20.69%) told a relative, 107 (26.35%) told a friend, 74 (18.23%) replied to ask the snert to stop their comments, and 113 (27.83%) engaged in a flame war with the snert.

The e-Venger

Evident in the online community investigated was the masked e-venger, who in the case of this particular community was an actor who signed up with the pseudonym elected member, claiming to be an elected representative on the local council, who the members quickly identified to be someone who had been banned from the community in the past. This user appeared to have similar ways of posting to the snert, posting flames and harassing other members. The difference between the e-venger and the snert is that the former is driven by wanting to get even for mistreatment in the past whereas the later responds unconstructive to the present situation.

Poor sad boy, have you met him? He's so incompitent (sic). His dissabilty (sic) is not medical it's laughable. The lad has no idea about public perception," "Don't give me this shit, she and they cost a fortune to the taxpayer, you and I pay

her huge salary. This is an ex-education Cabinet Member who was thrown out by the party, unelected at the next election and you STILL pay her wages!", "I'll see you at the Standards meeting Cllr Powell. 'Sponsor me to put forward a motion'! Bring it on. – Elected Member

The member appeared to be driven by emotional stimuli activating vengeance forces, seeking to disrupt the community and even making personal attacks on the members including the author. As outlined above, the data collected by Livingstone and Bober (2006) reveals that 27.83% of people that are flamed will be seek revenge by posting a flame back.

The MHBFY Jenny

Sometimes the remarks of members such as flirts and big men are accepted, which can lead other actors to experience emotional stimuli activating forgiveness forces as was the case with Dave, the investigated online community's MHBFY Jenny.

Mind you it was funny getting you to sign up again as 'The Victim'. – Dave, Male, Pontypridd

While many of the MHBFY Jenny's comments are constructive like the flirt, they differ because the former responds to their internal dialogue as was the case with Dave above, whereas the flirt responds to external dialogue from other actors, as Ponty Girl clearly does.

The Chat Room Bob

The online community investigated, like many, had its own chat room Bob. The actor taking on this role in the investigated online community went by the name of Kigali Ken, and his contributions make one wonder whether he would say the same things in a real-world community.

Any smart women in Ponty these days? Or any on this message board? I've been out of the country for a while but now I'm back am looking for some uncomplicated sex. Needless to say I am absolutely lovely and have a massive... personality. Any women with an attitude need not apply. – Kigali Ken, Male, Pontypridd

While their action of seeking out others may appear to be flirting using the vernacular definition, the intention of the chat room Bob differs from the flirt who based on Heskell's (2001) definition is someone who feels great about themselves and resonates this to the world to make others feel good, as they will make pro-social comments about others and in response to others. The chat room Bob on the other hand, appears to be only after their own gratification, responding to their physical wants.

The existence of the chat room Bob is evident. The data collected by Livingstone and Bober (2006) reveals that 394 people from a sample of 1,511 have reported that they have received sexual comments from other users. Of these 238 (60.4%) deleted the comment straight away, 170 (43.14%) attempted to block the other person, 49 (12.44%) told a relative, 77 (19.54%) told a friend, and 75 (19.04%) responded to the message. This suggests that the chat room Bob is an unwanted character in online communities whose contributions people will want to delete and whom they may try to block.

The Ripper, Wizard and Iconoclast

Despite studying the online community for over a year, there was no evidence of there being a ripper, a wizard or an iconoclast in the community, beyond the administrators of the site posting and deleting content and adding new features, such as polls. The closest an actor came to being a ripper was an actor called choppy, who faked a suicide and then claimed a friend had hijacked their account. Fortunately, it might be argued that a true ripper who was seeking to cause self-harm was not present, but the existence of this type of online community member should lead online community managers to show concern for them, and members should not reply with comments such as "murder/suicide" when they ask for advice, as happens in some online communities.

While visual representations are often absent from bulletin board communities, actors will often make their first interpretations of others in virtual worlds when they book at another's avatar and evaluates them based on their worldview, which may provoke a relation leading to the actor developing an interest in the other actor. In the context of online communities, an avatar is a digital representative of an actor in a virtual environment that can be an icon of some kind or an animated object (Stevens, 2004). According to Aizpurua et al. (2004), the effective modeling of the appearance of an avatar is essential to catch a consumer's attention and making them believe that they are someone, with avatars being crucial to creating interaction between customers and vendors. According to Puccinelli (2006), many vendors understand that customers' decisions to engage in economic transactions are often influenced by their reactions to the person who sells or promotes it, which seems to suggest that the appearance of an avatar will affect the number of transactions other actors will have with it.

