Determining Dimensions of Social Websites: Insights through Genre Theory

Mohini Singh  
RMIT University  
Melbourne, Australia  
mohini.singh@rmit.edu.au

Yogesh Dwivedi  
Swansea University, UK  
y.k.dwivedi@swansea.ac.uk

Ray Hackney  
Brunel University, UK  
ray.hackney@brunel.ac.uk

Konrad Peszynski  
RMIT University, Melbourne, Australia  
konrad.peszynski@rmit.edu.au

Abstract

This paper considers an analysis of the dimensions of social websites as an important communication and collaboration tool for individual users and communities. Social websites may be referred to as social network sites and social media sites which reflect technology, user, content and linguistic issues for 'social' interaction. They have clearly achieved widespread adoption as a new means of communication in a very short time around the globe. Genre Theory is applied to classify extant literature on social websites to reflect their growing importance, the reasons for their adoption, the content shared, the mode of use and the language for communication. This paper therefore provides an elaborate consideration of user as well as numerous emerging research issues on the implications of this new media.

Key words: social web sites, social networking, user created content, SNS language

1. Introduction

Social networking is fast becoming the principal communication and information sharing media used by people of all ages, and backgrounds in all regions of the world. Social networking sites also referred to as social media sites are developed on the Web 2.0 platform, which offers an architecture for participation and allows users to control their own data and information [25]. Web 2.0 is an extension of Web 1.0 on which individuals deliver content and services in the public domain creating a network effect through which others can access, update and combine content [10]. Characteristics of Web 2.0 enable formation of communities via collaboration and information sharing; novel and enhanced data access methods with ‘mashed up’ (combined) information from different sources; and with Ajax supported creative and responsive interfaces [2]. Social networking applications therefore developed on the Web 2.0 platform are designed around an architecture of participation and communal collaboration [45]. Individuals are using social websites for communication, collaboration, information sharing, networking, finding ‘lost’ friends and forming communities. Although business organisations are also resorting to social web sites for advertising, marketing and engaging employees [46], the focus of this paper is on ‘social’ user issues and characteristics of social networking. Web 2.0 based social networking sites are in very widespread use with new ones emerging almost everyday. It is proposed to identify the most popular sites (each with over 30 million users) and determine their ‘dimensions’ of networking and communication.

These are noted in Table 1:
Adoption of social web sites by individuals is so significant that users of these sites range from 30 million on MyHeritage to 500 million on Facebook (Table 1). The growing number of users indicates the importance of social websites and their relevance to society. Due to social websites being so widely adopted in a very short period of time, and accessible on a variety of platforms including PCs, mobile phones, laptops and other ubiquitous technology [52], it is considered essential to explore key dimensions of networking that are making them so prevalent. Although there are numerous publications on one or more aspect of Web 2.0 technologies, significant earlier studies on this topic are focussed on its taxonomy [25], definition, history and scholarship [5] risk, trust and privacy concerns [17], changes in user behaviour [37], self disclosure model [38]; [28], and impact on business environment [45]; [46]. A generic consideration and understanding of why

