

“Shorts Last Sunday, Snow Pants Today”: Delving Into the Information Values of Immigrant and Expatriate Users of Twitter

Alyssa Hyduk

University of Alberta
School of Library and Information Studies
3-20 Rutherford South
Edmonton, Alberta, Canada T6G 2J4
alw@ualberta.ca

Adam Worrall

University of Alberta
School of Library and Information Studies
3-15 Rutherford South
Edmonton, Alberta, Canada T6G 2J4
worrall@ualberta.ca

ABSTRACT

Information-centric online communities are frequent sources for users who are seeking and sharing information, with greater sharing encouraged when users share similar judgments of information value. Information sharing and ICT use are especially important for immigrants and expats, but further research is needed into immigrants' use of ICTs and their information value judgments. This poster presents in-progress research on how the ICTs used by expat and immigrant members of Twitter interact with the information values of community members. Findings show information value determination and negotiation are important for immigrants and expats online, with cultural, contextual, and economic values being most frequently invoked both explicitly and implicitly. A strong role for boundaries and some establishment of common ground was observed, but further exploration is necessary and planned of cases of information value negotiation, information sharing, and ICT use among this population to further our understanding of them in social, technical, and cultural contexts.

Keywords

Immigrants, online communities, information value, Twitter, information worlds.

INTRODUCTION

Information-centric online communities are frequent sources for users who are seeking and sharing information (Fisher & Julien, 2009; Kraut, Wang, Butler, Joyce, & Burke, 2008). Greater information sharing is encouraged in these communities when users share similar judgments of what information should be valued (Ardichvili, 2008;

Haythornthwaite, 2006). Such sharing around common information values becomes even more important for those who find themselves in a new country for an extended period of time, having immigrated there and become an expatriate (or expat) of their country of origin.

Immigrants and expats rely on use of the Internet, social media, and online communities to find information and social support (Caidi, Allard, & Quirke, 2010). Technology thus becomes an important part of their information behaviour, with Caidi et al. (2010) stressing that further research on immigrants' use of ICTs as part of their information sharing is especially needed. Values in online communities have been studied (by e.g. Seraj, 2012) and in the sociotechnical contexts of the design, development, and use of ICTs (see e.g. Shilton, Koepfler, & Fleischmann, 2013), but little work exists on the information values of immigrants and expats. This poster presents in-progress research on how the ICTs used by expat and immigrant members of the Twitter social media site, and in particular those members which use selected hashtags relevant to their status as expats or immigrants, interact with the information values of community members.

As part of a larger study, we looked to answer the following research question: *How does the information and communication technology (ICT) used by Canadian immigrant and expatriate members of Twitter interact with the information values of community members?* In answering this question, we examined the information values present—explicitly and implicitly—within a sample of tweets collected on Canadian immigrant and expat topics. We also ended up exploring the ICT use and information values of those who discussed topics of interest to immigrant and expatriate members, but who may not be immigrants or expats themselves.

In the sections below we briefly review the background and literature leading to this study and the methods used to collect and analyze data. We then report our findings regarding the types and nature of information values observed in relation to ICT use, and end by discussing our

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ASIS&T 2016, October 14-18, 2016, Copenhagen, Denmark.

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findings in relation to the literature and future work in this area.

BACKGROUND AND LITERATURE REVIEW

Online Communities and Information Worlds

Online communities are social aggregations of people online who interact and communicate, mediated by technology. Such communities serve as true human communities, complete with human feeling and emotion, the forming of personal relationships over time, and the emergence of social constructions (Kraut et al., 2008; Rheingold, 2000; Tuominen & Savolainen, 1997). As with face-to-face communities (e.g. Fischer, 1975), online communities can be broken into an “ecosystem of subcultures” (Rheingold, 2000, p. xviii); smaller communities nest within bigger ones.

