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Internet Usage Under Authoritarian Regimes: *Conviviality, Community, Blogging and Online Campaigning in Iran*

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Abstract

The Internet is increasingly used throughout all countries, including those with authoritarian and oppressive regimes. What will be the outcome of this intersection? The academic literature is replete with debates on the Internet as an authoritarian or democratic device and whether it provides a revolutionary tool for freedom of speech or is a menace to society. Most of these studies focus on social theory or technical studies of the Internet to fall within one of the polarised utopian or dystopian categories.

Rather than focussing on the interplay of social forces, or narrowing down on the technology as the sole determining factor, this study pays significant attention to both the characteristics of technical objects and the socio-political forces. To address this, Illich's theory of 'conviviality of tools' is drawn upon. This theory is used to examine the basic argument that the Internet is a convivial tool that promotes conviviality in Internet communities.

Our examination draws field evidence from case studies of two online campaigns in Iran – one on women's rights; one on stoning. These show that bloggers can develop strong campaigns under authoritarian regimes. However, the state is increasingly fighting back. And it is the state – by mediating the relation between virtual and real social spaces – that will significantly determine the transferability of conviviality between the two.

We build from this to create a final conceptual framework that provides a model for analysing authoritarianism and the Internet in other countries.

A. Introduction

Since its creation, one aspect of the Internet that has interested many scholars has been its political dimension. The academic literature is replete with debate on whether the Internet reflects authoritarianism or democracy, drawing on technological determinist or social shaping theories. Utopians argue that the Internet promotes a more intense democratic participation and will advance a direct form of democracy (Hague and Loader 1999; Rheingold 1993; Toffler 1991). Dystopians on the other hand believe that the Internet has the capabilities to pose a threat to democracy as it allows states and large businesses to maximise surveillance, control and manipulation of citizens, especially in developing countries (Gutstein 1999; Wilheml 1998). DiMaggio et al. (2001) in their review of the literature around the social implications of the Internet present two main conclusions: firstly that the Internet's impact is more limited than either the utopian or dystopian visions suggest. Secondly, that the nature of that impact will vary depending upon how economic actors, government regulation, and users collectively organise the evolving Internet technology (p310). To date there are few empirical studies that go beyond this polarised "utopian-dystopian" debate and improve our understanding of the dynamics of the Internet and its relation to the socio-political sphere. In response, this paper analyses the relationship between the Internet and societal change by examining specific political experiences from within a local context. Iran was chosen as the basis for the research because it is a highly relevant but under-researched example where citizens are struggling for freedom of self expression, in a country where the regime has restricted expression of certain views and political opposition. Therefore, many individuals and groups have exploited the relatively less censored and less regulated nature of the Internet to open new windows for dissent and expand the realm of public free speech (Hofheinz 2005, Loewenstein 2008).

This study specifically addresses the following question:

> *Can the convivial characteristics of the Internet contribute to societal conviviality in Iran?*

To address this, Illich's (1973) theory of 'conviviality of tools' is drawn upon. This theory is used as a lens to examine: 1) the extent to which the Internet is a convivial tool that promotes conviviality in

Internet communities; and 2) the extent to which this conviviality can contribute to the conviviality in the real spaces of society in the Iranian context.

The paper is organised as follows. In the next section, the paper presents the theory of conviviality. After a presentation of the research approach we draw on empirical evidence to demonstrate the conviviality of the Internet. Two Internet based campaigns are presented to investigate whether campaign members can use the conviviality characteristics of the Internet to make any significant changes to the Iranian society. The next section discusses the findings of the research and presents the conclusion. The final section presents a conceptual framework that is derived directly from the findings of this research. This conceptual framework lays the foundation for further work and research in this field, especially in studying different countries.

B. Conviviality of the Internet

> *"Convivial tools are those which give each person who uses them the greatest opportunity to enrich the environment with the fruit of his or her own vision. Industrial tools deny this possibility to those who use them and they allow their designers to determine the meaning and expectations of others. Most tools today cannot be used in a convivial fashion."* *(Illich 1973)*

We chose the work of Ivan Illich (1926 - 2002) as the theoretical basis for our inquiry. Specifically, we draw on Illich's writings on Conviviality as expressed in *Tools for Conviviality* (Illich 1973). Illich's work has had considerable influence over information systems research and practice. Orlikowski and Iacono (2001) point out that Illich's insights on conviviality underpinned the argument by Kling and Dutton (1982) and Kling and Scacchi (1982) for a change in emphasis away from the technical artifact (i.e. computers and software) which had previously dominated information systems design and implementation. The view of information systems design and development through the 'lens' of conviviality inspired a reconceptualisation of the technical artifact as only one element in a 'web of computing' required to apply the technical artifact to socio-economic activity. The web of computing includes training, staff, organizational arrangements, policies, and incentives to enable the effective management and use of new technologies. The influence of Illich's insights on conviviality of technology has continued into contemporary information systems research and practice (e.g. Wastell et al. 2004).

We draw on Illich's work here for two main reasons. Firstly, the theory offers an appropriate conceptualisation of the extent to which technology supports democratization and features suited to civil society which constrain particular groups' abilities to control the flow and content of information, knowledge and ideological or symbolic representations. Secondly, Illich's work has been used effectively in related prior studies of the Internet and social reform most notably in Indonesia (Lim 2003).

Illich rose to fame in the 1970s with a series of polemical books on major institutions of the industrialized world. They explored the functioning and impact of education*,* energy, transport and economic development, medicine and work. In *Tools for Conviviality*, Illich (1973) argues that for hundreds of years, machines worked for men realising the vision that machines can replace slaves. For Illich, people need tools to work with, rather than tools that work with them. They need technology to make the most of the energy and imagination each has, rather than producing more well-programmed energy slaves. The concept of conviviality in Illich's work which we draw upon here refers to the role of technology in autonomous and creative intercourse among persons and the intercourse of persons with their environment. Illich writes:

> *"I choose conviviality to designate the opposite of industrial productivity. I intend it to mean autonomous and creative intercourse among persons... I consider conviviality to be individual freedom realised in personal interdependence and, as such, an intrinsic ethical value"* (Illich 1973).