<table>
<thead>
<tr>
<th>Name (SNS)</th>
<th>Description/Focus</th>
<th>Date of origin</th>
<th>Registered Users</th>
<th>Registratio n (Age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>General.</td>
<td>Feb 2004</td>
<td>500,000,001</td>
<td>&gt; 13</td>
</tr>
<tr>
<td>Qzone</td>
<td>General. (In Chinese)</td>
<td></td>
<td>200,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>Twitter</td>
<td>General (Micro-blogging, RSS updates)</td>
<td>July 2006</td>
<td>175,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>Habbo</td>
<td>General for teens. Over 31 communities worldwide.</td>
<td>2000</td>
<td>162,000,000</td>
<td>&gt; 13</td>
</tr>
<tr>
<td>Bebo</td>
<td>General</td>
<td>July 2005</td>
<td>117,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>Vkontakte</td>
<td>General (Russian-speaking world including former Soviet republics)</td>
<td>Sept, 2006</td>
<td>110,578,500</td>
<td>Open</td>
</tr>
<tr>
<td>Myspace</td>
<td>General</td>
<td>Aug 2003</td>
<td>100,000,000</td>
<td>&gt; 13</td>
</tr>
<tr>
<td>Tagged</td>
<td>General.</td>
<td>2000</td>
<td>100,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>Friendster</td>
<td>General. (Southeast Asia)</td>
<td>2002</td>
<td>90,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>hi5</td>
<td>General. (India, Mongolia, Thailand, Romania, Jamaica, Central Africa, Portugal and Latin America)</td>
<td>2003</td>
<td>80,000,000</td>
<td>&gt; 13</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>Business and professional</td>
<td>May 2003</td>
<td>80,000,000</td>
<td>&gt; 18</td>
</tr>
<tr>
<td>Netlog (Facebox/Bingbox)</td>
<td>General. (Europe, Turkey, the Arab World and Quebec Canada)</td>
<td>July 2003</td>
<td>70,000,000</td>
<td>&gt; 13</td>
</tr>
<tr>
<td>Flixster</td>
<td>Movies</td>
<td>2007</td>
<td>63,000,000</td>
<td>&gt; 13</td>
</tr>
<tr>
<td>MyLife (Reunion.com)</td>
<td>Locating friends and family</td>
<td></td>
<td>51,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>Classmates.com</td>
<td>School, college, work and military</td>
<td>1995</td>
<td>50,000,000</td>
<td>&gt; 18</td>
</tr>
<tr>
<td>douban</td>
<td>Chinese Web 2.0 site for review and recommendation services on movies, books, and music.</td>
<td>2005</td>
<td>46,850,000</td>
<td>Open</td>
</tr>
<tr>
<td>Odnoklassniki</td>
<td>Connect with old classmates. (Russia and former Soviet republics)</td>
<td>2001</td>
<td>45,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>Flickr</td>
<td>Photo sharing, commenting, photography related networking, worldwide</td>
<td>Feb 2004</td>
<td>32,000,000</td>
<td>&gt; 13</td>
</tr>
<tr>
<td>Last.fm</td>
<td>Music</td>
<td>2002</td>
<td>30,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>MyHeritage</td>
<td>family-oriented social network</td>
<td>2003</td>
<td>30,000,000</td>
<td>Open</td>
</tr>
<tr>
<td>Viadeo</td>
<td>Global and Campus Networking (English, French, German, Spanish, Italian and Portuguese)</td>
<td>May 2004</td>
<td>30,000,000</td>
<td>Open</td>
</tr>
</tbody>
</table>

Table 1: Social Websites with over 30 Million Users

they are so widely used, what is shared, who is using it, where, when and how they are used is not apparent. This paper is an attempt to highlight the reasons for such fervent use of social networking sites, the content shared on these sites, potential participants, temporal aspects of communication, as well the linguistic elements of social networking by critically reviewing the extant literature.

We provide an explanation of Genre Theory as a relevant analysis criterion to structure extant literature on social networking dimensions. This enables an understanding of the wide adoption of social websites as a communication and collaboration tool, the content shared, who the users of this media are, the mode of use, the linguistic elements involved and issues for future research.

2.0 Genre Theory

Using the genre perspective we classified current literature on social web sites to provide an understanding of what is being done with this new media, who is using it, why it is being adopted so widely, where and when is it used and how is it used by individuals and their online networks. The genre model according to Yates, Orlikowski and Jackson [57] provides a structure through six dimensions – why, what, who, where, when and how for understanding central issues, benefits and risks of a new medium in the context of existing technologies. The genre model has been successfully used as an appropriate classification tool to understand new technology based applications. These include a study of information on the web [19], characterization of Web genres [9], online newspapers [23] and documentation [49]. In addition, studies that used the genre model are web navigation [43], collaborative information retrieval in virtual libraries [39], document management systems in digital libraries [41] and communication in the use of mainframe computing in industry [59].

