

Gatekeeping in Virtual Communities: On Politics of Power in Cyberspace

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Abstract

Gatekeeping/Information Control is exercised frequently and daily in virtual communities. Gatekeeping exists in four different levels: Regulators, service providers, communities' managers and members of communities. The article analyzes the sensitive balance of relationships among these stakeholders. Additionally, it examines how information control is being exercised in forums and more specifically constructs explanatory models which explain different reasons for deleting messages in forums. The empirical examination combined qualitative and quantitative methods, integrating content analysis along aside data mining, over data of three years on 715 virtual communities. The results suggest behavior patterns of users in virtual communities that can be identified and addressed. Three levels that impact gatekeeping nature are analyzed – the gatekeepers, the community and the gated while addressing: first, the duality of gatekeepers as protectors or manipulators; second, the politics of power of marginalized groups in cyberspace and finally, the meaning of anonymity to information control through looking at history of users' activities and gender.

1. Introduction – What is Gatekeeping?

The concept of *gatekeeper* was first coined by the social psychologist Kurt Lewin [1, 2]. His theory of “*channels and gatekeepers*” was developed to understand focal points of social changes in communities. The entrance to a channel and to its sections was presented as a *gate*, and the movement within the channel and between the channel and its external environments was presented as controlled by one or more *gatekeepers* or “impartial rules” [2]. Later, the concept of gatekeeping was applied to various fields, specifically to practical domains such as journalism (e.g., editors of newspapers would be considered as gatekeepers), health science, operation research, and technology development (e.g., consultant that give a second opinion, or intermediaries) [3-6]. Most of the theories which were originated from the communications field grasped the role of the *gatekeeper* as an individual who selects information, messages and items and has

discretion to decide what should be published in the media. Most theories also tried to develop explanatory models to the gatekeeping process decision– subjective [7, 8], information characteristics [9], procedures [10], the organization [11], the institutional environment [12] and the social system [13]. In depth elaboration of traditional gatekeeping can be found in Barzilai-Nahon [14] and Shoemaker [15].

Referring to gatekeeping as a selection process only, underrate the importance of the process in networks and more specifically in virtual communities. Barzilai-Nahon in her dissertation suggests a *Network Gatekeeping Theory* [14, 16] where *gatekeeping* is referred to a process of an information control in general and not only selection, and more specifically “a process of controlling information as it moves through a gate. Activities include selection, addition, withholding, display, channeling, shaping, manipulation, repetition, timing, localization, integration, disregard and deletion of information” [14].

2. Gatekeeping in Virtual Communities

Gatekeeping in virtual communities exists mainly in the following four layers: regulators, service providers, community managers and members of the community. These stakeholders may apply various gatekeeping mechanisms to control information inside virtual communities. Mechanisms that facilitate gatekeeping may fall into the following categories [14]:

- Censorship mechanisms – mainly deletion of messages by communities' managers, or removal of users' accounts by service providers, filtering or blocking messages beforehand (only in certain types of virtual communities – e.g. listservs with moderators).
- Editorial mechanisms – modification of content
- Channeling mechanisms – making some issues more conspicuous to the community and to its agenda by using hyperlinks, ranking content, displaying these issues in projecting areas on the website and so on.
- Security mechanisms – creating communities that rely on black or white lists authentications of members.

- Localization mechanisms – using language or cultural characteristics in order to seclude and characterize content exclusively to a specific audience.
- Infrastructure mechanisms – providing tools that may impact users’ ability to create, change and maintain content.
- Regulation mechanisms – mainly constructing rules of behaviors (e.g., community code), training and guidance how to react in various situations.

The study focuses on one type of information control mechanism that is being exercised by community managers: deletion of messages after they are posted in forums. There were two research questions raised: one, what are the factors that may explain the process of gatekeeping and more specifically the deletion of messages by managers. Second, are there explanatory factors that can explain the reason for gatekeeping /deletion of messages in virtual communities? For this purpose ten explanatory models were constructed according to ten reasons that appeared as relevant to delete messages while interviewing 45 virtual communities’ stakeholders (see Table 1). The reasons for deleting messages were: Infringement on community culture, irrelevant (off topic) information, commercial information, protecting communal boundaries, vulgarity, unlawful activities, outing, racism, slander and sedition for violence.