For Illich, convivial tools are a central feature of a convivial society. Conviviality is understood as "autonomous and creative intercourse among persons and the intercourse of persons with their environment" and represents in essence individual freedom realized in personal interdependence. Tools include all rationally designed devices, be they artifacts or rules, codes or operators. For Illich, school curricula or marriage laws are no less purposely shaped social devices than road networks. A convivial society would be the result of social arrangements that guarantee for each member the most ample and free access to the tools of the community and limit this freedom only in favor of another member's equal freedom. The politics of a convivial society would aim principally to exclude the design of tools that are obstacles to the exercise of personal freedom. With the caveat that the criteria of conviviality are to be considered as guidelines to the continuous process by which a society's members defend their liberty, and not as a set of prescriptions which can be mechanically applied, Illich outlines four main characteristics that define convivial tools:

1. Users, rather than the designers of the technology, must have the power to shape it according to their tastes, desires and needs;

2. Convivial tools must promote communities and encourage and maximise communication amongst the members of the society;

3. Convivial tools must make the most of the energy of individuals, and maximise and encourage creativity and imagination of users;

4. Users of convivial tools must not be mere consumers, but also producers and contributors to the technology.

According to these criteria, Illich shows how the telephone is a good example of a convivial tool. He writes:

> *"The telephone lets anybody say what he wants to the person of his choice; he can conduct business, express love, or pick a quarrel. It is impossible for bureaucrats to define what people say to each other on the telephone, even though they attempt to interfere with the privacy of their exchanges"* (Illich 1973).

Is the Internet a convivial tool? If we relate the extraordinary story of the evolution of the Internet to the characteristics of conviviality it is clear that the designers of ARPANET had no intent for it to evolve into today's Internet. Their objective was to develop a network for the US military with minimum vulnerability against nuclear attacks. However, the architecture, method of communication, and the protocols were all created and shaped by the communitarian culture of the technology (Castells 2001). The first condition for conviviality is clearly fulfilled by the Internet in that the users of the Internet defined and shaped it to its form today, not its original designers.

With regard to the second characteristic, openness of the Internet's architecture and the social organism it maintains, allows new nodes to be added with little cost and this scaling property was one of the main reasons for the exponential growth of the Internet soon after its advent. This allowed for new users of the technology as well as the modifications to be communicated back to the entire user base in real time (Castells 2001). This real time communication capability has turned the Internet into the largest, most effective communication network in the world. The transition of the Internet to Web 2.0 enhanced communication amongst users, and hence promoted the communitarian culture further still. Therefore, one can say that the second condition of conviviality, promotion of community and enhancement of communication, is undoubtedly intrinsic to the Internet.

Regarding the third characteristic, the invention of the Internet has completely transformed the business industry and the leisure landscape. The users of this technology have found new ways of competing with each other and new ways to feel joy and pleasure. The Internet has fostered individual creativity and maximised users imagination and personal energy under personal control.

The Internet fulfilled the first three conditions of conviviality soon after its invention. However, until recently, the Internet has reinforced the dominant dependent relationship between those who control the technology and those who consume its product. The recent transition to Web 2.0 has changed things dramatically. Many technologies now allow users to personalise Internet intake and create their own content. These same 'amateurs' are also the audience, critics, fans and collaborators with other amateurs. He further states that "the distinctions between content creator and content consumer are beginning to vanish as individuals seize these tools to make the Internet into what they want it to be". This is reflected in Time magazine's announcement that 'You' (users) were the 'Person of the Year' in 2007 expressing that the Internet reflects the contribution of its users. The Internet seems to fulfil the conditions of convivial tools "permitting the evolution of a life style and of a political system which give priority to the protection, the maximum use, and the enjoyment of the one resource that is almost equally distributed among all people: personal energy under personal control" (Illich 1973). The virtual community created by the Internet can be described as convivial as "it aims at sharing knowledge: members trust each others, share commitments and interests and make mutual efforts to create and preserve conviviality" (Polanyi 1964).

In summary, the conceptual framework draws on Illich (1973) and is concerned with the conviviality of the Internet. In later sections we will apply this framework to enable evaluation of the conviviality of the Internet in relation to evidence from two popular online campaigns in Iran. The effectiveness of these campaigns in achieving their goals enables us to conclude on the value of the Internet to a convivial Iranian society.

C. Research Approach and Background

Since the weblogging community in Iran has received limited systematic empirical scrutiny (Stebbins 2001), this research adopts the exploratory approach to find out what is happening, to seek new insights, to ask questions, and to assess phenomena in a new light. The overall strategy of this research is interpretive, guided by the knowledge of reality as socially constructed by individual human actors. As interpretivists, the researchers attempted to understand phenomena through the meanings people assign to them. This research was largely qualitative in nature consisting of empirical analysis of political activist material on the Internet (Walsham 1995).

C1. Data Collection

Three types of data collection techniques were used in this research: review and synthesis of literature, virtual ethnography and interviews. The review and synthesis of literature was mainly carried out to examine the current literature on social formation and the social influence of the Internet, identify the gap within this literature and establish a theoretical framework for this research. Virtual ethnography (Hine, 2000, Ruhleder, 2000) is a relatively new development in the field of ethnography which extends the traditional notions of ethnographic study from the observation of co-located, face-to-face interactions, to physically distributed, technologically mediated interactions in virtual networks and virtual communities[1]. Following an extensive review, the researcher selected 30 of the most popular Iranian weblogs[2] to observe some of the communications and interactions on a daily basis in the period of April-July 2007. In addition, the researcher also examined some of the weblogs' archival records, and some of the weblogs linked to these 30 weblogs. This unique approach allowed the researcher to gain access to bloggers' opinions, issues, and judgments on different topics. The majority of these weblogs were written in Farsi (Persian) which is one of the reasons why Iranian blogs are largely understudied in developed countries. However, the first author's fluency in Farsi made it possible for these weblogs to be studied, translated, and analysed thoroughly. The first author also conducted a total of 9 semi-structured interviews of approximately 40 minutes each. The first aim of these

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[1] Another example of conviviality, coincidently.
[2] To ensure the popularity of these weblogs Technorati was used. Technorati is a company that keeps track of all the weblogs on the Internet, providing some useful statistics for researchers.