To study these communities, we chose to use Burnett and Jaeger’s (2008; Jaeger & Burnett, 2010) *theory of information worlds*, an explicitly multi-levelled theory of communities centred around socially constructed information. Potential synergies and conflicts are possible (Burnett, 2015) across five key factors, of which three are of interest here:

- *information behaviour*, “the full spectrum of possible normative [information] behavior ... available to [a world’s] members” (Jaeger & Burnett, 2010, p. 23);
- *information value*, the value judgments placed on information within and across worlds (p. 35); and
- *boundaries*, places where “information worlds come into contact with each other,” where “information exchange can—but may or may not—take place” (p. 8).

Information Values and Boundaries

In the socially constructed context of online communities, the *values* users hold as individuals and collectives become important. Values have been significantly explored in the context of the design, development, and use of ICTs, as reviewed by Shilton, Koepfler, and Fleischmann (2013). Their treatment of both the “value sensitive design” and “values in design” traditions (p. 260) notes that both draw from across disciplines and can inform the roles played by values in the design of sociotechnical ICTs. Koepfler (2014) and colleagues (Koepfler & Fleischmann, 2011, 2012; Koepfler, Mascaro, & Jaeger, 2014) have furthered this work and applied it to online communities and social media, examining values, ICT use and design, and information sharing in the online community of Twitter users experiencing homelessness. Others have explored values and value negotiation in online community and social media environments outside of the two approaches reviewed by Shilton et al. (2013). For example, Seraj’s (2012) study of the Airliners.net online community found that intellectual, social, and cultural values were created, negotiated, and shared within and by the community.

The sharing of common values is a form of what knowledge management terms “common ground,” with users with similar valuing of information more likely to share their information and knowledge with others, leading to distributed knowledge being created within and across community boundaries (Ardichvili, 2008; Haythornthwaite, 2006). Worrall (2015) found users of the LibraryThing and Goodreads online communities who engaged in the negotiation of information values, and understood differences within and across multi-levelled communities and information worlds, were able to continue to engage, share existing information, and create new information and knowledge despite these differences, to the point of forming newly emergent communities.

METHOD

Our study addresses the identified gaps in the literature by answering a three-part research question. Here we focus on the first part: *How does the information and communication technology (ICT) used by Canadian immigrant and expatriate members of Twitter interact with the information values of community members?* In the first phase of our study we conducted ethnographic, unobtrusive *observations* of the Twitter community, obtaining a general understanding of uses of the platform, the information behaviours of members, and the information values at play. Particular attention was paid to examples of information value negotiation and information sharing within and across boundaries. This phase did not intend to explore these in any depth, but increased our familiarity with discussions by and about Canadian immigrants and expats and helped guide our development of a qualitative codebook. This first phase also allowed us to, as a sampling strategy for obtaining relevant content, select the most appropriate hashtags and keywords for further analysis using this codebook. From our observations the following hashtags were selected: #cdnimm; #expats; #newcdns; #newtocanada, and #welcometocanada. We also observed many users engaging in information sharing without using any hashtags, and noted the significant and relevant keywords that were being used.

A second *content analysis* phase allowed for the collection and analyzing of messages from our chosen hashtags and keywords. Hashtags and keywords that were not explicitly about Canadian expat and immigrant concerns were combined in searches with the keywords “Canada” or “Canadian” to provide appropriate refinement. 597 posts (tweets) from the chosen hashtags and keywords were collected over a two-week period in late March and early April 2016. Posts that were deemed to lack any relevance to our research questions, had been deleted, were protected, were clear and blatant spam, or duplicated those already collected under a different hashtag / keyword search were removed, leaving 536 posts for analysis. The contents of posts were coded by both authors using portions of an extended information worlds codebook (slightly adapted from Burnett, Lee, Hollister, & Skinner, 2014; and

Hollister, Skinner, Lee, & Burnett, 2016) and a constructed cultural memory codebook (available from the authors on request). (A third phase of interviews will continue this research, as we state in our conclusions section.)

