Follow @TermList on Twitter! - Social media as a tool for terminological information and activities<sup>1</sup>

Anita Nuopponen, University of Vaasa

**Abstract.** The article discusses how social media is or could be utilized for terminological activities as well as for dissemination of terminological information. Various terminology-related activities in social media have been scrutinized in order to find a pattern for what is done and what could be done. As a theoretical framework are taken the four affordances of social media (visibility, persistence, editability and association) presented by Treem and Leonardi (2012) for organizational communication. Also for terminological activities, it is important that various types of contributions can be located and viewed, that the compiled knowledge does not disappear, that the messages can be carefully crafted prior to publishing, and that connections can be made between individuals, between individuals and content or between an actor and a presentation, as well as between contents.

Compared to traditional computer-mediated communication tools such as websites, email and mailing-lists, social media makes it easier to get networked, to meet and participate, to get involved, and to share and find information. However, social media offers myriads of alternatives, and it may be an overwhelming task to find the most relevant sites and software. This paper concentrates only on those social media tools which the people working with terminology have found useful in a way or another. In the field of terminology, LinkedIn functions as a popular people connector while Twitter is gaining ground as a news media for calls for papers, new publications, coming courses and other topical information. Alongside blogs, also traditional websites have their established role in disseminating information and publishing content. They both function also as portals linking various other channels, while email often receives the role of a notification tool. Social media technologies such as wiki integrate interaction tools to content production tools facilitating thus collaboration and collaborative projects.

## 1. Introduction

Terminology science and terminology work have always had a very strong emphasis on networking, collaborating, and sharing information as well as on utilizing and developing computer software for various activities of the field. This paper integrates two research interests of the author: terminology and computer mediated communication (CMC), and belongs to a

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series of papers where the adaption of CMC technologies for terminology work and dissemination of terminological information have been reviewed<sup>2</sup>. The following citation is from Nuopponen 1996 presented at the TKE conference in Vienna:

"The Web is an ideal platform for various kinds of terminological activities. It is <u>not only</u> an online archive or storage for electronic documents or a world-wide bibliography or encyclopedia of terminological and terminographical information but it can play an important role as an interactive collaborative communication tool in terminological research, terminographical projects, as well as in education. Even though there are already plenty of terminological activities in the Web, the major part is still missing - hopefully not very long". (Nuopponen 1996)

Most of the major actors in terminological information dissemination and coordination, such as Infoterm and TermNet and national terminology centres, were still missing on the web - a fact that may seem hard to understand today. However, the obvious reason for it was that the World Wide Web was still brand new back then, and the first easy-to-use web browsers appeared around 1993. The Internet opened for commercial use as late as around 1991-93, the years 1994-95 being the breakthrough years. At the University of Vaasa, we had been following the development of the Internet from the late 1980's, and 1994 I established *Term-List* mailing-list and *Terminology Forum* web portal for terminology related information.

Since then, more tools for online interaction and information dissemination have become available, the latest being social media, the use of which has spread to almost any field of human activity. With Kaplan's and Haenlein's (2010) words, social media could actually "be seen as an evolution back to the Internet's roots, since it retransforms the World Wide Web to what it was initially created for: a platform to facilitate information exchange between users". It is time for the next review of the situation. This articlediscusses how the terminologists utilize or could utilize the Internet and more specifically social media for terminological activities and for dissemination of terminological information today. As a theoretical framework are taken the four affordances of social media presented by Treem and Leonardi (2012), who discuss the kinds of behaviors social media supports. Only those social media sites or applications are taken under scrutiny where terminological information, content or activities could be found.

### 2. Social media

Since the concept of social media is evolving a definition for it is hard to pin down. Often authors resort to give an extensional definition by enumerating "the types of technologies that people recognize, implicitly, as social media (e.g. *blogs*, *wikis*, *Social Networking Sites*, *social tagging*, etc.)" as Treem and Leonardi (2012: 145) point out in their analysis of previous social media studies. In Figure 1, there is a tentative typology of the types of social media. It is difficult to outline a concept system for social media because the software and services or technologies

<sup>&</sup>lt;sup>2</sup> "Terminological information" refers here to information related to terms and concepts, terminological products, methods, theories, research and other activities etc.

are constantly being developed and morphed into something new. For instance, in the beginning, Twitter was associated with blogs, but now it is used for news sharing, social bookmarking, and it is competing with social networking sites such as Facebook and Google+.