interviews was to gain access to the bloggers' opinion and judgment on certain topics outside the Internet and to compare it with the data collected from their weblog to ensure their validity. Some of the interviewed bloggers write blogs with their real names and some others choose to remain anonymous. Therefore some bloggers are conscious of the possible consequences of talking about certain topics. However, their ability to remain anonymous allowed them to reveal their real opinion. The second aim of the interviews was to collect pieces of narrative of the history of the advent of the Internet in Iran, in addition to gaining inside access to the methods of censorship used by the Iranian government. Therefore, one interview was conducted with a very senior official in the Ministry of ICT in Iran and another was conducted with an individual who was closely involved in the early development of the Internet in Iran. Also one interview was conducted with a journalist who was jailed for several years for political blogging. Finally, three feminist campaign members were also interviewed to understand the precise methods of Internet use in aiding and promoting these campaigns. All in all, the interviewees were selected from three categories: Internet victims, Internet users, and Internet resistors. Some of the interviews were conducted over the telephone; others were conducted through emails if the interviewee requested to remain anonymous. E-mail interviews hold several advantages over traditional face-to-face interviews: they allow more time for the interviewee to reflect on the questions and their impersonal and anonymous nature allows the interviewee to say things that would not be said face-to-face (Hunt and McHale, 2007). Some interviews were tape recorded as well as notes being taken. The reasons behind using tape recording had been explained to all interviewees and their permission to record was obtained in advance.

C2. Background

After the 1979 revolution, new models of behaviour and self presentation were formed in Iran which were based on Islamic teachings. In the first decade after the revolution, in particular, interactions with government institutions and bureaucrats necessitated a specific model of self presentation. Men were mostly required to wear dark-coloured clothing, trousers, untucked long-sleeved shirts, and facial stubble. Women also had to appear without any make-up in a black 'chador[3]' (Amir-Ebrahimi 2004). Since a non-traditional model of self-presentation continued to exist in private settings, people,

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[3] 'Chador' is an outer garment or open cloak worn by some Iranian women when they venture out into public.

especially women and youths, employed the strategy of adopting multiple personalities and models of behaviour, to cope with both traditional and non-traditional settings. Amidst these identity crises the Internet was born in Iran in January 1993, when Dr Larijani, director of the Institute for Studies in Theoretical Physics and Mathematics (IPM) sent Iran's first e-mail to the University of Vienna (Rahimi 2003). Whereas in many countries, such as China, the Internet was largely developed by the state (Rahimi 2003), Iran's first experience with the Internet occurred within the university system and until recently most of Iran's domestic Internet connections were based in academia (Rahimi 2003). However, within only a few years, the community of Internet users spread from experts within academia to the public.

The Iranian government promoted the use of the Internet to provide an alternative means of scientific and technological advancement during the troubled economic period that followed the Iraq war. Additionally, the government was in favour of technological advancement as one of the main messages of the 1979 revolution was to put the supposed affinity between scientific technology and faith into practice (Rahimi 2003). Furthermore, the Internet impressed the government by its potential to serve the Islamic state as a forum for online discourse of revolutionary propaganda and to promulgate the Shia[4] ideology. Several clerics referred to the Internet as a "gift to spread the word of the prophet" (Rahimi 2003). Lastly, the non-censorship policy in relation to the Internet affirmed the original ideology of the Islamic revolution as a supporter of modern technology. However the government's lack of technical expertise and insufficient finances restrained them from providing any direct assistance to the commercial sector to develop the Internet in Iran. On the other hand, the curiosity of the Iranian public and their demand for a medium that connected them to the outside world created an opportunity for the private sector to take the matter into their own hands. As a result the state information agencies became increasingly weaker in the domestic telecoms market.

Rapid technological advancements in the private sector due to the importation of inexpensive computer products from south Asia, the initial promotion of the Internet by the government, and the high demand by the Iranian public, encouraged Internet use to grow at an extraordinary rate. Internet use grew from

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[4] **The** Shia faith is the second largest denomination of Islam. Shias believe that Ali, prophet Mohamed's son in law, was his rightful successor. Shias also believe that the religious leader is also the political leader in the Islamic state.

1 percent of the population in 2000, to more than 10 percent in 2005 and more than 30 percent in 2008 (World Bank 2006, Internetworldstats 2009): an exponential growth curve that has been one of the fastest growth rates in the world. The growth of the Internet, rise of cyber-cafes and coffee-shops, and inexpensive voice chat became a convenient way for the public, particularly young people, to converse online, challenge the Islamic government's legitimacy and confront its oppressive impositions of moral guidelines. Another interesting phenomenon that has experienced a similar extraordinary growth rate is weblogging. The Iranian "blogosphere" was initiated in September 2001 when Hossein Derakhshan, a young journalist from Iran, set up one of the first blogs in Farsi, and created a simple how-to-blog guide. Since then, the community of bloggers has witnessed a dramatic increase in its population in the last six years, and reports suggest that Farsi, together with French, is now the second most frequently used language for keeping on line journals. According to the 2009 NITLE Blog Census, there were roughly 200,000 blogs written in Farsi.

Alavi (2006) claims that the astonishing growth rate of the Iranian blogging community relates to the fact that it meets the needs no longer met by the print media; "it provides a safe space in which people may write freely on a wide variety of topics, from the most serious and urgent to the most frivolous" (Alavi 2006). Some journalists and writers use this safe space to bypass strict state censorship and to publish their work online. The famous case of a former prostitute's weblog, detailing the underworld life of Iranian society, demonstrates how Iranians are defying and bypassing the strict moral code imposed by the Islamic state. Therefore, the Internet has been free of control and censorship for most of its development period in Iran, providing people with the unique opportunity to anonymously demonstrate their dissent, exercise self expression, and all in all, open new windows and expand the realm of what can be said in public (Hofheinz 2005).

D. Findings

This section presents the findings from two case studies in which the Internet is currently being utilized as a medium for public dissent, collective political activism, and social movements in contemporary Iran. In each case the background of the issue, the nature of the movement, usability of the Internet and the reaction of the state will be discussed in detail.

D1. Case 1: The 1 Million Signature Campaign

Throughout the twentieth century, Iranian women have organised and fought for social and political rights. However, most recently, the advent of the Internet has changed the nature of these movements dramatically. Weblogs allow Iranian women that were suppressed for all of their lives, to express themselves freely and anonymously for the first time in history. Feminist campaigners believe that the Iranian law considers women as second class citizens and promotes legal discrimination against them. They also believe that unjust laws have promoted unhealthy and unbalanced relationships between men and women that have had negative consequences on both sexes. Therefore, this campaign was initiated in 2006 by feminist campaigners demanding an end to discriminatory laws against women. This campaign aims to collect one million signatures through door-to-door contact, women gathering events set up by the campaigns and most importantly, through the Internet, in support of changes to discriminatory laws against women, and to provide education on legal issues to the public, raise public awareness, promote collaboration between groups demanding equality between men and women, and to document experiences. Other campaigns were also initiated with association to this campaign, demanding equal rights for women regarding more specific issues such as freeing feminist campaigners from prison, allowing women into football stadiums, and providing Iranian nationality to children of foreign fathers and Iranian mothers.