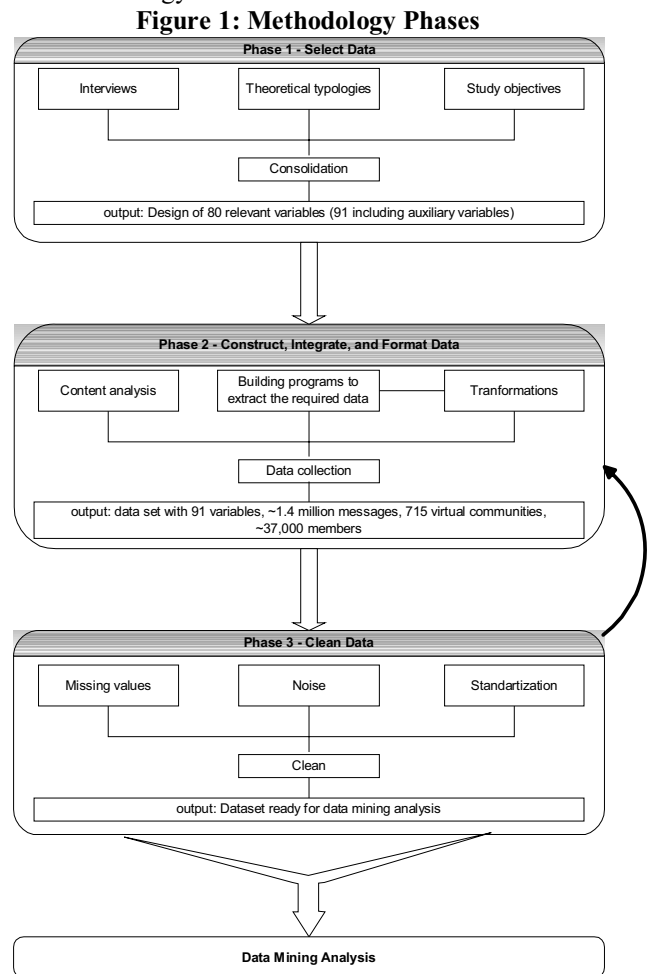
There is an extensive literature on dynamics of behavior that occur in virtual communities [17-19]. Most of it is qualitative and focused in one or few case studies of virtual communities, and therefore difficult to generalize about a wider trend or pattern of behavior. Nevertheless, the literature on gatekeeping as a concept in virtual communities almost does not exist. There are no defined prior frameworks, models and variables that can be used. Consequently, integrating a bottom-up with a top-down methodology approach should and a combination of quantitative and qualitative methods seemed to be the appropriate approach in this case.

3. Integrative Methodology

The study combines a bottom-up and a top-down approach. A bottom-up approach is required in order not to constraint the study with models that are not proper to deal with gatekeeping; while a top-down approach is taken in order to facilitate the development of a meaningful preliminary set of potential relevant variables. I have chosen to employ data mining to reflect best the bottom-up approach. Data mining techniques may be regarded as bottom-up approaches that at their core lies the process of constructing a model to represent a dataset “Data mining is the analysis of (often large) observational

data sets to find unsuspected relationships and to summarize the data in novel ways that are both understandable and useful to the data owner” [20]. Moreover, data mining is one of the few techniques that can easily deal with large amounts of data. The data set contains large volume of data in the form of a matrix of 80 variables and 1.385 million records, so that the number of overall observations is very large (N = 112.185M).

The Data Mining followed the Methodology set by CRISP-DM (Cross-Industry Standard Process for Data Mining) Consortium [21]. Figure 2 summarize the phases of the methodology.