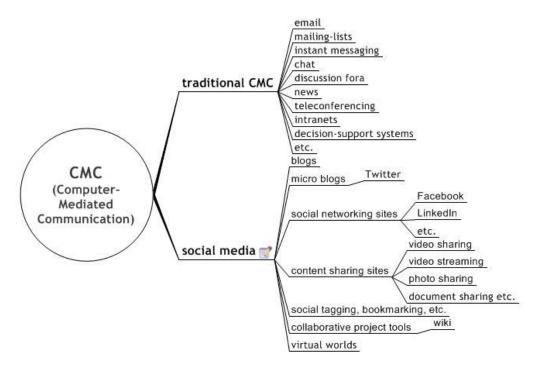


Figure 1. A rough typology of computer mediated communication

Intensional definitions for the concept of social media quite often emphasize features such as online existence, content creation by the users, displaying the content to others, sharing, and interactivity. These characteristics, however, do not yet distinguish social media adequately from the *traditional CMC* (see Figure 1) (Treem and Leonardi 2012: 145). Email, mailing-lists etc. have many of these features. In addition to the generally mentioned characteristics of social media Treem and Leonardi (2012) emphasize the kinds of behaviors social media typically afford - what we can do with these tools. As affordances they list:

- **visibility** (contributions can be easily located and viewed)
- **persistence** (social media maintains the compiled knowledge over time)
- editability (messages can be carefully crafted prior to sending)
- **association** (between individuals, between individuals and content or between an actor and a presentation, content and content)

Treem and Leonardi (2012: 148-150) note that these affordances apply also to the traditional CMC and other types of communication technologies utilized in organizations. The difference is that social media technologies have potential to have high levels of <u>all</u> of these affordances simultaneously. (Ibid.) For instance, emails can be crafted carefully and stored and searched,

however, they have limited visibility. Furthermore, the sender cannot edit or remove a sent message. A database entry may have visibility but it may lack association, e.g. discussion between those who are editing the entry.

Even though Treem and Leonardi (2012) are talking about organizational settings, much of what they say applies also to communication inside a discipline, in this case the field of terminology. In the following, today's terminological activities online and possibilities that social media offer for this field will be discussed.

# 3. Terminological activities online

In Nuopponen 1996, the future of terminological activities on the web was outlined as shown in Figure 2.

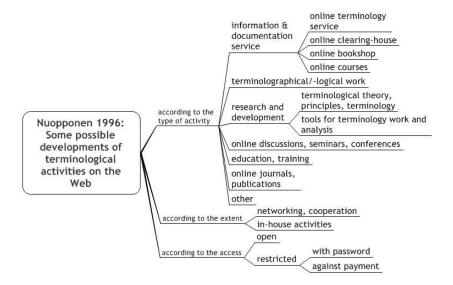


Figure 2. Some possible developments of terminological activities on the Web (Nuopponen 1996)

Until that, great efforts were put e.g. in compiling bibliographies and disseminating information on printed terminological products. Today, the future predicted in the paper, is quite accurate, because the web is now utilized for all of these, e.g. printed bibliographies have been replaced by online listings of publications and we have direct access to vast amount of relevant texts and documents. Search engines, link lists, home pages and social networking sites have made printed who is who publications redundant and antiquated.

### 4. Terminological activities in social media

For this presentation, various terminology-related activities in social media have been searched for in order to find a pattern for what is done and what could be done. Seen from the perspective of social media, terminological activities could be roughly divided into networking, sharing,

meeting, collaborating, teaching and training, and doing research (Figure 3). Each of these has its own requirements and there is no single social media site, platform or application that would serve them all.