According to a personal interview with one of the campaigners, the Internet is the most important tool for this type of campaign. The interviewee (who wished to remain anonymous), stated "the Internet allows them to share information about the campaign, and educate and raise women's awareness by providing legal educational material". Those interested in supporting the campaign can then sign the campaign's online petition. In addition, according to the interviewee "the Internet is the easiest way to gain access to a large audience, arrange meetings and seminars, promote dialogue and identify the supporters of the campaign without the harassment of the government".

These campaigns often raise funding for feminist movements and other feminist issues using the Internet and online facilities such as Paypal. These campaigns often make a big reflection in the Iranian blogosphere. Bloggers often discuss these campaigns in detail, stating their opinion and either supporting or opposing their efforts. Bloggers that support these campaigns normally display

logos and banners (figures 1, 2) of these campaigns on their weblogs and write an article in support of the campaign. The result is an international network supporting and opposing these campaigns.

Figure 1. The right to pass nationality down

Figure 2. Open stadiums to women

Bloggers often publish photos, videos, and news on the progress of such campaigns, something that is entirely shunned by the state owned newspapers. Other newspapers are also banned from publishing such material, which according to the government may cause political instability and threaten the Islamic Republic. Therefore, weblogs are the only sources that provide information, raise awareness and promote dialogue on such campaigns and movements. However, the webloggers are not all supporters and the Internet allows expression of dissent and reaction. For example, figure 3 shows some of the direct responses by webloggers to the 'Open stadiums to women" campaign:

Figure 3: Responses to the 'Open stadiums to women campaign'

Outcome of the campaign

One of the Government's first efforts in reaction to these campaigns was the creation of propaganda against feminist activists, presenting them as 'the enemy of Hejab[5] , Islam and the Islamic state'. All the mainstream media are operated by the state and the head of the TV and Radio is selected directly by the Supreme Leader. Reactions from bloggers are illustrated in figure 4 below:

30 June 2002   http://aaab.blogspot.com
Do you watch television? Unbelievably stupid...It's so moronic... even
if you ignore the worthless subject matter, the poor production and
performances... the worst bit is the absurd propaganda.
Source: Alavi 2006

Figure 4: Blogger reaction to TV media

According to Shahrzad News, Minou Aslani, Director of Public Relations for the Basij[6] Resistance Force, has initiated a 4.5 million signature campaign, protecting Hejab and Islam, as a direct response to the 1 million signature campaign. The government has initiated a broad crack down effort, commonly known as "The effort to fight bad Hejab" provoking attacks on Feminist activists. Photos, videos and news of these attacks are published on weblogs and social networking sites such as YouTube (figure 5).

Figure 5 taken by a mobile phone camera, demonstrates an attack on an Iranian woman because of her unsuitable dress code. Such images would never be permitted to be published in official newspapers. However, this image was published and discussed by hundreds of bloggers. Source: http://irwomen.net

This and similar efforts by the police created a huge reflection on Iranian blogs and instigated several campaigns calling for a virtual march and petitions calling for freedom of feminist activists. Once again, bloggers have supported these campaigns by displaying their logos (figure 6), raising awareness and creating dialogue.

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[5] Hejab is the Arabic term meaning to cover. In the Islamic context it is a religious requirement that obliges women to dress modestly and to cover everything except the face and hands.
[6] Basij is a volunteer based Iranian paramilitary force that was founded by Ayatollah Khomeini in November of 1979.

Iranian blogs were linked to foreign blogs and consequently several news channels and human right organisations such as 'Amnesty International', 'Reporters Without Borders', the BBC, and Reuters published appeals and requesting the freedom of feminist campaigners. During an interview with a blogger named Zeitoon[7], she argued that "the number of bloggers is not significant in comparison to the country's population, but it is increasing exponentially on a daily basis. As the number of Internet users increases so does the government's fear and anxiety". According to her, this fear and anxiety was mostly because bloggers' thoughts and ideas are gradually penetrating amongst people in society and that the government is aware of online petitions sent to the United Nations, for example. The Iranian Government closed down the main campaign website six times and has been censoring the word 'woman' from all search engines including Google, in an attempt to ensure a decline in the blog readership. Extracts from blogs are given below in figure 6.

Figure 6. Extract from a blog and logos exhibited by many bloggers as a sign of protest against the censorship of the phrase 'Women' and filtering feminist websites.

An interview with a highly ranked government official in the ministry of ICT provided details of the nature of filtering (censorship) of weblogs: "For example we had to intensify filtering when women's campaigns were progressing, or when the presidential election was heating up…..these sites get filtered exponentially, meaning that after filtering one site; all the sites linking to it and all the links to the links get filtered." An interview with one of the campaign members gave a different perspective. This person stated that the Government censorship efforts have not been effective at all and that

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[7] Zeitoon (Olive) is the interviewee's nickname. Her weblog http://z8un.com is one if the most well known Farsi weblogs. Zeitoon has a different online identity from her real life and even her friends and relatives are unaware of her weblog. This is not uncommon amongst the Iranian blogosphere and often bloggers do not choose to identify themselves. Zeitoon did not agree to participate in the interview orally to protect her identity.

statistics also confirm this fact. "Daily statistics, demonstrate that 1,100 unique users visit the campaign site on a daily basis, a figure that has remained generally unchanged after the censorships".