The six key dimensions of the Genre Theory to explain social networking in this paper are based on Yates, et al [57] criteria for explaining the use of emails as a new medium of organisational communication. Each aspect of the Genre Theory applied to structure extant literature on social websites is presented below.

**Why** – explains the purpose social networking sites serve as communication tools. The why dimension elaborates on the reasons so many people are now communicating via this new media.

**What** – highlights the content that is shared by users on social networking sites and some implications.

**Who** – establishes the users of social web sites, the participants, communities and networks that are engaging social websites as a communication tool.

**Where** – illustrates the technology platforms supporting social media interactions.

**When** – assumes the temporal aspects of communication, such as synchronous as well as asynchronous nature of communication supported by social networking sites.

**How** – explains the manner and form in which communication and information sharing takes place on social networking sites. It highlights the linguistic elements of communication.

The six dimensions used to classify literature are presented in Table 2. Although the classifications are used to present an understanding of social networking sites, they are interrelated in one way or another to fully explicate this new innovation in communication.

<table>
<thead>
<tr>
<th>Why</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>What</td>
<td>Content</td>
</tr>
<tr>
<td>Who</td>
<td>Potential participants</td>
</tr>
<tr>
<td>Where</td>
<td>Technology platform</td>
</tr>
<tr>
<td>When</td>
<td>Type and time of communication</td>
</tr>
<tr>
<td>How</td>
<td>Linguistic elements</td>
</tr>
</tbody>
</table>

**Table 2: Six Key Dimensions of the Genre Model**
(adapted from Yates, Orlikowski and Jackson, 2008)

2.1 Social Networking Sites used as Communication Tools (Why)

As noted, social websites are based on Web 2.0 technologies, described by O’Reilly [36] as new cost effective internet applications that support collaboration and communication amongst users. Users collaborate and communicate via social networking sites by taking advantage of Web 2.0 capabilities to author and edit content [34], to communicate in real time [31], whilst being mobile [3]. The growth in social networking is so significant that not only are there web sites such as Ning and KickApps supporting their creation, but a search engine is now available for finding them [25]. The list of social web sites identified (Table 1) clearly demonstrates that some sites are more popular in particular regions of the world, they support a variety of languages, and serve as open as well as closed applications for specific and generic use. Although many are general sites supporting users from 13 years and above, some have been created for specific groups, age and communities.

Social web sites in this paper are based on Kim et al [25] description comprising of both social network sites and social media sites. Social
network sites connect people to other people in online communities such as MySpace, Facebook, Windows Live Spaces, and other similar sites. The communities can range from a network of offline friends connected via social network sites to online acquaintances which may include one or more interest groups such as school attended, hobby, support, profession, ethnicity, gender, etc. These are further described as general or vertical, both of which are either open or closed [8]. Open sites are open to general users, vertical sites connect people with a common trait such as schools attended, ethnicity or a common interest such as arts, whereas closed sites are for members of particular groups only. Social media sites such as YouTube, Flickr, Digg, Metacafe, and others support user created content made up of photos, videos, book marks of web pages, user profiles, user activities and text. They are used as a new asynchronous means of communication between a user and the user’s online community to broadcast messages or any other user created content (UCC) to a large number of people, and to view and respond at any time to messages posted by other people [25]. These sites allow for different avenues of communication such as instant messaging, blogs, multimedia, inclusion of video clips, tagging, tasks and calendars, scrapbooking, hobbies, interests and photographs [31]. The main reason why people use social networking sites are for communication, to connect with existing members, stay in contact with others and sometimes to kill time [16]. Other researchers identified the reasons for social website use to be for enjoyment [42], self-presentation [5], to maintain social ties [13] crowd sourcing and political campaigns.