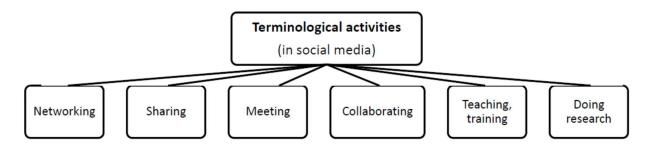


Figure 3. Terminological activities in social media

## 4.1 Networking

Networking refers here both to (1) finding the right persons and organizations to connect with, and to (2) reconnecting and keeping in touch as well as to discussing common interests. Social networking sites (SNS) such as LinkedIn and Facebook<sup>3</sup>, enable the users to find those that they already know and to connect with them, to see who is connected with whom and who does what. Indeed, there is already a large network of terminology researchers and terminologists to be found in LinkedIn. Earlier, finding this information and building a professional network required e.g. frequent participation in terminological events, correspondence and email exchange. On a SNS, the information is easy to edit and does not disappear as easily as business cards after a conference.

Seen from the other angle, SNS affords visibility for the users. Treem and Leonardi (2012) say that "social media afford users the ability to make their behaviors, knowledge, preferences, and communication network connections that were once invisible (or at least very hard to see) visible to others". Especially LinkedIn (linkedin.com), which is more professionally oriented than Facebook (facebook.com) has become commonplace to link with people we meet at conferences and meetings. Instead of exchanging business cards we may say "you can find me in LinkedIn" or send invitations to people we have met and to connect with. The user profile in LinkedIn could also be characterized as a dynamic and interactive CV since the users can update their data and connections may endorse the skills and write recommendations. The users post status updates and follow each other's messages. In addition, the sites themselves analyze users' data and existing contacts, and recommend new connections or content, which may or may not be relevant.

<sup>&</sup>lt;sup>3</sup> Other popular social networking sites are Google+, Orkut (popular in India, Brazil), Sina Weibo (China), Vkontakte (Russia). See more, e.g. http://en.wikipedia.org/wiki/List\_of\_social\_networking\_websites

Compared to social media, discussions in email or on a mailing-list have limited visibility. Social media sites give also the possibility to edit messages carefully, to delete already submitted messages, to address a larger group without messing up the mailboxes, to search and access messages later on, etc. (Treem & Leonardi 2012: 148.) A SNS site like LinkedIn provides people with various kind of information which also a home page may do, but SNS sites are normally more dynamic and facilitate also interaction and social behaviour: endorsing connections, sending messages, sharing news or other content, joining groups with special interests and discussing in these groups.

In traditional CMC discussions, opinions, and comments have been conducted and expressed as email messages, mailing-list conversations or synchronous or asynchronous online chat. Emailbased tools are limited to their visibility, only those to whom the message is send get it. A downside is that mailboxes get easily filled with lengthy conversations. Instead, social media sites could be utilized for discussion enabling thus more people to join a discussion. For instance in LinkedIn, it is possible to create discussion groups or join an existing one. For terminologists, there are especially two groups: *Terminology*, managed by Kara Warburton, and its subgroup for *Association for Terminology and Knowledge Transfer* managed by Hanne Erdman Thomsen. Utilizing possibilities like this is not without problems either since it is easy to forget being a member in a group unless email notifications have been turned on. Email has become a tool that is being used on a daily bases, but SNS sites have not have necessarily gained the same degree of presence in our daily lives.

# 4.2 Sharing

One of the most typical features of social media is sharing - sharing content and meta-knowledge. On the field of terminology, the content could be texts, publications, articles, slideshows, terminological products, software, video recordings from courses, etc. Meta-knowledge means here information on where to find tshared content, links, news and reviews etc. Email, websites, email newsletters, online journals and online bookstores and databases, have made sharing and finding content easier and faster. Social media enhance this set of tools, e.g. with blogs, wiki, social tagging, content sharing sites for video, texts, photos.

**Blogs** are useful tools for sharing thoughts, ideas and opinions with each other<sup>4</sup>. They may have a possibility for the readers to join the conversation and to share posts to other social media channels. Good examples from the field of terminology are *BIK Terminology*<sup>5</sup> by Barbara Inge Karsch, *Terminology Blog* by TermNet<sup>6</sup>, *TNCs blogg* (in Swedish) by The Swedish Centre for Terminology<sup>7</sup>, and the *Blog* of European Parliament's Terminology Coordination<sup>8</sup>. Also many

<sup>&</sup>lt;sup>4</sup> More e.g. Kaplan & Haenlein 2010.