According to this interviewee, most of the site's visitors access the site through blocked URLs, while others access the site through approximately 100 news sites and weblogs, which have either posted their logos on their sites, or have linked a news item published on Change for Equality. In addition many weblogs and websites provide a list of proxies or other facilities that can be used to access blocked website. The blog extract below is typical of those available online:

June 2007   http://varesh.blogfa.com
This article titled "A campaign against violence and backwardness"
was published on roozonline.com. Because you cannot view this site
from Iran [because it is censored] I have put it on this blog...
Asieh Amini

Figure 7. Example of a blog circumventing censorship

Zarafe.com is an example of a site that provides proxy access to some blocked websites and weblogs. It also allows users to access common social networking sites such as Orkut, MySpace etc. Feminist activists also use weblogs to publish their stories from prison, during and after their imprisonment period. A feminist campaigner and also a professional journalist (who wished to remain unidentified), explained how for several weeks after she was arrested, she reported and transferred the events and happenings inside the prison to her visitor friends on tissues. These reports were then quickly publicised by making them available on weblogs.

The 'cat and mouse' game of Government censorship of weblogs, in addition to websites such as BBC Persian, Flickr, Orkut, MySpace, YouTube, Hi5 and many more was largely ineffective due to webloggers sharing technical knowledge and creativity in bypassing state censorship. The government decided to take a new approach and in 2008 an announcement was made to all website owners and webloggers to register their websites (on http://www.samandehi.ir). The ministry of media warned: "If your weblog is not registered, it will have an 'unknown' label and this can lead to its blockage". This infuriated bloggers as this would remove their anonymity and destroy the democratic feature of the Internet, which was the primary aim of the legislation. However, most bloggers chose not to register their weblogs, displaying a banner in demonstration of their disagreement with this legislation. In addition the Ministry of ICT in Iran prohibited Internet Service Providers from providing high speed

connection and limited the Internet connection speed for private use to only 128 Kbps (Economist 2006). This was justified by the government as an attempt to stop the public from downloading Western films and videos which may contain unsuitable material. In an interview with a blogger and also a professional journalist[8] (who wished to remain anonymous), he argued convincingly that these types of measures would never succeed. He explained that "there are a lot of Persian weblog providers, but if they oblige us to register our weblogs, we could simply go elsewhere. There are a lot of foreign weblog providers that can, and do, facilitate Farsi weblogs" (figure 8).

This blogger was not alone in stating the above argument. All interviewees, who where mostly bloggers, concurred that not just this approach, but any other methods of Government filtering and censorship will never succeed.
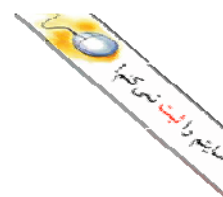

Figure 8. A banner stating in Farsi: "I will not register my site" can be seen on many Iranian weblogs.

D2. Case 2: Stop Stoning Forever Campaign

The Iranian law is mainly based on the Islamic Sharia law. In the Sharia law the punishment for a married man or woman who has committed adultery is death by stoning. Therefore article 99 of the Constitution states: "whoever commits adultery with a free will must be punished by stoning". Articles 100-104 then describe the details of the punishment. However, in December 2002 Ayatollah Shahroudi, Head of the Iranian Judiciary, declared a moratorium on stoning in Iran. Nevertheless, stoning sentences continue to be handed out as no change was made to the Iranian Penal Code to prohibit them.

Background

The Stop Stoning Forever Campaign started its work in August 2006, when a group of Iranian human rights defenders, mostly women, amongst them activists, journalists and lawyers, began a campaign to abolish stoning, following reports that a man and a woman had been stoned to death on 7th May 2006

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[8] This blogger was arrested in January 2005 and sentenced to 14 years prison, as a result of his weblog. He used the Internet as an alternative media for publishing his articles which could not be published in the newspaper that he was employed for. After 18 months he was diagnosed with cancer and released from prison temporarily, during which he participated in the interview.

despite an official moratorium on such executions (figure 9). Since then, they have identified at least nine women and two men who are under sentence of death by stoning for committing adultery, and lawyers in the group undertook to represent them.

Despite the Iranian Judiciary's denial of the incident, campaign activists have gathered evidence that this stoning, along with few other cases, had indeed occurred, and that several more cases are still pending. The campaign's main argument is based on articles 6 and 7 of the International Covenant on Civil and Political Rights (ICCPR), which respectively state: "in countries which have not abolished the death penalty, sentence of death may be imposed only for the most serious crimes" and "no one shall be subjected to torture or to cruel, inhuman or
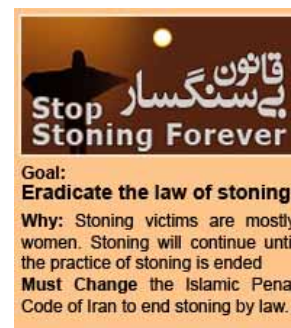

Figure 9. Stop Stoning Forever campaign's logo

degrading treatment or punishment." As previously mentioned, government officials have all denied such sentences and because of the government control of public media, such evidence could never be presented publicly. However, using the Internet the campaign's activists have been able to reach a significant audience to provide them with legal education, raise their awareness, and involve them in the campaign. Iranian bloggers also play a role in distributing the news, links and stories throughout the Iranian blogs which are transferred to foreign blogs, News channels, and other Human Right campaigns. They also discuss the Islamic Sharia law and the Iranian constitution on this issue, which results in further rise of public awareness and education. Many weblogs, websites and Human Right Campaigns display the logo of the campaign and provide the link for people to visit the campaign's website and sign the petitions. Many weblogs provide their readers with a standard letter in several languages to be signed and posted to government officials to stop these punishments and to make amendments to the Iranian Penal Code. Some bloggers provide their readers with officials' telephone and fax numbers and ask them to contact officials to plea for the release of detainees and to maintain pressure on the government. Others provide details of the execution's place and arrange gatherings to stop them. Some extracts are given below in figure 10.

18 June 2007   http://sibiltala.blogspot.com/
What Can You Do? Ring or bombard the Iranian officials with
faxes. Here are the phone numbers [....] Spread the news. If
you are in Iran and live near Takestan [The town of the
upcoming execution], be ready so that if the sentence was
not cancelled, you can go to Takestan's Behesht Zahra
[Takestan's Cemetery].

19 June 2007   http://www.meydaan.org/
Urgent Press Release
URGENT ACTION ALERT: You Only Have Hours to Oppose the
Scheduled Public Stoning of Mokarrameh and Her Partner.

The Stop Stoning Forever Campaign invites all citizens of the world to
contact the Iranian officials by phone and/or fax and ask them to stop
the public stoning of Mokarrameh Ebrahimin, the 43 year old mother of
three children, and her partner, the father of her 11 year old child.
Please note that email may not be effective. Also, please note the time
difference since the stoning is scheduled for Thursday, June 21, in the
morning, Tehran time, which is Wednesday evening and early
Thursday morning in the US and Europe. Please act now before it is
too late!