In the context of gatekeeping the study concentrated in unidentified virtual communities with managers, and more specifically in forums. The research was conducted in Israel and involved all the big five institutional virtual community service providers (as opposed to private entrepreneurs who provide virtual settlements on their private sites). The sampled communities comprised 70% of all unidentified communities hosted on platforms of institutional enablers. The first phase was to apply the top-down approach and decide about a large set of

potential variables (91 variables) that could be relevant to the process of controlling information in forums. The set was created while taking into account the theoretical typology of gatekeeping mechanisms and gatekeepers that was specially built for this study [14] together with conducting open interviews and later on follow-up interviews with different hierarchies of the virtual communities' environment (CEO, editors of community enablers, managers that are responsible over the forums' managers, and the forum managers themselves). The set of pre-determined potential variables allowed on the one hand to enter constructs that were meaningful from a theoretical point of view of gatekeeping to the study (like a classical top-down research would do) and on the other hand not to impose pre-determined relationships between them and allow the data-mining process to search for the different possible relationships (like a bottom-up process).

The second phase constructed the variables that were decided upon in the previous stage. Four variables ('the reason for deleting a message by the manager', 'manager type', 'forum type', 'forum subject') required the involvement of a manual content analysis. That is, it required to read the messages and context and consequently decide upon the categories they fall into. Five research assistant were assigned to do the content analysis coding. All the inter-rate reliability scores among them were above 0.6. To keep it manageable, out of the 3 years of data, only one month was sampled with ~1.4 million messages that belonged to 715 virtual communities.

The two research questions that this study ask are 'Did a gatekeeping event occur?' and 'Why did a gatekeeping event occur?' In both cases the dependent variables are categorical. In the case of the first question, the dependent variable behaves as follows:

$$y = \begin{cases} 1 & \text{if "gatekeeping occured"} \\ 0 & \text{if "gatekeeping did not occur"} \end{cases}$$

In the study I have concentrated in the censorship mechanism, as a reflector of gatekeeping, and more specifically, deletion of messages. So one can transform the first research question to:

$$y = \begin{cases} 1 & \text{if "message was deleted"} \\ 0 & \text{if "message was not deleted"} \end{cases}$$

When the dependent variable is discrete rather than continuous, a logistic regression analysis may be appropriate. Logistic regression applies maximum likelihood estimation after transforming the dependent variable into a logit variable. Logistic regression estimates the probability of a certain event to occur. I applied the logistic regression model using the GainSmarts data mining method [22].

The second question is more complex in nature, since it comprises human evaluation of the researcher regarding the dependent variable: 'the reason for gatekeeping'. The categories of the deletion reasons were created out of the interviews. Interviews of community managers suggested that ten reasons may be relevant when applying gatekeeping. Their frequencies, as appeared in the manual content analysis of 1.5 million sampled messages, are provided in Table 1.

The second research question is contingent upon the first one. That is, first a message is deleted and once it is deleted I look for the reason of its deletion. I have split the research questions into 10 different problems with 10 different dependent variables, and ten different logistic regression models, according to the 10 reasons for gatekeeping/deletion of messages.

$$y_i = \begin{cases} 1 & \text{if reason for deletion is } i \\ 0 & \text{if reason for deletion is otherwise} \end{cases}$$

$i = 1 \dots 10$, where i represents the reason for deletion according to Table 1

Table 1: Reasons for Gatekeeping

Reason for Gatekeeping	Frequency %
1. Infringement on Communal Culture	45.45%
2. Not Relevant (off topic)	38.58%
3. Commercial Information	7.32%
4. Guarding the boundaries	4.61%
5. Vulgarity	2.19%
6. Unlawful activities	0.97%
7. Outing	0.26%
8. Slander	0.21%
9. Racism	0.21%
10. Sedition for violence	0.18%
Total	100.00%

The dependent variable of the second research question was analyzed by manual content analysis of the messages. Five research assistant analyzed the messages according to the context of the discussion, guidelines provided by the communities' managers. Sample of 10% of messages were examined for purposes of quality by the forum managers and the researcher. The inter-rate reliability among the coders exceeded 0.6 in all categories.

4. Results

The following tables (Table 2 and Table 3) delineate some descriptive statistics about the forums that were examined in this study and their distributions.