2.2 Content Shared on Social Websites (What)

The content shared on social websites has led to some legal implications resulting in court actions, and the issue of truthfulness on social websites such as fake

All users can post new UCCs on social websites and view at any time UCCs created by other users. Although many of the UCCs are irrelevant to a user, some can be helpful and a new source of knowledge [25]. Some social web site users are celebrities who use this medium for self-promotion or for communicating with their fans bases [32] and [56]. Although a few of the celebrities might communicate directly with their fans via their social website, many have other people to ghost write their UCCs [7].

Patchin and Hinduja [37] suggest that in addition to the types of information above, some irresponsible information such as photos in different costumes, swear words, evidence of alcohol, tobacco and drug use and other personal information is also shared on social websites. Problematic material including pornography, politically sensitive material that is prohibited in some countries, and comments that are defamatory or violation of privacy have also been identified on social websites. Posey et al. [58] describe the content shared on social websites to be social in nature, open and self-disclosing. Disclosing and sharing information on social websites foster relationships [6] and Web 2.0 authoring tools enable users to collaboratively create, share and recreate knowledge from multiple sources for collective intelligence.

Types of data presented on these sites centre around member registrations, videos and photos posted by members, member activities, members’ friends data, and other related information. The member registration function reads member email address, checks for duplication against the member registration data, reads password, saves this detail to create an index entry for member ID for subsequent access [25]. Social networking sites carry data and information that are viewable by the public or restricted to approved friends.

Content presented on social websites can also prove to be harmful if targeted by spammers, phishing and malware attacks [25]. Irresponsible data on social websites has led to some legal implications resulting in court actions, and the issue of truthfulness on social websites such as fake
names, ages, schools attended, qualifications achieved, etc which is becoming an issue for debate and the need for regulations and standards in the use of social websites. Misuse of social websites to present false and other undesirable information can also result in damage to self or damage to others. Self damage caused by social website use include denial admission to universities, lost employment opportunities, arrest of criminals, lost court cases [22]; [41]. Some users engage in spreading false rumours, participate in cyber bullying and cyber stalking [30] and some have become less productive due to the excessive time they spend on social web sites [25].

2.3 User Profiles of Social Networking (Who)

Although social websites are also gaining importance in government and business organisations, the focus in this paper is on individual users. The millions of social website users range from teenagers [37] to older people [18], who are either individual users, members of networks or community groups, professionals, special interest groups, classmates, ethnic diasporas (Table 1), and other groups with similar attributes. Fogel and Nehmad [17] reveal that there are approximately equal percentages of men and women users and most users spend an average of one hour a day of their time on social websites. The online community for a user of social websites may include offline friends who are members of the same site, as well as new online friends and acquaintances [40]. Fogel and Nehmad [17] suggest that users of social networking sites have a greater risk taking attitude since in spite of knowing the possible risks of their information being seen by others they are comfortable placing personal information on these sites. This is supported by Acquisti and Gross [1] reported that users of social network sites were freely providing their home phone numbers on their sites and even a larger number were sharing their cell phone numbers. The type of information presented on social network sites generally portray user behaviour which is largely being scrutinised by prospective employers, teachers, counsellors, and law enforcement agencies to determine the character of these users [16] and [44].

Although most users take advantage of social network sites privacy settings to control who may access parts of their profiles, many users are not concerned about the ‘digital print’ they leave on social web sites [50]; [51]. Dwyer et al. [12] refer to trust and trust in other social website members to be factors that supersede privacy concerns of social website users.

2.4 Technology Platform Supporting Social Networking (Where)

Web 2.0 is a technology platform that brings about collaboration and communication [29] and enables users to create their own content on social network sites [27]. Most of the social web sites are IT entrepreneurial outcomes started by one or small groups of engineers similar to the development of eBay, Fastflowers.com and Hotmail [47]. Web 2.0 being an extension of Web 1.0 includes all the features of Internet access, web servers, firewalls, http protocols and traffic manager, accessible on PCs as well as tablet PCs, lap tops and other portable technologies such as iPads and mobile phones [52]. Filesharing [35] distributes and provides access to digitally stored information, such as computer programs, multi-media (audio, video), documents, or electronic books [55] by enabling content sharing.