19 June 2007   http://equalitynow.org
Please send appeals to arrive as quickly as possible, in Persian, Arabic,
English or your own language: Explaining ... State that Amnesty
International considers the punishment of flogging to constitute cruel,
inhuman and degrading treatment amounting to torture... Please send
your appeals to:
Leader of the Islamic Republic, His Excellency Ayatollah Sayed 'Ali
Khamenei, Shoahada Street ... and Head of the Judiciary: His
Excellency   Ayatollah   Mahmoud   Hashemi   Shahroudi
Ministry of Justice... Send copies to diplomatic representatives of Iran
accredited to your country...

Figure 10: Blogger activity regarding executions

Outcome of the campaign

The Stop Stoning Forever Campaign has enjoyed some success. Although the campaign has not been
victorious in making the necessary alterations to the Iranian Penal system, using the Internet has spread
the news and created an international opposition, putting extreme pressure on the Iranian authorities to
adjourn some cases and to revise the Penal system. According to Norway post, the Norwegian Ministry
of Foreign Affairs called in Iran's Ambassador, Abdolreza Farajirad, to protest against the stoning of
Jafar Kiani in Iran. UN human rights chief, Louise Arbour, condemned the execution, saying that
"stoning is in clear violation of international law". She called on Iran to stop the stoning of Kiani's
partner, Mokarameh Ebrahimi, who is reportedly in jail with the couple's two children. Also according
to Radio Liberty, the United Nations, Western governments, and human-rights groups have strongly
condemned the stoning of an alleged adulterer. In a letter to the head of Iranian Judiciary, Ayatollah
Mahmud Hashemi Shahrudi, Human Rights Watch urged prompt action to prevent the stoning and
called on the Iranian authorities to revoke regulations under the country's Islamic Penal Code that
permit execution by stoning. In response to this international pressure and the Stop Stoning Forever
campaign, Elham Aminzadeh, the Vice President of the Foreign Relation of Iran's National Security
Commission, told ISNA (An Iranian News Agency):

"the proof and substantiation of this campaign [stop stoning for ever] is simply based on a list [of signatures] produced from the Internet and members of the international community which is not recognised by us".

In general, the Iranian government's response to this international pressure has been a mixture of ignorance and denial but in most cases, these pressures have resulted in postponement or complete suspension of these punishments. According to Amnesty International, Parisa, Shamameh, and Hajieh who all faced death by stoning, have recently had their cases reviewed. On 5 December 2006 Parisa was released after receiving 99 lashes and Hajieh had her sentence overturned and was released. Shamameh's stoning was also rejected in the Supreme Court, ordering a retrial due to incomplete investigations in the case.

E. Discussion and Conclusion

The research question driving this inquiry is "*Can the convivial characteristics of the Internet contribute to societal conviviality in Iran?*" To improve our understanding of this dimension of the social implications of the Internet, two cases were presented. The Feminist movement case and the Stop Stoning Forever campaign demonstrate that the Internet is not simply another communication or media technology. It is a tool that is successfully used to bypass state censorship and to break through barriers of state monopoly over the production of knowledge and flow of information. In these two cases people have used the Internet to both create new knowledge and share existing knowledge with a larger audience, both inside and outside the country. As discussed earlier, the Internet was met with huge enthusiasm on behalf of both the government and the Iranian public. However, while both the state and the society contributed to the Internet's rapid growth rate, they embraced the Internet for different reasons, creating further conflicts between the nation and state. The difference between the state's and the nation's uses of the Internet created anxiety within the Iranian officialdom. Clerics that have once called the Internet a "gift to spread the word of the prophet" began calling it a "Trojan Horse, carrying enemy soldiers in its belly" (Macintyre, 2005).

Therefore, the same state that had formerly invested millions of dollars in promoting the Internet began investing heavily in censoring it. However, the state's lack of expertise in Internet technology, in contrast to the educated elite, did not enable the government to dominate it or to effectively censor it. This turned the Internet into the only media and communication technology that was outside the control of the supreme leader and the state, thereby providing openings and opportunities for non-state actors to engage in political activism and social reform without overt control from the state.

The Internet developed and grew in universities and it was very quickly transferred to the Iranian society. However, the government lagged behind these developments and hence could not shape the Internet in accordance with their ideologies and desires. Therefore, with reference to the conditions set by Illich (1973), the Internet empowered Iranian society rather than the government shaping it according to their desires. This is one of the points that all interviewees agreed on without an exception: the government had no significant role in developing the Internet[9]; and that the Internet is part of modernity and the evolution process.

As was discussed in the previous section, the main contribution of the Internet to both cases, the Feminist movements and the Stop Stoning Forever campaign, was clearly the production, sharing, and communication of knowledge to society. As a consequence of the regime's oppressive techniques and complete dominance of all mass media and communication technologies, the international community was previously unable to look into dissent in Iranian society. The Internet is being used as a tool by people inside Iran to transfer episodes of their daily lives and reflect their concerns, fears and anxieties in form of blogs to the international community. The Internet is used by people in forming and sustaining campaigns and movements thus promoting communities, encouraging and maximising communication amongst the members of the society; which in Illich's terms represents conviviality. The Internet was used in a variety of ways to help campaigns and movements. The Internet was employed for contacting individuals, collecting signatures, through petitions and emails, collecting money, through online banking and Pay Pal, arranging events, meetings and seminars, in addition to creating and transferring knowledge to provide educational material and to raise people's awareness. The most interesting aspect of the Internet was the provision of the ability to share information that

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[9] This is a point that the first author was able to experience personally in Iran during his time at high school, in the late 1990s.

aided others in the circumvention of government censorship, filtration and other efforts to restrain and control the Internet. This conviviality of the Internet enabled campaigners, social reformers and other users of the technology to bypass state censorship, expanding the realm of what can be said in public and promoting their campaigns vigorously.

After observing the phenomenal growth rate of the Internet, the government was forced to invest in the education of officials especially in the Ministry of ICT in order to impose censorship. However the conviviality of the Internet restricted government in achieving these objectives. After several years of failed attempts to control the Internet, the government considered its prohibition altogether. However, the government's future plans and current levels of reliance on the services provided by the Internet, for cross organisational communication, e-government, e-commerce, etc. made it impossible for them to abandon it altogether as it would have resulted in catastrophic economical consequences for the country.