Table 2: Distribution of Forum Types

Forum Type	Frequency %
Expert Groups	12.0%
Support Groups	9.7%
Discussion Groups	8.1%
Service Providing Groups	8.3%
Salon and Acquaintance Groups	20.4%
Interest Groups	25.0%
Fan Groups	16.5%
Total (715 forums)	100.0%

Table 3: Distribution of Forum Subjects

Forum Subject	Frequency %
Current events	2.38%
Culture, education and art	7.83%
The economy	2.10%
Social issues	24.34%
Sports and challenge	5.87%
Music	12.45%
Science and technology	4.34%
Health	10.77%
Gastronomy and nutrition	2.24%
Spiritual	4.62%
Entertainment and leisure	15.52%
Law	0.7%
Travel, nature and environment	2.94%
Other	3.92%
Total (715 forums)	100.00%

Due to the lack of space, I will not introduce all the ten explanatory models, but only the results that will be analyzed and discussed in the next section (the statistics tables and more elaboration of the results can be found in Barzilai-Nahon [14] at <http://www.ischool.washington.edu/karineb/html/pub/PhDBarzilai.pdf>). We will focus mainly at the main three reasons for deletion as appear in Table 1.

I would like to focus on four main variables that were important to analyze the main explanatory models.

Result No. 1 - Variable ‘User Identification’ reflects individual users. Service providers many times assign special ‘id’ for specific roles (e.g., all guest will receive the same id). This variable has turned to be an explanatory factor to the process of gatekeeping and shows that community managers, guests and service providers are more likely than other members of the community to post commercial information that later is deleted (this applies to ‘Commercial Information’ as the reason for deletion in table 1). Community managers were seven times less likely than others to send information that offend the community, while service providers were 35 times more likely to experience gatekeeping due to harming the community than others (this applies to ‘Infringement on Communal Culture’ as the reason for deletion in table 1). Moreover, guests are significantly more likely to experience gatekeeping than permanent members due to posting messages with commercial

information, or with content that infringe the communal culture or with irrelevant content.

Result No. 2 – Variable ‘Forum Subject’ reflects the distribution of forum subjects (see Table 3) and appears in different contexts. It is a dominant factor in the first research question ‘whether gatekeeping occurred?’ Communities that deal with economy as their core subject are by far more likely to experience gatekeeping than other communities. The list of subjects in order of increasing likelihood to experience gatekeeping includes: communities of sexual preferences (e.g., homosexual), sports, music, forums with adult material, young, fans, entertainment, social acquaintances, politics that concern parties, and support. Subjects related to nature, family, culture, art, education and science are less likely to experience gatekeeping.

The second research question, ‘the reason for a gatekeeping occurrence’ showed different results for the three main reasons for gatekeeping: ‘Commercial Information’, ‘Infringement on Communal Culture’ and ‘Irrelevance’. When the reason for gatekeeping is ‘Commercial Information’, communities that deal with politics as their core subject, are less likely than others to experience gatekeeping (this is contrary cases when the reason for deletion is ‘Infringement on the Communal Culture’). On the other hand messages in forums that deal with subjects such as education, science, computers, leisure and entertainment, and sports are more likely to experience gatekeeping due to commercial information. In cases were the reason for gatekeeping was ‘Infringement on Communal Culture’ we see interesting findings. Communities that deal with politics as their core subject are more likely to experience information control, while communities with subjects of sexual preferences and adult material are less likely to pass gatekeeping. In cases where the reason for deletion was due to irrelevance of information, communities that deal with subjects of love and romantic relationships, sports and sexual preference are more likely to experience gatekeeping than others.

Result No. 3 – Variable ‘Normalized number of deleted messages during the entire history of the user on the platform’ reflects the number of deleted messages per user since she first subscribed to the service provider proportional to her seniority in the platform. The result shows that the likelihood to experience gatekeeping increased the more gated messages a user had throughout her history with the service provider. Note that this variable deals with deletion in all communities that one user is affiliated with under a service provider. When the reason for deletion was ‘Commercial Information’, deleted messages one month before served as an enough good indicator to explain chances to pass gatekeeping.