A STEREOTYPE THEORY FOR INTERPRETING AVATARS IN ONLINE COMMUNITIES

Technology-enhanced businesses led by business leaders of a black ethnicity have been some of the most innovative in the world, with companies like Golden State Mutual ending the 1950s with electronic data processing systems in place, $133 million of insurance in force and $16 million in assets (Ingham & Feldman, 1994). Representations of black actors have also been some of the most

studied, with potential applications for studying avatars in online communities. Alvarado et al. (1987) argue that black actors fit into four social classifications: the exotic, the humourous, the dangerous and the pitied. Furthermore, Malik (2002) suggests that male black actors are stereotyped as patriarchal, timid, assiduous, and orthodox. Evidence for these can easily be found in contemporary print media, such as Arena magazine (Croghton, 2007) where an advertisement for an electronic gaming system displays a black individual as pitied. In the same publication Murray and Mobasser (2007) argue that the Internet is damaging relationships, where images of women are of those in 'perfect' bodies, and although they do not define what a perfect body is, it would be safe to assume they mean those depicted in the publication, such as Abigail Clancy and Lily Cole, the later of which described herself as 'hot stuff', and perhaps depictions of this sort could be iconographic of an exotic avatar. Alvarado et al. (1987) supported by Malik (2002) have argued that these stereotypes have been effective in generating revenue for advertisers and not-for-profit organizations. While these stereotypes may be useful for developing an understanding of avatars and how they can generate both social and economic capital for individuals, they need to be put into the context of a psychological understanding of how actors behave and interact with others.

Utilizing the ecological cognition framework (Bishop, 2007a; 2007c); it can be seen that the visual appearance of an actor's avatar could be based on the five binary-opposition forces, with some of the stereotypes identified earlier mapping on to these forces. The image of actors as orthodox and pariahs can be seen to map onto the forces occupied by the flirts and snerts, respectively; the assiduous and vanguard stereotypes appear to be in harmony with the forces occupied by the wizard and iconoclast, respectively, the dangerous and timid stereotypes are consistent with the forces connected with the e-venger and MHBFY Jenny, the exotic and pitied stereotypes can be seen to

map on to the forces used by the chat room Bob and ripper, respectively, and the patriarchal and humourous stereotypes appear to be consistent with the forces, respectively, used by the big man and troll. The stereotype theory provides a useful basis for investigating the role of avatars in online communities and the effect they have on social and economic transactions.

Location and Participants

A study was carried out in the second life virtual world and involved analyzing the avatars used to create a visual representation of the actor and profile pages displaying their personal details and avatar of 189 users, known as residents, of the community who met the criteria of having given at least one rating to another actor, a feature that has since been discontinued in the system despite it showing how popular a particular actor was.

Equipment and Materials

The Second Life application was used to view and engage with the online community, and a word processor and spreadsheet was used to record data from the community in the form of the number of times a person had received a gift or response from another.

Procedure

The author became a member of the online community under investigation and interacted with the other members over a period of three months. The members of the community did not know the author, especially as a pseudonym was adopted, as is the norm with Second Life. The author carried out activities in the online community by following the membership lifecycle stages that each individual member of an online community goes through as discussed earlier in the chapter. A search was done for actors and possible locations and groups of specific avatars identified. After an

Table 2. Mean (M) dollars ($) given and received by actors of specific avatars and their ROI (%)

Stereotype	Character	N	M Given $	M Received $	M ROI %
Exotic	Chat Room Bob	30	1171.67	1731.67	237.26
Pitied	Ripper	11	1743.18	2534.09	141.19
Humourous	Troll	48	362.5	446.35	120.69
Patriarchal	Big Man	17	4500	4588.24	428.43
Orthodox	Flirt	16	4393.75	4575	49.48
Pariah	Snert	26	149.04	107.69	-1.24
Assiduous	Wizard	16	267.19	159.38	-12.63
Vanguard	Iconoclast	4	75	162.5	233.33
Dangerous	E-venger	6	2587.5	2095.83	0.62
Timid	MHBFY Jenny	15	6150	4395	101.82

avatar was categorized, data from their profile was recorded and the return on investment (ROI) calculated. According to Stoehr (2002), calculating the ROI is a way of expressing the benefit-cost ratio of a set of transactions, and can be used to justify an e-commerce proposal.