The codebooks and coding process were reviewed and discussed by the two authors throughout to come to a common understanding and help ensure consistency and intercoder reliability and the credibility and trustworthiness of our analysis (see Gaskell & Bauer, 2000; Golafshani, 2003; Lincoln & Guba, 1985). While subtle differences existed in coding—as perhaps expected with an emergent and constructed theoretical framework—we observed no significant conflicts and the few minor discrepancies were resolved through further discussion to obtain agreement on our results and findings, an approach consistent with the interpretive and social constructionist nature of this research.

RESULTS

The gathering, coding, and analysis of data taken from the Twitter hashtags found clear delineations in the value of information for immigrant communities in Canada using the social media platform. This was the most frequent area of coding throughout our broader study, demonstrating the importance placed upon the information received in these interactions and on the influence—explicitly or implicitly—of information value in users' information sharing within and across community boundaries. In order to further understand the complexity of the information values of these users, information value was further divided for coding purposes in order to understand the differences between explicit and implicit information values, along with the type of value most considered by the community. We present brief findings from the most common value types below.

Cultural

Cultural information value was the most highly applied code during this stage of our research. As per our codebook, information that has cultural value is “of interest to or important to many members of a world.” As our study focuses on immigrant and expat populations in Canada, the information provided via Twitter using the selected hashtags would undoubtedly be of use to such populations, and thus be of cultural value. Sometimes this would be expressed explicitly, but in other cases was more implicit through users' use of the retweeting and liking features of Twitter as ICT. Examples¹ of tweets within this category include: “New changes to make it easy for immigrants in Canada to qualify for citizenship quickly” and “Events for #NewCdns: The Immigrant Cafe: How to research for your

small business.” Considering that immigrant communities would be looking for and needing such information, it is unsurprising that this particular type of information was valued by community members. Many tweets in relation to representatives of federal and provincial governments and nonprofit organizations indicated explicit or implicit cultural values held by those representatives in Canadian culture or in the welfare of Canadian immigrants and expats. Canadian and foreign country cultures were often implicitly alluded to by users posting thoughts and in a series of interviews with expats linked to in tweets by a blog network site.

Contextual

Much of the Twitter activity studied was coded as contextual; this category was the second most highly used code under information value. Per our codebook, information has contextual value “within a specific time, place, or situation (and [is] less valued otherwise).” Considering the very specific nature of tweets and the limited characters allowed—affordances provided by Twitter as ICT—it is unsurprising that a considerable amount of tweets fell into this category. It demonstrates an extremely close relationship between hashtag and user, and emphasizes the importance of following and thus “belonging” to a particular hashtag in this community. Even with hashtags, tweets might be contextualized to a narrower group, as in this example targeted at Americans living in Canada: “Hey fellow expats in Canada. Which is worse, IRS or CRA? #expat #TaxSeason” Tweets promoting events of interest to new expats and immigrants were also highly contextual to locations, dates, and times. A similar class of tweets was those relating to weather conditions, such as one reporting the wearing of “shorts last Sunday, snow pants today. #WelcomeToCanada.”

Economic

While information valued for economic reasons was determined to not be the most valued type of information by immigrants and expats, it was still among the more popular types of value implied or made explicit. Per our codebook, information valued for economic reasons is “perceived to be profitable in an economic sense.” Many tweets contained information about jobs and businesses or were intended to market services or resources, and were thus coded under this type. Examples of such tweets include: “Resources for Newcomer #Entrepreneurs in the GTA”; “A guide to moving to Canada as an expat”; and “#welcometoCanada: Thinking of #renting? Several types of rental housing exist. [self-link]” (retweeted by a realtor). Considering the tenuous circumstances many immigrants and expats face when moving to a new country, the desire for information regarding employment and income would be greatly valued in the community. Companies and organizations providing services and resources that are of clear use to this population also have a vested interest in getting their attention early and often, especially if there is potential long-term profit in establishing a relationship (as in the case

¹ To protect users' confidentiality, some tweets have been slightly edited to remove personally identifying information; links have also been removed to avoid promoting particular web sites.

of real estate and entrepreneurial support). Technological features including hashtags and retweets were frequently used towards this end.