Result No. 4 – Variable ‘Gender’ reflects the user gender. The study found that community managers are more likely to delete messages of users whom no prior information about their gender was given or of users whom managers considered to falsify their gender data more than other users¹. Additionally, managers were more likely to delete messages posted by men than by women. Nevertheless, in cases where the reason for deletion occurred due to ‘Infringement on Community Culture’ or due to ‘Irrelevance’ (see Table 1), women were more likely to experience gatekeeping than men while again, people who kept their identity to themselves were the group that most highly experienced gatekeeping.

5. Analysis and Discussion

Each explanatory model out of the different eleven can be analyzed separately [14], though a horizontal cross-sections analysis of trends identified in the various models would be more beneficial here, and will give a more macro pattern picture on gatekeeping in virtual communities. That is, instead of explaining each model separately, I identified in this paper repetitive tendencies along all of the various models while trying to answer ‘how do virtual communities create a sense of order and control of information’, or ‘how do they establish gatekeeping mechanisms’? The analysis will approach three different angles of gatekeeping: gatekeepers (section 5.1), communities (section 5.2) and the gated – the user that experience gatekeeping (section 5.3).

5.1. Gatekeepers: The Duality of Hurting and Guarding the Walls

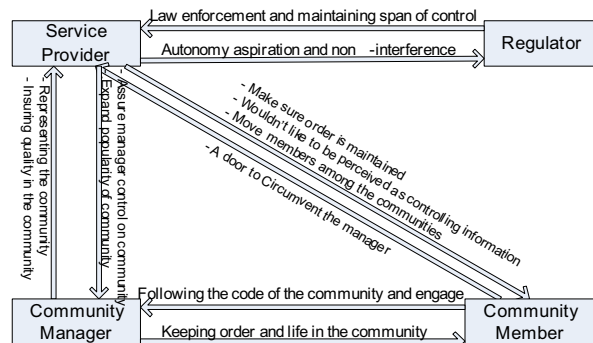
Classical gatekeeping literature treats gatekeepers as protecting boundaries and autonomy of social networks. According to the models in this study that deal with gatekeeping that occurred due to ‘Commercial Information’ or due to ‘Infringement on Communal Culture’, it can be hypothesized that service providers and managers not always play the role of guardians toward their communities and in some cases even betray their roles as protecting-gatekeepers (see result No. 1). Managers and providers chose to inundate communities with commercial information/SPAM, which serves as a main source of revenues, while less taking into account the cost of the intrusion into their communities. In these cases, two agendas are involved: that of the community, which is not interested in commercial information, and

that of the providers and managers, who exploit their authority and role as gatekeepers, pursue their interests and distribute this material.

In some instances service providers take it even further: not only they distribute commercial information, but they also try to attract attention of members and solicit them to move to other spaces on their platform for the sake of another activity (e.g., move them to another virtual community). These cases are outright infringements on community culture, since the objective of these activities is to draw members away from their communities and reduce their engagement with their own community, thereby weakening the social capital of the community (for example, a message that invites all members of a forum to join a discussion in another virtual community and to stay there). In cases of infringement on community culture, the explanatory models detected that service providers exclusively and not managers, were in violation (see Result No. 1). Managers are mostly ready to distribute commercial information upon requests of their service providers, but not to distribute messages that may destroy their communities, e.g., by moving users to other communities.

The relationships among the various stakeholders are sensitive in virtual communities. Figure 2 exemplifies some of the tensions that may occur in the context of virtual communities in four layers (look also at Barzilai-Nahon [23]).

Figure 2: Virtual Communities’ Stakeholders



The sensitive relationship among the stakeholders, defines their dual role as gatekeepers. On the one hand as guarding the walls upon members of communities, and on the other hand exploiting their power and manipulating information to adapt it to their interests and needs. While the first section of analysis deals with the gatekeepers level, the next section deals with communities as the unit of analysis.

¹ More details on the coding process of gender can be found at <http://www.ischool.washington.edu/karineb/html/pub/PhDBarzilai.pdf>

5.2. Marginalized Groups: Gatekeeping and the Boundaries of Communities

Increasingly, the literature is emphasizing the vulnerability of virtual communities that are out of the mainstream [24, 25]. Most of these studies are qualitative and examine specific case studies of marginalized groups and exhibit aspects of intolerance towards these communities (for example, entering a homosexual forum in order to create chaos among its members, through posting messages of hate and provocations).