Referring to the discussion of conviviality, one may conclude that the Iranian Internet meets all the conditions specified by Illich. However, can this conviviality be transferred to the real spaces of Iran? Both cases in the findings section demonstrate that there exists a continuous 'cat and mouse' battle between webloggers and Government as they both try to impose themselves on the other. Based on these two cases, there are no clear winners or losers, but we see an ongoing struggle to defend each other's territory from the abuse and violation of the other.

The cases show how the conviviality of the Internet is initiating several attempts to campaign for change to the Iranian Constitution and consequently Iranian society. On the other hand the government is also instigating efforts to impose its ideologies compulsorily, by attempting to remove anonymity from blogs, arrest bloggers, and censor the information created and transferred to the Iranian society. However, neither has been truly successful in serving their purposes. Although the Stop Stoning Forever campaign and some of the Feminist movement's campaigns were successful in demonstrating the convivial features of the Internet, by creating and transferring knowledge to the outside world, educating people, and creating constant pressure on the state, one cannot say that bloggers have been responsible for altering the Iranian Penal System, or the Iranian Constitution. On the other hand, one

cannot say that the government's attempts in controlling the Internet and imposing censorship have been successful. As has been demonstrated in the findings section above, the government's repeated attempts at imposing censorship were circumvented.

The founder of the Iranian 1979 revolution, Ayatollah Khomeini, realised that the survival of the Islamic Republic system, like any other theocracy, is in need of a strong media dominated by the state to promulgate the ideology of the theocratic government. Khomeini's system provides the supreme leader with the power to select the head of TV and radio. The advent of the Internet was obviously not predicted by Khomeini, and its free flow of information has frustrated and created anxiety within government officials as they compare it to an earlier technology that fuelled the 1979 revolution, when Khomeini's speeches were broadcast from France to Iran through the telephone system developed by the Shah.

These threats, however, do not deterministically signal the final chapters of the regime. After recognising its failure in controlling the Internet, the Iranian state has identified the Internet's Achilles' heel; its isolation from the bulk of Iranian society. According to the World Bank (2008), Iran's GDP per capita was US\$9855 for the year 2007, compared to the UK's \$35100. However, Pars Online, a major Internet service provider in Iran, charges a monthly fee of \$65 for 128Kbps ADSL access with unlimited traffic in the provinces of Iran and \$27 for a similar service in Tehran. In the UK at the time of writing, Virgin Media charges a monthly fee of about \$20 for 2Mbps broadband access. Comparing these figures demonstrates that average Iranian households in the provinces of Iran must spend a staggering one twelfth of their monthly income to gain access to very low speed Internet, something which is perhaps considered a luxury compared to food, education and housing. In the UK an average household spends merely a 146th of their monthly income to gain access to high speed broadband Internet. These figures demonstrate a clear gap in the affordability of Internet access between the people living in Tehran and the people living in the provinces of Iran and also reveal that the Internet is limited to the more affluent segment of the society in Iran (albeit that represents quite a significant segment). Subsequent to identifying the Internet's Achilles' heel, the government realised it can play an important role in further distancing the virtual realm from the physical spaces of the Iranian society by

acting as a mediator, that attempts to diminish the extent of the impact of the Internet and virtual communities on conviviality in the physical spaces of Iran.

Internet's high fees are mostly due to a lack of competition in the Iranian ICT market. This lack of competition is very much surprising considering there were an estimated 23 million Internet users in Iran in 2008 and the fact that the Internet growth in Iran is one of the highest in the world, estimated to be a staggering 9,100% between 2000-2008 (Internet World Stats, 2009). However having a mere glance at the government's policies in recent years, one can find only one reason for this lack of competition: poor governmental policies and legislative laws. According to the OpenNet Initiative (2007), government's banning of high speed Internet in 11 October 2006, not only drove many of the Internet service providers in Iran to the verge of bankruptcy, but caused several projects, such as the $6 million Internet television project of the ITC (Information Technology Company), as well as virtual surgery lab projects, e-universities and many more scientific and commercial projects being implemented in the country to fail. Furthermore, article 19 of the 'Regulation of the Media in the Islamic Republic of Iran' obliges the Internet content providers to be subjected to two complementary sets of requirements: they must produce content within state-defined objectives and they must refrain from producing state-defined types of illegal material. Therefore one can conclude that, intentionally or unintentionally, the Iranian government plays a significant role in keeping the digital divide wide and the Internet access cost high.

Referring to the case of Indonesia, Merlyna Lim (2003) writes: "No political revolution can happen without involving society on a wider scale. Even those efforts within cyberspace are fruitless unless they can be extended into real social, political and economic spaces" (p274). Our study concurs with that of Lim, the Internet is convivial, but access to it is mainly limited to the educated[10] and the more affluent segment of the society and therefore its impact remains detached from the remainder of Iranian society. This is one of the reasons that most campaigns are met by much enthusiasm inside the virtual spaces of the Internet, but not in the real spaces of the society. These two spaces are segregated and

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[10] Although interviewed webloggers were selected randomly, all bloggers, as far as the researchers are aware, possessed at least a Bachelors degree. This highlights the education level of Internet users in Iran.

distant. Pragmatically speaking, as long as this isolation exists, any chance of Iranian webloggers imposing themselves on the Iranian society is limited.