Source

Information value “based on [the] source or perceived ‘authority’,” as per our codebook definition, was another frequently applied code. Media outlets—such as TV or radio news programs and print or online magazines—and direct government tweets were integral to this form of information sharing. Example tweets include “These are #Vancouver’s best (and worst) places to live: #YVR Magazine” and “Citizenship and Immigration Canada report indicates that international student worker program must be remodeled.” Such tweets often mentioned the Twitter accounts of the organizations in question, using this ICT-provided feature to provide for explicit citation (and, we presume, valuing) of the source. In the search for information and sharing of it with others, it is unsurprising that immigrant populations would search for and value official sources of information in order to acquire the most accurate content possible.

Rhetorical and Ideological

Rhetorical information value is defined in our codebook as “how [information] is presented or argued, regardless whether true or accurate.” This type of information value often followed more emotional statements on Twitter and, while users might have posed such tweets as a question, they did not actually expect a reply. Tweets such as “So I shouldn’t be surprised if it snows in May?” and “How is someone born in Canada to a Cuban immigrant father & USA American mother considered ‘natural born citizen’?” provide examples of these. Neither of these tweets are truly expecting answers, but are posted to show the user’s outrage or disbelief. The latter is also indicative of many of these tweets having an ideological component, another type of information value which we defined as content “support[ing] a particular political position.” Users shared views and information about expats and immigrants with a political slant and using hashtags and keywords frequently used by that population without necessarily being part of this population themselves. Given that immigrant and expat concerns are the subject of many current and recent political campaigns in Canada, the US (our sample collected during a particularly divisive period of the 2016 presidential primaries), and elsewhere, a certain amount of political and ideological discussions can be expected. Users had various degrees of agreement with each other as to whether information was of ideological value. Information on immigration policies put forward by Canadian political parties and world events which affected immigration in particular provinces were commonly shared. As a social media outlet, it is inevitable that such a platform as Twitter would be used as an emotional outlet and as a platform to promote one’s ideological and political views. As with other information values identified, the technological features of Twitter—particularly hashtags, but also likes,

retweets, and quoting—were often used in support of values, views, and opinions.

Truth

Information valued for truth reasons occurred with some frequency; as defined in our codebook, this was information that was “perceived by members of the world to be true.” In some cases, this overlapped with rhetorical and ideological types of value as users focused on phrasing and argument to determine if particular information being shared was to be believed. Other cases included the statement of facts but without clear evidence to back them up or the expression of beliefs; for example, one tweet claimed that among the “Top US #expat #destinations [was] #Vancouver #Canada.” The affordances provided by the Twitter platform would have allowed for such evidence, but perhaps not always within the 140-character limitation. Still other tweets simply lacked in context to determine whether a statement was true or not, and so relied on users expressing truth value—through replies, retweets, and likes—within the boundaries of time, place, and contextual knowledge. For example, a series of tweets about winter weather occurring in early April appeared under the #WelcomeToCanada hashtag, but with most users not providing context of *where* in Canada the weather was occurring. In these cases, some users did include their location in their bio, but others did not, showing further inconsistent attention paid to context and inconsistent use of the affordances of the ICT to provide that context. Truth information value thus often overlapped with contextual information value.

Implicit vs. Explicit

We also coded information value as a whole into two separate categories: *implicit* and *explicit*. As per our codebook, implicit refers to statements of value which can only be inferred from observations and themes that recur; explicit refers to direct, clearly stated assessments of value. Those tweets which were not immediately identifiable as explicit statements of value were considered to be implicit. Explicit tweets were easy to identify, as their content was recognized as immediately important to expats and immigrants; for example: “Landlord-tenant laws can vary over time and in every province. Know what to expect.” Implicit statements of value still contain information valuable to the community, but often couch this information in language which is not overt. These tweets are frequently accompanied by website links to direct the user to further information; for example: “Press release from Immigration, Refugees and Citizenship Canada,” with a link to the release on the Canadian government’s web site. Implicit tweets thus made more direct use of the features of Twitter, as a platform and as ICT, to allow for such inferential, cultural, and contextual value. Explicit tweets were more often based in economic, source, rhetorical, or ideological value.