This study makes it possible to perform a comparative empirical examination of different virtual communities on the same platform quantitatively and qualitatively and examine whether marginalized groups, namely, those that are not being conceived as part of the mainstream, are indeed more exposed to harmful attacks because of their controversial subjects (see Result No. 2). Marginalized groups are non-ruling communities and are collectivities which have systematically been excluded from hegemonic power foci [26].

When it concerns the first research question – did gatekeeping occur, Result No. 2 shows that the subject-matter of the community, which is the essence of its common good, is more important than the question whether the group is marginalized or not in the general culture.

First, and contrary to conventional expectations [24], the findings show that virtual communities which are out of the mainstream do not experience more intrusion and attempts to injure community norms than do other types of virtual communities. Sometimes even less, for example, virtual communities of gays-lesbians are less likely to experience gatekeeping than those devoted to sports and music.

Second, primarily virtual communities dealing with current events, the economy, and social issues are more likely than others to experience gatekeeping. When it comes to infringement on community culture, communities of current events and fans were more exposed to harmful material, and therefore tended to exercise gatekeeping more often than other communities. Since communities dealing with current events are usually discussing acute and controversial issues, the atmosphere there tends to be tensed. Members in these collectivities are interested in the same subject and it constitutes the glue that holds the community together. However, they often belong to opposite sides of the barricade, so discussions easily flare up. If gatekeeping takes place in such a case, it is usually because of infringement on community culture. At the same time, communities that are dealing with current events were

less likely to experience gatekeeping because of irrelevance.

Communities concerned with the family, art, culture, education and sciences tended to exhibit less internal conflicts and were able to maintain a more peaceful communal life. These virtual communities are usually more specific and professional in nature, less politically contentious, and therefore tend to attract members interested in a narrower field, which offers fewer opportunities to harm the community.

The finding in this study, that the positioning of a group in a certain culture (i.e., mainstream vs. marginal group) does not suggest that it will be attacked on the Internet, leads to the conclusion that the Internet opens new opportunities to users, allowing them to choose their affiliation with the virtual communities they desire. Choices and alternatives in the real world are more limited, especially for marginalized groups in society that might suffer further marginalization. In most of these cases choosing the kinship is not voluntary but is forced upon us as part of our way of life, therefore, many times the spiritual engagement in a community might be confined. On the other hand, the findings show that regardless of the community positioning, virtual communities impose gatekeeping either towards external users who are trying to intrude, and towards their members, as well, if the contentions are bitter and pose a danger to the cohesiveness of the community. The combination of data mining and content analysis was crucial in order to identify the conditions in which gatekeeping prevails. So to conclude the argument: cyberspace offers users the opportunity to choose the affiliation to communities, and does not impose relationship. This allows marginalized groups to feel more open and less fearful of bonding together in cyberspace, and creating a strong social capital and a community core that will enable them to resist attacks on their communities for the sake of harming them.

Furthermore, the dependence of gatekeeping on the subject-matter of the community shows that virtual communities are diverse and offer plurality of choices for users who can interact at once with many communities, in a way and to a degree that are impossible in real life. Yet, virtual communities have their own boundaries both towards outsiders and insiders. As discussed in Barzilai-Nahon [23] voluntary engagement, which happens extensively in the Internet generates social capital. Community members who can choose their affiliations according to their free will feel more engaged and are inclined to contribute more to the general good of the virtual community. Although social capital may be different in cyberspace than in the real world, our discussion demonstrates that commitments of users in

cyberspace may be strong. Marginalized groups may create strong sense of social capital, maybe even stronger than in the real world. Aside the massive literature on the benefits of social capital in communities [27], some scholars have raised skeptical views about social capital meaning [28, 29]. Similarly, we can see in this study that marginalized groups as main stream groups with a strong social capital and communitarian feelings can create a strong homogeneity of ideas and expressions, while oppressing any alternative perspectives that are not consensual. Hence, online marginalized communities will oppress opinions that are different, while those opinions may well be main stream in similar offline communities. Marginalized communities have to experience a certain oxymoron since they creating strong communal basis and identity, yet, they are marked with boundaries that exclude users who are outside the community (see also [29]).