<sup>&</sup>lt;sup>5</sup> http://bikterminology.com

<sup>&</sup>lt;sup>6</sup> http://terminologyblog.wordpress.com

<sup>&</sup>lt;sup>7</sup> http://www.tnc.se/TNCs-blogg

<sup>8</sup> http://termcoord.eu/blog

companies have interesting terminology related blogs; e.g. Microsoft<sup>9</sup> and SAP<sup>10</sup> have blogs with discussion possibilities for their customers, translators and localizers. Blogs may over time become huge repositories of information as has happened with TermCoord's original blog<sup>11</sup>, which was transformed into a website.



Figure 4. Pinterest boards of Terminology Forum (http://www.pinterest.com/termlist)

Link lists on websites are still popular for sharing meta-knowledge (e.g. *Terminology Forum*<sup>12</sup>). Social media offers further options, e.g. Pinterest, Scoop.it. Pinterest is a very popular social media site used for sharing ("pinning") beautiful photos found anywhere on the web. In the article *Pinterest as a library marketing and information literacy tool*, Dudenhoffer (2012: 328) describes Pinterest in the following way:

Pinterest allows members to "pin" items or images found on the Internet to a "pinboard," which can then be easily shared through an e-mail link or by following the creator. The boards are publicly viewable so no login is required, and the boards can be constantly updated. This type of tool lends itself very well to sharing information to visual learners and traditionalists alike, and can be maintained by library staff quickly and easily.

<sup>9</sup> http://blogs.technet.com/b/terminology

<sup>&</sup>lt;sup>10</sup> http://scn.sap.com/community/globalization

<sup>&</sup>lt;sup>11</sup> http://termcoord.wordpress.com

<sup>12</sup> http://www.uva.fi/termino

Library faculty can also use Pinterest to create "research portals," or visual representations of ideas used to kick off the research and writing process.

Some terminologists have been experimenting with same kind of usage for terminology, e.g. Terminology Forum<sup>13</sup> has Pinterest boards *Term banks* with links to term bank websites and *Terminological literature* with book covers of terminological literature from sites where they can be purchased or downloaded from, and so on (see Figure 4). Others may share the findings, like or comment them. Scoop.it is similar to Pinterest but more text oriented (see e.g. http://www.scoop.it/u/terminology-forum). These could be described also as social content curation sites, where the users aggregate (links to) existing content according to their interests and share their findings with their followers.

**News sharing** could be taken as a separate category of sharing. Introduction of email, mailing-lists, email newsletters, and websites made spreading and acquiring e.g. event information easier. For a while an effort was made to compile event information on the *Terminology Forum* portal, but the idea was soon abandoned because finding information and editing webpages took too much effort and could not be done regularly. Today, Twitter and mobile devises (phone/tablet) offer a better solution: it is easy to follow tweets from other users who are interested in terminology related events and content, and (re)tweet the information to the followers. It is a fast way to send and forward information on various terminological events (see Figure 5). Mobile applications have brought social media in mobile phones and tablets where the social media news feeds and messages can be easily accessed whenever we have some extra time.

http://www.nintorost.co

<sup>&</sup>lt;sup>13</sup> http://www.pinterest.com/termlist



Figure 5. Results of the Twitter search terminology (8.11.2013)

Also Facebook is utilized by organizations to publish news, but Twitter affords better visibility, because in addition to the followers, anybody can find the message through a search with a word (e.g. terminology), "hashtag" (#terminology), or user (@termlist). Facebook is geared towards association between users while in Twitter the strongest association is often between the sender and the content. Some of the most relevant twitterers to be followed for those interested in terminological news and events are Uwe Muegge, Rodolfo Maslias, TermCoord, TermNet and TermList.

# 4.3 Meeting, events, education and training

Social media (e.g. Twitter, Facebook, a blog) is often used not only to advertise for coming conferences (see Fig. 5), but also during the conference. It is usual that some participants (see Fig. 5: TAUS; Kaleidoscope) and some of the organizers are live blogging or tweeting during the event and quoting the presentations (see Fig. 5: #tekom). Another possibility is to stream the event or parts of it so that participants may follow, comment (e.g. in chat) or even give presentations online. A distinction can be made between webcasts and webinars (online seminars). Webcasts are more or less one way communication while webinars apply interactive elements of webconferencing software (e.g. Adobe Pro Connect, Skype, etc.) allowing the presenter and the audience to interact. Webinars, video (e.g. Youtube.com, Vimeo.com) and slide sharing (e.g. www.Slideshare.net), are utilized in various kinds of educational and training purposes. E.g. TermNet organizes ECQA Certified Terminology Manager courses partly as

webinars (http://www.termnet.org). Also various translation and localization businesses organize webinars on terminological topics. For university courses, it is purposeful to utilize e-learning platforms since universities usually have a platform (e.g. Moodle, Blackboard) available to their personnel and students. These platforms include various types of communication and content sharing tools familiar from social media.