DISCUSSION AND CONCLUSIONS

While this research is not complete, we have already seen that information value is the most prevalent, and most important aspect of the immigrant and expat Twitter communities we observed. At least for these communities, what they are seeking and valuing most in their online interactions is information which they can use in their daily lives. Tweets that provided this information provided the greatest cultural, contextual, and economic value, and often were from valued sources that could be trusted to be truthful. Information values also had clear interactions with the use of the ICT-based features of Twitter, including retweeting, liking, quoting, and replying to tweets; and mentioning and following fellow users.

The importance of following appropriate contexts to obtain and share this valuable information implies a strong role for boundaries in the determination and negotiation of information value by this population. Like Seraj (2012) we found an especially strong role for cultural values, and appearances are that these and other shared information values have led to some establishment of common ground (Ardichvili, 2008), at least within smaller subgroups (cf. Fischer, 1975). Findings are less clear on whether this truly is leading to new knowledge creation and sharing (cf. Haythornthwaite, 2006) and new community emergence (cf. Worrall, 2015), and on the influence of sociotechnical factors vs. purely social ones.

More data must be obtained via other methods to substantiate and extend these conclusions and their implications for information sharing, information values, and cultural memory as they interact with users' technology use in online community and social media environments. In a further phase of this research we will conduct semi-structured qualitative interviews with expat and immigrant users of Twitter to further explore and detail cases of information value negotiation, information sharing, and cultural memory formation and invocation, analyzed using the same codebooks as in the content analysis reported here. We believe this will deepen our understanding of the information values, information sharing, and cultural memory of these users and how these interact with their use of the ICTs provided by Twitter and related online platforms. Deeper synthesized analysis of the present and future data will also allow for more direct conclusions and implications to be drawn and assessed for the design and development of online communities and the ICTs that support them and for the support and facilitation of immigrants and expats' information sharing online. We expect to share these conclusions and implications further in future presentations and publications. We also saw that expat blogging communities and online forums are connected and interact with the online communities present on Twitter as part of our observation and content analysis, leading to another avenue for follow-up research. We believe further examination of ICT use, information values, and information sharing among this related population is

necessary to consider similarities and differences present in the sociotechnical contexts of expat blogs and forums, furthering our collective understanding of immigrants' information behaviour and ICT use.

ACKNOWLEDGEMENTS

We acknowledge research support funding from a Start-Up Grant awarded to Adam Worrall from the University of Alberta Faculty of Education towards this study. We also thank the anonymous reviewers for their comments and suggestions in improving this poster. The authors contributed equally to data analysis and the writing of this poster.

REFERENCES

- Ardichvili, A. (2008). Learning and knowledge sharing in virtual communities of practice: Motivators, barriers, and enablers. *Advances in Developing Human Resources, 10*, 541–554. doi:10.1177/1523422308319536
- Burnett, G. (2015). Information worlds and interpretive practices: Toward an integration of domains. *Journal of Information Science Theory and Practice, 3*(3), 6–16. doi:10.1633/JISTaP.2015.3.3.1
- Burnett, G., & Jaeger, P. T. (2008). Small worlds, lifeworlds, and information: The ramifications of the information behaviour of social groups in public policy and the public sphere. *Information Research, 13*(2). Retrieved from <http://informationr.net/ir/13-2/paper346.html>
- Burnett, G., Lee, J., Hollister, J. M., & Skinner, J. (2014). *Information worlds general codebook*. Unpublished codebook.
- Caidi, N., Allard, D., & Quirke, L. (2010). Information practices of immigrants. *Annual Review of Information Science and Technology, 44*, 491–531. doi:10.1002/aris.2010.1440440118
- Fischer, C. S. (1975). Toward a subcultural theory of urbanism. *American Journal of Sociology, 80*, 1319–1341.
- Fisher, K. E., & Julien, H. (2009). Information behavior. *Annual Review of Information Science and Technology, 43*, 317–358. doi:10.1002/aris.2009.1440430114
- Gaskell, G., & Bauer, M. W. (2000). Toward public accountability: Beyond sampling, reliability, and validity. In M. W. Bauer & G. Gaskell (Eds.), *Qualitative researching with text, image, and sound* (pp. 336-350). London, UK: Sage.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report, 8*, 597-607.
- Haythornthwaite, C. (2006). Articulating divides in distributed knowledge practice. *Information,*