E1. A Conceptual Framework

Figure 11 summarises the findings of this research and lays the foundation for further work. From this figure one can deduce that the virtual spaces of the Iranian society constantly instigate efforts to make changes to the real spaces of the society. However, there exists a 'mediator' in this case the Iranian state authorities, that can seriously weaken these efforts. It is true that this mediator has minimal influence on the convivial characteristics of the Internet within the virtual spaces of the society, but it can have a major influence on its impact on the real spaces of the society. Therefore, one can conclude that the most important factor on the impact of the Internet on societal conviviality in the real spaces of the country is the power and the influence of the mediator: the bigger the influence through the power and domination of the mediator, the weaker the impact. However, this figure also demonstrates that the mediator is under constant pressure from the international community, the virtual world and the real society at the same time. As was demonstrated in the case studies, these pressures have indeed obliged the Iranian government to alter their approach significantly and repeatedly. This model may be generalised to explain the transfer of conviviality in different countries. For example, it would be interesting to apply this model to countries such as Zimbabwe with people suffering under an authoritarian regime. The virtual world would remain largely the same in terms of conviviality in different countries. The difference however, would be the influence of the mediator and the intensity of pressure on the mediator in different countries. In countries such as China and Iran, the influence of the mediator is enormous and therefore the transfer of conviviality very difficult to achieve. In countries such as the US and the UK, however, the influence of the mediator appears to be relatively small and has a lesser effect.
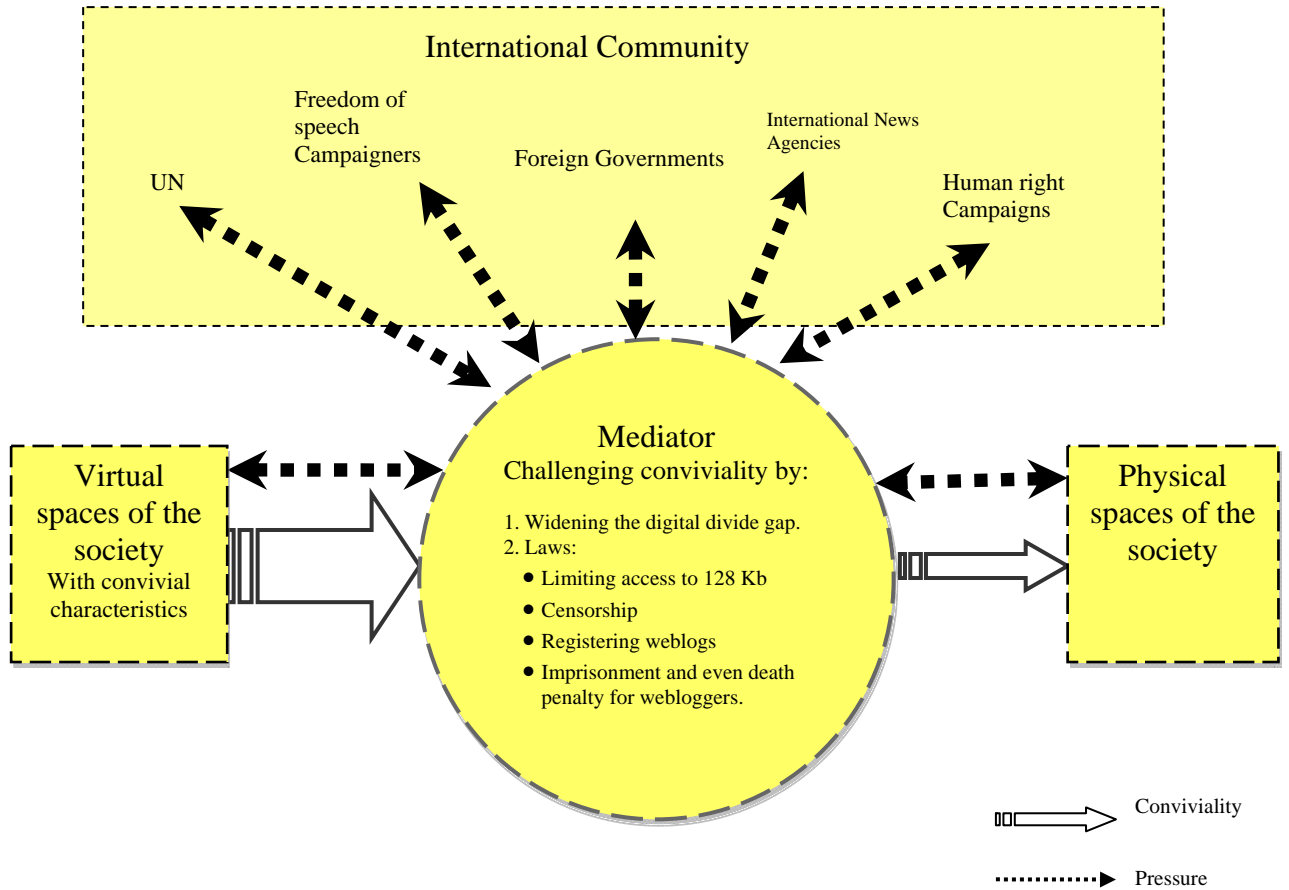
Figure 11. Conceptual framework based on the evidence from Iran

All in all, this model suggests that the impact of the Internet and the virtual communities on societal conviviality depends on three factors:

1. The influence of the mediator and its domination of the Internet.

2. The size of the virtual community with relation to its physical form.

3. The intensity of pressure from the international community.

E2. Paper's Main Contributions and Future Research

This paper begins to contribute both theoretically and empirically to the fields of Information Systems and Social Theory. It is not only a fully detailed empirical piece of work on the political use of the Internet in Iran, but it contains the first known study that examines the impact of online campaigns and

movements on the real spaces of Iran. In addition, it provides several snapshots of the Iranian Internet communities attempting to make alterations to the Iranian constitution and society and also several accounts of the Iranian government trying to control the Iranian Internet. No other study to date has examined this bi-directional struggle between the government and Internet community in such detail. Furthermore, this paper examines the multimodal link between Internet behaviour, real-world behaviour and the state in the Iranian context. This multimodal link is what separates this paper from studies where a relationship between only two constructs, the Internet and real-world behaviour, is explored. Theoretically, this study contributes to literature relating the technology of the Internet, social theory and contemporary socio-political transformations. The novelty of this study is in its relation of the technology of the Internet in Iran. The other major innovative aspect of this study is to employ a novel way in studying contemporary societies by conducting a virtual ethnography in the Iranian "blogosphere". Therefore, unlike many studies of the Internet which lack significant attention to people's activities and conversations in virtual communities, this paper is built mainly around ethnography of these communities. The derived model (figure 11) offers an attempt to generalise the findings to the study of the Internet in other societies. Future research could apply the model and method to other societies, looking for clusters of developing countries that exhibit similar state interventional characteristics to Iran such as China and possibly Zimbabwe. For example, figure 11 could be used to show the transfer of conviviality from virtual to physical spaces by scaling the sizes of the circle and boxes. One criticism of figure 11 could be that it depicts complex, dynamic social events and influences as static. We therefore suggest that future research in this area could gain from offering more process-based accounts of conviviality, showing how outcomes are moulded by historical factors, major events and their sequences, and contextual influences.

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