#### 4.5 Collaboration

Terminology projects and terminology management involve various types of interaction, information transfer, and communication e.g. messages, meetings, storing and sending material, commenting, editing, reviewing, publishing, and promoting. These have traditionally required various tools to perform. Many of the problems could be solved with social media or by integrating interactive elements in collaborative platforms, such as offered by wiki technology.

Basically wiki technology is "an open source collaborative server technology that enables users to access, browse, and edit hypertext pages in a real-time context" (Leuf & Cunningham 2001: 442). There are several extensions of wiki technology, e.g. Semantic MediaWiki, which makes the data machine-readable for the Semantic Web<sup>14</sup>. Wikipedia is the best-known example that utilizes Semantic MediaWiki as its platform. The same platform can also be applied for collaborative terminology projects, e.g. the *Finnish Termbank for Arts and Sciences*<sup>15</sup>. The termbank is a national project to compile terminologies of various academic disciplines on crowdsourcing basis. In 2008, Nuopponen concluded a paper with

"Wikipedia is an interesting model of open online collaboration because the discussions on principles and methods between the participants are available on the web. The next ten years will hopefully see several termpaedias to be born in different special fields." (Nuopponen 2008)

Today, wiki technology seems to be often applied and mentioned when developing integrated collaborative tools for terminology work (e.g. Kudashev 2013; He etc. 2009; Désilets etc. 2009). Wiki technology affords to make connections between terminological entries and related discussions, thus solving some of the problems, which the traditional terminology databases are criticized for. Projects and organizations may utilize this technology, which needs a server to be installed. For individuals and smaller groups, an interesting online collaboration site based on wiki technology is TermWiki<sup>16</sup>, where anybody can compile a glossary, search and discuss the collections. There is also a commercial, more advanced version available for companies.

Also those who are working with ontologies have realized that when ontologies are growing too large to be managed by a single person or a small group, it is necessary to collaborate but

<sup>&</sup>lt;sup>14</sup> http://semantic-mediawiki.org

<sup>&</sup>lt;sup>15</sup> http://tieteentermipankki.fi/wiki/Termipankki:Etusivu/en

<sup>&</sup>lt;sup>16</sup> http://www.termwiki.com

traditional tools do not support this. Tudoranche etc. (2008) present Collaborative Protégé<sup>17</sup> as a solution to integrate communication tools into ontology tools. According to Tudorache etc. (2008) a big problem is "the disconnect between the produced ontology on the one hand and all the thought and discussion that went into producing this artifact on the other hand". Therefore, for the user of "the ontology, it was often impossible to understand the rationale that went into the design decisions, to find which references were relevant, to find the external resources that informed the modeling decisions". Collaborative Protégé integrates discussions with "ontologyediting process, chats, and annotations of changes and ontology components". (Ibid.) The experiences and solutions developed for ontology work are interesting also from the point of view of terminology work since many of the methods and problems are similar.

### 5. Conclusion

There has been a notable change in online activities in the field of terminology during the last fifteen years. There is no more questioning if terminology organizations need a website or not, instead the question today is, whether they need social media presence or not. The Internet is not only for building archives and making them accessible but also for actively sharing various types of content. Instead of bibliographical or other meta-information, also the whole content may be made available for free<sup>18</sup> or for a fee. Social media has enhanced possibilities to get connected and to maintain contact as well as to be informed on things happening on the field of interest.