- Communication and Society*, 9, 761–780. doi:10.1080/13691180601064113
- Hollister, J. M., Skinner, J., Lee, J., & Burnett, G. (2016). Exploring information worlds: A codebook and theory development session for interaction and engagement. In D. Fenske & J. Greenberg (Chairs), *iConference 2016 proceedings*. Retrieved from <http://hdl.handle.net/2142/89455>
- Koepfler, J. A. (2014). Values and self-presentation in online communication by stakeholders related to homelessness (Doctoral dissertation). University of Maryland, College Park, MD. Retrieved from ProQuest Dissertations and Theses. (3628759)
- Koepfler, J. A., & Fleischmann, K. R. (2011). Classifying values in informal communication: Adapting the meta-inventory of human values for tweets. In A. Grove (Ed.), *Proceedings of the 74th ASIS&T Annual Meeting: Bridging the Gulf: Communication and information in society, technology, and work*. Silver Spring, MD: ASIS&T. doi:10.1002/meet.2011.14504801116
- Koepfler, J. A., & Fleischmann, K. R. (2012). Studying the values of hard-to-reach populations: Content analysis of tweets by the 21st century homeless. In J.-E. Mai (Chair), *iConference 2012 proceedings* (pp. 48–55). New York, NY: ACM. doi:10.1145/2132176.2132183
- Koepfler, J. A., Mascaro, C., & Jaeger, P. T. (2014). Homelessness, wirelessness, and (in)visibility: Critical reflections on the Homeless Hotspots Project and the ensuing online discourse. *First Monday*, 19(3). doi:10.5210/fm.v19i3.4846
- Kraut, R., Wang, X., Butler, B., Joyce, E., & Burke, M. (2008, April 18). *Beyond information: Developing the relationship between the individual and the group in online communities*. Retrieved from <http://kraut.hciresearch.org/sites/kraut.hciresearch.org/files/articles/wang08-isr-relationship-rev2-submitted.pdf>
- Jaeger, P. T., & Burnett, G. (2010). *Information worlds: Behavior, technology, and social context in the age of the Internet*. New York, NY: Routledge.
- Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. In *Naturalistic inquiry* (pp. 289–331). Newbury Park, CA: Sage.
- Rheingold, H. (2000). *The virtual community: Homesteading on the electronic frontier* (revised ed.). Cambridge, MA: MIT Press.
- Seraj, M. (2012). We create, we connect, we respect, therefore we are: Intellectual, social, and cultural value in online communities. *Journal of Interactive Marketing*, 26, 209–222. doi:10.1016/j.intmar.2012.03.002
- Shilton, K., Koepfler, J. A., & Fleischmann, K. R. (2013). Charting sociotechnical dimensions of values for design research. *The Information Society*, 29, 259–271. doi:10.1080/01972243.2013.825357
- Tuominen, K., & Savolainen, R. (1997). A social constructionist approach to the study of information use as discursive action. In P. Vakkari, R. Savolainen, & B. Dervin (Eds.), *Information seeking in context: Proceedings of an international conference on research in information needs, seeking and use in different contexts* (pp. 81–96). Los Angeles, CA: Taylor Graham. Retrieved from http://informationr.net/insic/ISIC1996/96_Tuominen.pdf
- Worrall, A. (2015). “Like a real friendship”: Translation, coherence, and convergence of information values in LibraryThing and Goodreads. In G. Olson (Ed.), *iConference 2015 proceedings*. Champaign, IL: iSchools. Retrieved from <http://hdl.handle.net/2142/73641>