5.3. The Illusion of anonymity: Guests, History and Gender

Result No. 1 revealed that guest users were more likely to experience gatekeeping than permanent members of communities. Many platform providers enable users to login to communities either with a permanent user account or with a guest account. Why would users prefer to join as guests rather than as permanent members, when a virtual community is of an unidentified type and its members are perceived to be anonymous? From interviews with forum managers and from the content analysis of the messages done for this study, it is clear that in most communities many members know each other. As a community matures, its members become more familiar with each other and kinship relationships are developed, especially among members that construct the community core (usually the seniors) [23]. Though, most of the interactions are being done by using nicknames and not real names.

Using a guest account provides an additional layer of anonymity, although in this case the enhanced personal security is not aimed against the authorities or service providers but at the community itself, since in most cases service providers can track and identify users with a high degree of confidence, for example, by examining their IP address. Using a guest account increases the anonymity vis-à-vis the community and allows the user to join without providing personal details and choose a nickname, thereby minimizing the risk of being exposed by other members.

There is a rich literature on the issue of anonymity on the Internet [30-33]. According to all these, the added anonymity with respect to the community (and not other external stakeholders) provides for the guest a greater

opportunity for free expression with minimal consideration of group pressures and without the risk of revenge, enabling the guest to disseminate information, which might have heavy implications for the community without assuming formal responsibility to the community. Platform providers allow guest accounts because they believe that in this way, *strangers* who are not part of the community might be able to participate in some cases in discussions and at the same time remain distinguished from the regular members of the community – creating boundaries between the community and its outside environment, a win-win situation for both the community and the guests.

The content analysis of guest messages reveals that in most instances these guest accounts are not used to accommodate outsiders but are rather a way for members of the community to separate themselves from the virtual identity they have created. Members are aware of their image and relationships created in their communities and wouldn't like to jeopardize their status in the community. So logging in to the community with a guest account is done because they think their views would hurt the hegemony norms expressed by the community in some way, which is why guest identities are more likely to experience gatekeeping and their messages are more likely to be deleted. Hence, guest accounts are a way for members of a community to generate debates and express diverse opinions among its members. So my claim which is similar to the one made in the previous section: that gatekeeping may lead into silencing voices that are not similar with the mainstream of the communities, thus creating monolithic spaces without high level of information diversity inside them. The mechanism of guest account provides users with the rather illusion, that both anonymity and therefore the freedom to express marginalized views exist.

Continuing to examine the anonymity issue in virtual communities Result No. 3 uncovers that history about members of the community is significant in terms of gatekeeping and may provide an indication of the users' pattern of virtual behavior. Users that had more deleted messages that were treated by the community as a larger number of condemnations were more likely to experience gatekeeping than other members of the community. How much history is enough to determine a virtual pattern of behavior by managers of the community? According to the study, in cases of SPAM, one month was sufficient to provide a good indication of the chances of a user to be intrusive and therefore experience gatekeeping. Users who invade a community with the purpose of distributing advertisement and commercial material usually try to post the same message in many communities; after being discovered their usernames usually are blocked. Therefore, in most cases of commercial information, there

is simply no history from which one can learn about the gated user; if there is one, it is usually short, such as one month.

According to the explanatory models created by the data mining, a complete historical profile of user's deletion records in the past over the platform would give the service provider a good indication as to whether a specific user can potentially be a trouble-maker, and will try to hurt communities. Moreover, according to the models, looking at the user history only within a specific community is not enough, to predict or understand its virtual behavior pattern, and it is vital to check also the horizontal history of the user, in all the communities with which the user is affiliated on the platform.