For those working with terminology, e.g. terminologists, terminology researchers, translators, students, etc., social media makes it easier to get networked, to find and share information, to meet and participate, get involved, and so on. However, social media offers myriads of alternatives, and it may be an overwhelming task for a newcomer to find the most relevant sites and software. In this paper, therefore only a handful of relevant social media tools were taken as examples. LinkedIn seems to function as a popular people connector in the field of terminology. Twitter is gaining ground as a news media where calls for papers, new publications, coming courses and other topical terminology related information are tweeted and retweeted. Also the traditional CMC tools such as websites have their established role for information dissemination and content publishing. Websites and blogs function as a hub linking various other channels or as an interface to them, while email often receives the role of a notification tool when social media sites inform us that someone liked or forwarded our message, or started to follow us etc. The amount of collaboration and collaborative projects is growing and so does the need for collaborative tools. The technology (e.g. wiki) is now here, it just needs some adjusting to fit for terminological activities.

<sup>&</sup>lt;sup>17</sup> http://protegewiki.stanford.edu/wiki/Collaborative\_Protege

<sup>&</sup>lt;sup>18</sup> See forinstance: Pavel, Silvia and Diane Nolet (2001). Handbook of Terminology, Translation Burea, Public Works and Government Services, Canada. http://www.bt-tb.tpsgc-pwgsc.gc.ca/publications/documents/terminoeng.pdf?archived=true

Social media has its downsides, too, but the focus of this article has been rather in its affordances for terminological activities. It is important that various types of contributions can be easily located and viewed and that the knowledge maintained and compiled over time does not disappear. Furthermore, social media enables usually the messages to be carefully crafted prior to publishing and connections to be made between individuals, between individuals and content or between an actor and a presentation, as well as between contents.

### References

Désilets, Alain, Louis-Phillippe Huberdeau, Marc Laporte & Jean Quirion (2009). Building a Collaborative Multilingual Terminology System. *Proceedings of the ASLIB: Translating and the Computer*. Available: http://nparc.cisti-icist.nrc-

cnrc.gc.ca/npsi/ctrl?action=rtdoc&an=15153226&lang=en

Dudenhoffer, Cynthia (2012). Pin it! Pinterest as a library marketing and information literacy tool. In: *College & Research Libraries News*. Vol. 73 (2012) No. 6, 328–332. Available: http://crln.acrl.org/content/73/6/328.full.pdf+html

He, Shan, Senthil K. Nachimuthu, Shaun C. Shaki b& Lee Min Lau (2009). Collaborative Authoring of Biomedical Terminologies Using A Semantic Wiki. In: *Proc. of AMIA 2009 Symposium*, San Francisco, California, 234238. Available: http://www.ncbi.nlm.nih.gov/pubmed/20351856

Kaplan, Andreas M. & Michael Haenlein (2010). Users of the world, unite! The challenges and opportunities of Social Media. In: *Business Horizons*. Vol. 53 (2010) No. 1, 59–68. Available: http://dx.doi.org/10.1016/j.bushor.2009.09.003

Kudashev, Igor (2013). *Quality Assurance In Terminology Management: Recommendations From The Termfactory Project*. University of Helsinki, Palmenia Centre for Continuing Education, Kouvola. Available:

http://www.projectglossary.eu/download/QA\_in\_TM\_Kudashev.pdf

Leuf, Bo & Ward Cunningham (2001). The Wiki Way: Quick Collaboration on the Web. Addison-Wesley.

Nuopponen Anita (1996). Terminology Online: From Term Banks to the World Wide Web. In: *Terminology Science & Research*. Vol. 7 (1996) No. 1, 21–27.

Nuopponen, Anita (2008). Term lists or multimedia and collaboration? Future directions for online terminology resources. In Proceedings of XVIth European Symposium on Language for Special Purposes (LSP) Specialised Language in Global Communication, University of Hamburg 27–31 August 2007.

Treem, Jeffrey W. & Paul M. Leonardi (2012). Social Media Use in Organizations. Exploring the Affordances of Visibility, Editability, Persistence, and Association. In: *Communication Yearbook*. 36, 143–189. Available online:

http://comm.soc.northwestern.edu/leonardi/files/2012/09/socialmedia.pdf

Tudorache, Tania, Natalya F. Noy, Samson Tu & Mark A. Musen (2008). Supporting Collaborative Ontology Development in Protégé. In: The Semantic Web – ISWC 2008, p. 17–32. Heidelberg: Springer. Available: http://link.springer.com/chapter/10.1007/978-3-540-88564-1\_2