Results

The results, as summarized in Table 2, reveal that the avatar with greatest return on investment was the patriarchal stereotype with a 428.43% return and the one with the least ROI was the assiduous with a 12.63% loss. The most common avatar was the humorous, followed by exotic and pariah. The least common avatar was the vanguard, followed by the dangerous and pitied.

An independent samples test using the Mann-Whitey method was carried out on one of the highest ROI avatars, the patriarchal, with one of the lowest, the pariah. It revealed, as expected, a significant difference in the return on investment ($Z=-3.21$, $p<0.002$). Also interesting was the difference between the specific attributes rated. The mean appearance rating for the patriarchal stereotype was 29.24 compared to 17.27 for the pariah ($Z=-3.10$, $p<0.003$), the mean building

rating for the patriarchal was 29.03 compared to 17.40 for the pariah ($Z=-3.06$, $p<0.003$), and the mean behavior rating was 30.62 for the patriarchal stereotype and 16.37 for the pariah ($Z=-3.68$, $p<0.001$). This would seem to suggest that as well as not getting as high a return on investment, other actors will not judge the more antisocial-looking pariah as well as they judge the more sophisticated-looking patriarchal avatar. Examples of the avatars are presented in Figure 3. Studies such as those by Zajonc (1962) and Goldstein (1964) have demonstrated that actors will seek to avoid the uncovering of beliefs and other thoughts that come about when an actor experiences threatening behavior from others or uncomfortable emotions. This being the case, it could be that when an actor is presented with an avatar that causes them discomfort or 'dissonance', then they will seek to resolve the conflict created by avoiding that particular avatar. This would explain why the pariah stereotype produces a limited number of economic transactions and has the one of the worst returns on investment, which would seem to support the findings of Eagly et al. (1991) that people that appear less discomforting are more popular with peers and receive preferential treatment from others.

Figure 1. Examples of avatars in order top-bottom, left-right as Table 2

THE FUTURE OF SOCIAL NETWORKING COMMUNITIES

In science fiction, the future is often portrayed as utopian or dystopian, where possible future outcomes of social trends or changes that are the result of scientific discoveries are depicted and the implications of them assessed (Csicsery-Ronay, 2003). In the cyberpunk genre of science fiction, the dystopian future is often made up of corporations, who ruthlessly corrupt, corrode, exploit and destroy (Braidotti, 2003). Social networking communities are quickly being subsumed into corporate structures. In July 2005, News Corporation bought Myspace.com, which is a social networking service that integrates message boards with personal homepages and utilizes the Circle of Friends social networking technique, and in December of that year, the British broadcaster ITV bought the old school tie-based Friends Reunited social networking service (BBC, 2005; Scott-Joynt, 2005).

The ecological cognition framework has the potential to radically transform minor Web sites into highly persuasive and engaging communities where relationships between vendors and customers can be enhanced and the goals of each can be met. While there is also the possibility that a corporation that understands online communities can manipulate its members in such a way that it can easily exploit them, the model could be used by vendors with more of an interest in helping customers meet their goals to market their products and services effectively. Vendors that understand the stage of Kim's (2000) lifecycle they are at and the stage the consumer is at can more effectively target their messages in such a way that they are persuasive. Using the model, vendors can design avatars that provoke the particular responses they want from customers and continue that initial appeal by adopting the appropriate character type. This works well in some media texts where according to Kress (2004) media producers can use the appearance of their characters to convey that character's personality and build on that throughout the text.

DISCUSSION

The rise of online communities in Internet environments has set in motion an unprecedented shift in power from vendors of goods and services to the customers who buy them, with those vendors who understand this transfer of power and choose to capitalize on it by organizing online communities and being richly rewarded with both peerless customer loyalty and impressive economic returns. A type of online community, the virtual world, could radically alter the way people work, learn, grow consume, and entertain. Understand-

ing the exchange of social and economic capital in virtual worlds could involve looking at what causes actors to spend their scarce resources on improving someone else's reputation. Actors' reputations may affect how willing others are to trade with them or even give them gifts, and their reputation is in part influenced by their appearance and how they interact with other actors and often feedback from other actors are displayed on their profile.