So are members of communities really anonymous? While providers indeed might be accessible to such information on their platforms, the specific communities' managers do not have access to every individual member history record over the whole platform through the information systems accumulated by the service providers. Then the question that needs to be discussed is 'why does tracking the deletion record of a user affects the chance of a message to be deleted?' As communities mature, the manager and the core of the community (i.e., the seniors that drive the base for social capital) learn patterns of behavior of their members. The learning process is not necessarily a formal process, but is part of the self-regulation processes that are being carried out in communities. During this, an informal image and categorization is being assigned to each one of the members according to the accumulated activity within the community. A member who is considered being a constant troublemaker will be handled by managers rigidly. Contrary to conventional expectations, results demonstrate that despite a certain measure of anonymity that exists on the Internet (e.g., the ability of members to change their identity and online behavior more easily than in the real world) members of virtual communities adopt consistent virtual patterns of behavior. In many cases once a label of an irritant has been assigned to a user, once the process of learning ended, it would be very difficult to change the view of the gatekeepers and in some cases the rigid treatment these users receive comparing to their mates would not be justified, and their message will probably continue to be deleted, and pass gatekeeping, sometimes erroneously based on their "anonymous" history. The results indicate that regardless of anonymity, virtual identities tend to exhibit a consistent behavior in cyberspace.

Finally, Result No. 4 describes some anonymity issues in communities from a gender point of view. In all cases, users who did not provide information about their gender were regarded by forum managers as the most dangerous

group, and were more likely to experience gatekeeping than either men or women who identified their gender. For users identifying their gender, the general gatekeeping model (the model that answer 'did a gatekeeping event occur?') indicated that relative to their proportion among the users on the provider's platform (54.2%) men were more likely to experience gatekeeping except in cases of infringement on community culture and irrelevant messages, when women's messages were more likely to be deleted relative to the women's share among the users on the provider's platform (45.8%).

According to interviews with forum managers, while women are inclined to be more social than men and to raise issues that concern social relationships among members of the community, in many cases women are inclined to steer discussions from the main subject of the community to other topics, which are perceived as turning out to be irrelevant by the communities' managers, and later results in gatekeeping activities against them (e.g., deleting these items). For the same reason, in cases that are perceived by the managers as infringement on community culture, women were more likely to experience gatekeeping than men.

It seems that on the one hand the virtual space is subjected to patriarchal perceptions as if women who provoke unconventional thinking endanger the community. On the other hand, women find in cyberspace a platform for expressing social voices that are more easily suppressed among real communities. Therefore women were also more likely to provoke the community and exercise a divisive influence. The virtual space, as this study exhibits, is both a source of redemption for women who might be more suppressed in the real space, and on the other hand, the cyberspace has its own gatekeeping mechanisms, also against women. In the general model, however, gatekeeping is more likely to be activated on men than on women. Managers explain that this is because of a perception that men are liable to create more "troubles" than women, and are therefore examined more thoroughly by managers. Based on the findings, any conclusion about cyberspace being gender-free and, alternatively, any statement as if it has basic gender characteristics would be too superfluous. This issue shows that analysis through network gatekeeping theory may reveal new things regarding compound aspects gender in context of the Internet. Moreover, it shows that being anonymous does not always help the gated to gain power in her community, and in many cases is for her disadvantage.

6. Conclusions:

The findings elicited some points for discussion: First, the duality of roles that the different gatekeepers play in

virtual communities and the tension in the relationships among them. For example, service providers are not concerned with the welfare of their users and often flood them with commercial material, including offers contrary to the interest of the communities. In most cases forum managers allow the posting of commercial information approved by the providers but delete information that they interpret as harmful to their community. On the other hand, the providers confront a sensitive interaction with regulators concerning the authority over their platforms.

Second, it shows that even on generally anonymous platforms, members of virtual communities in some cases prefer using guest accounts in order to keep their virtual identity concealed vis-à-vis their community colleagues in order to ignite provocative conversations. This happens mostly when their statements are liable to breach conventional norms, in which case they prefer to add one more layer of anonymity. The anonymity issue also uncovered the informal learning processes that managers do in order to accumulate history of users to be able to categorize to patterns of behavior, and to be able to facilitate the gatekeeping process.

Finally, contrary to the findings of other studies that explored specific virtual communities using the case-study methodology and suggested that marginalized groups were also more vulnerable in cyberspace, eliciting provocations and more likelihood of being harmed. The present study found that marginal groups were not different from mainstream groups in the attitudes of outsiders toward them.

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