Most social networking sites have similar features although new features are created or added continuously to these sites to make them more dynamic, attractive to users, combat security issues, and to increase participation. These features within a site facilitate interaction amongst a population that is constantly engaged in multiple tasks [37]. Some social websites were developed with the main purpose of supporting information sharing [9] such as Wikipedia. Mashups make available combined information such as travel information together with Google maps [46].

2.5 Reach (When)

Social websites are accessible by members on different platforms, regions of the world and in all time zones. These channels are internet and mobile based technologies [19] that allow sharing of user created content across time and space. Communication on social networking sites can be synchronous allowing users to respond and comment concurrently, simultaneously or all together at once. However, the broad application of social websites is based on asynchronous responses, that is, not requiring real time responses giving users the freedom to respond at their convenience [25]. Originally, the World Wide Web (WWW) was intended to be used to share ideas and promote discussion within a scientific community. Web 2.0 heralds a return to these original uses, and prompts significant changes in the ways the World Wide Web is being used extending collaboration and communication to users from any part of this world, on any platform and in any language. How widely a social web site is adopted is easily established by the traffic on the site.

2.6 SNS Language (How)

Communication via social media has created a new type of language (English slang) due to the amount of space the website allows [26], young users
concealing content from adults [54], the language is considered 'cool' and innovative [60], or adding an element of style to the communication [26]. Examples identified in Whittaker's research on Bebo included the use of 'Getting MWI' – to be Getting Mad With It meaning getting drunk; 'Legal' – suggests person posting is 16 and legally allowed to have sex; and ‘taken’ or ‘Ownageeee’ conveying being in a relationship. A Twitter allows 140 character space in which the message is referred to as 'tweets'; people signed up to get them are 'followers or tweeple'; the sphere in which it operates is 'Twittersphere or Twitterverse'. A ‘twoosh’ is a message that fits the maximum of 140 characters exactly, without editing [59]. Korhan [26] is concerned about language on blogs using words such as 'folks' or 'dude' instead of people. The good part of this trend is that it is collective language, inclusive of all e.g, our friends and colleagues, however, the adverse effect of it is that the audience for whom the message is intended, may not always know it is for them. This can result in a hanging message with no one reading it. Zimmer explains a 'LiveJournal' to be a virtual community of bloggers and diary-keepers, 'friending' is marking something as a favourite, getting 'tagged' in a photo on Facebook is getting your name associated with that photo, and 'untagging' is to avoid anyone coming across the evidence of a particularly embarrassing moment. Another common thread in social media communication is the language that originated from chat rooms and text messaging. Although there is a long list on the URL http://www.netlingo.com/acronyms.php some common ones include '411’ meaning information; '@TEOTD’ meaning at the end of the day; '459’ meaning 'I love you'; 'B4YKT’ meaning 'before you know it’; and ‘LLT’ meaning 'looks like trouble’.

Finally, Whittaker [54] also believes that recognition has a very important role within young people's identity construction and social-networking pages provide the opportunity to gain both positive and negative recognition. She argues that young people are responding to the technological age they are living in thus becoming very creative in their use of language. However, Whittaker [54] also emphasises that social media slang is unprofessional and detrimental to ones professional etiquette.

3.0 Discussion

With the backdrop of the details in Table 1, the above literature discussion highlights the following issues of social networking:

**Technological Development**

Web 2.0, an extension of Web 1.0 led to the development of social websites offering a new medium of communication, networking and collaboration to users of all ages, in different languages and in all regions of the world. It enables the delivery of content that is either user created or presentation of existing information in new ways by combining different forms of data and allowing others to access, respond and comment on the subject matter. Technology capabilities have been ingeniously combined on this platform to deliver new experiences to users leading to a very wide participation and collaboration among myriads of user groups. Web 2.0 capabilities of file sharing, mashed up data from different sources, multi-platform access and easy to use, promote interaction, mobility and a very wide user participation.