The ecological cognition framework provides a theoretical model for developing a character theory for online communities based on bulletin board and chat room models. The five forces and their opposites can be used to develop the types, and the judgments of ignorance and temperance can be used to explain the behavior of those that do not participate, namely lurkers, which were accounted for in the investigated online community where it was possible to find that 45 of the 369 members were lurkers for the reason that they did not post any messages. The ECF would suggest that chaos forces drive trolls, as they attempt to provoke other members into responding as a result of experiencing mental stimuli. The troll was easily identified in the investigated online community as an actor that went by the pseudonym Pussy Galore, who even managed to provoke the author. Order forces can be seen to drive the big man and was represented in the investigated online community by the victim. Those actors who are plainly obnoxious and offend or harass other actors through posting flames are known as snerts, who were most obviously represented in the investigated online community by a user called JH. Flirts are members that respond to the text posted by other members as social stimuli, and will respond to it after activating their social forces and in the studied online community there was one remarkable member who posted mostly constructive posts in response to others' messages, know by her pseudonym Ponty Girl. There are actors driven by their vengeance forces, which could be labeled as e-venegers, represented in

the investigated online community by elected member and those actors driven by forgiveness forces could be called MBHFY Jenny, represented in the studied online community by Dave. An actor in an online community that is driven by existential forces, known to many as the chat room Bob, who seeks out members who will share nude pictures or engage in sexual relations with them, was apparent in the investigated online community using the name Kigali Ken. There is evidence for an online community member driven by thanatotic forces, who could be called a ripper, but this member was not found in the investigated online community beyond an actor called Choppy. There are also theoretically two more characters in online communities, driven by action stimuli that results in them experiencing creative or destructive forces, with the one driven by creative forces being the wizard, and the opposite of iconoclast being the one that seeks to destroy content in online communities.

These character types are particularly evidenced in bulletin board communities, but in the virtual world it is likely that an actor's avatar will have some effect on how others perceive them before they are spoken to. The extent to which an actor is able to sustain an appeal to another could be analyzed as seduction. An actor's avatar forms an important part of the intimacy stage of seduction, as the visual appearance of an actor could possibly have an impact on how others perceived them, and an actor may construct an image based on their identity or the image they want to project and the relationship between an actor's avatar and their identity can be understood as elastic as even the best and strongest elastic can break, with there being the possibility that avatars can develop to the point where connection between them and the identities of the actors using them can be stretched so far that they cease to exist. There has been a debate over whether identity is unitary or multiple with psychoanalytic theory playing a complicated role in the debate. If there is a lifecycle to an actor's membership in an online

community, then it is likely that they will develop different cognitions, such as beliefs and values at different stages that may become 'joindered'. This would mean that an actor's behavior would be affected by the beliefs and values they developed when joining the community when they are at a more advanced stage in their membership of the community. Utilizing the ecological cognition framework, it can be seen that the visual appearance of an actor's avatar could be based on the five binary-opposition forces, with some of the stereotypes identified earlier mapping on to these forces. The investigation found that the avatar with the greatest return on investment was the patriarchal stereotype with a 428.43% return and the one with the least ROI was the assiduous with a 12.63% loss. The most common avatar was the humorous, followed by exotic and pariah. The least common avatar was the vanguard, followed by the dangerous and pitied. An independent samples test revealed, as expected, a significant differences between the pariah and the patriarchal stereotype with the later having a greater return on investment, and higher ratings on appearance, building and behavior, suggesting that as not getting as high a return on investment, other actors will not judge the more antisocial-looking pariah as well as they judge the more sophisticated-looking patriarchal avatar.

The research methods used in this study were an ethnographical observation and document analysis. These methods seem particularly suited to online communities, where behavior can be observed through participation and further information can be gained through analyzing user profiles and community forums. The study has demonstrated that online communities, in particular virtual worlds, can be viewed as a type of media, and traditional approaches to media, such as investigating stereotypes, can be applied to Internet-based environments.

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