**Communication Tool**

The wide adoption of social websites reveals its exponential growth as an important communication media in the last few years resulting in hundreds of millions of users around the world. This new media also comes with easy to create content and a search engine for finding a relevant application for users. Different social websites are popular in different parts of the world creating a community that is either open to all or closed to particular groups. Social websites made up of social network sites and social media sites are general as well as vertical based on a common trait of users. Access to social websites are achieved from a variety of platforms with richness added to information including photos, video clips, calendar, scrapbook and book marks leading to creative, useful and interesting content. SNS are fast replacing other communication tools.

**Standards for User Created Content**

Social websites are user friendly with high level authoring tools allowing users to create content without the need for technical knowledge. User created content on social websites are multimedia enriched data, blogs, opinions and comments on others opinions. Social websites carry user information that ranges from personal data, experiences, professional achievements, hobbies, interests, quotations, to political opinions and some undesirable information that can have problematic implications. Although all user created content is not of interest to all users, some are knowledge enhancing and generate collective intelligence. Standards for UCC will provide guidance to users to share information that will not have any detrimental impact in the future.

**The Digital Print**
The millions of social website users are people from different age groups, ethnic backgrounds, speakers of different languages, both male and female or community groups. The community of users are either friends, members of the same community and professional groups, existing or new online friends, acquaintances or professional associates who have opted to join the groups. Reasons for individuals to use social websites include staying connected, communicate with friends, self promotion, maintain social ties, pastime and for pleasure. Social website users are generally recognised to have a greater risk taking attitude with easily shared personal information, a diary of activities and their network. Although some users are careful with the type of information they present on social websites, many are not concerned about the ‘digital print’ they leave on this new media. Self disclosure of information by individuals on social websites is influenced by trust building, empathy and reciprocity although sometimes this leaves the user vulnerable to those seeking information to determine the character of users especially employers, law enforcement units, counsellors, teachers and others.

**Web Language**

Communication via social websites has resulted in a new networking/web language that is either an acronym for an English phrase, words to reflect a position or state, or extending a human situation to technology. Social website terminology is made up of a combination of characters that are numeric, alphanumeric and include symbols. Some believe this to be a response to this new technological era, while others consider it detrimental to professional etiquette. How will this shape future communication trends is yet to be determined.

**4.0 Implications for research**

Although academic literature on social websites is sparse, the few earlier studies focussed on one or more specific aspect of social media such as trust and privacy, taxonomy, user behaviour of students and its impact on the community. Literature analysis enabled by the Genre Theory presented above is one of the first to present a comprehensive view of social websites illustrating technological support for such a development, user profiles, user generated content, linguistic elements of communication on this new media, and user networking requirements. Although research issues for this topic are wide and numerous, an important question derived from the literature analysis above and the information in Table 1 is: ‘are the above issues and implications of social networking the same in all regions of the world?’

Research on social networking can be addressed from many different angels and on diverse aspects, however other research issues identified from the discussion above include the need for research on technological developments, security of data, digital divide and future implications to further support and enhance social networking for collaboration, communication and community development. Implications of social network sites becoming the mainstream communication tool, are also an imminent research issue. Impact of social websites on other communication tools, standards required for communication on this media, and how to extend this media to non users are other considerations to avoid detrimental impact of such a useful technology.

Emergent research on universal standards for UCC to avoid personal harm, bullying, plagiarism, professionalism and impact on personal and professional opportunities is also a research consideration. Although there are so many aspects to consider on the language used for SNS communication, the important considerations are the development of a computer application to convert this new language into proper English and other languages. Other research issues are future implications of this language on professionalism, and the generation gap between users and non users of social media. Our paper clearly highlights the importance of social networking as the new communication and collaboration tool with numerous networking issues for further investigation and theory development.

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