

# Coherence and Convergence in Moderation: Implications from Boundary Object Theory for Inclusion and Exclusion Online

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## Brief Abstract

Boundary object theory and its conceptualization of coherence and convergence allow for a unique perspective on how individuals and groups are included and excluded within and across online communities centred around information. This short paper presents examples from prior research on such communities and some key implications for inclusion and exclusion in these contexts. Multiple approaches can and should be taken to balancing online inclusion and exclusion in moderation, maintaining a degree of coherence and convergence that supports information sharing and acculturation without leading to either groupthink or conflict.

## Introduction

The theoretical and conceptual lens offered by boundary object theory (Star & Griesemer, 1989) provides a unique perspective to the study of social informatics and information behaviour (Huvila, Anderson, Jansen, McKenzie, & Worrall, 2017), particularly when other theories of information behaviour, communities, and society are also considered. With the focus of this SIG USE symposium on inclusion and exclusion, the concepts of coherence and convergence, taken from boundary object theory, allow for the consideration of *how* individuals and groups are included and excluded. As further informed by such theories as information worlds (Jaeger & Burnett, 2010), social worlds (Clarke & Star, 2008; Strauss, 1978), and information grounds (Fisher, Durrance, & Hinton, 2004), it may be that individuals are violating group social norms, do not share the same information and cultural values as others, are not members of the same organizations or are of different ranks within those organizations, engage in activities and behaviour not seen as typical, or do not engage in the same sites for both deliberate and serendipitous information sharing and exchange. Focusing on the concepts of coherence and convergence, this short paper considers examples from my prior research and key implications of these examples for inclusion and exclusion in online, technology-facilitated communities where information is created, used, and shared.

## LibraryThing and Goodreads

In my dissertation research (Worrall, 2014, 2015; further in preparation / under review), I examined the relationships between LibraryThing and Goodreads and the online communities they facilitated, as informed by theories of boundary objects, social worlds, and information worlds. Users placed strong and explicit importance on social norms; if these did not at least partially cohere, in terms of users' understandings, then major conflict and feelings of exclusion were a possibility. Convergence of norms around a newly forming community was most often positive, encouraging fewer conflicts and more feelings of inclusivity, but too much convergence could lead to groupthink (see e.g. Tsikerdekis, 2013) and a potential lack of understanding – and thus coherence – between the new community and others. While users could feel inclusive within their own small community, they may feel excluded within the broader, larger community and society they are part of, a version of the insider / outsider problem Chatman (1996) described well. Information value was also of importance, but more implicitly; LibraryThing and

Goodreads facilitated the often-invisible work (Star & Strauss, 1999) of expressing values, translating them, and establishing some – but not too much – coherence. Communities that tolerated a degree of divergence in values were healthier and had happier members, who expressed feelings of “family,” “real friendship,” and “real community” (Worrall, 2015 and in preparation / under review).

### **Academia StackExchange**

Similar dynamics have been observed in recent collaborative research on Academia StackExchange (Academia SE; Worrall, Osolen, & Cappello, 2017; further in preparation), examining the socio-emotional motivations of users for information sharing and exchange on the site. Norms played a strong motivational role here as well, as did the desire to contribute to a sense of community and the self-efficacy of users in expressing their competency in sharing information. However, unlike many users of LibraryThing and Goodreads Academia SE users are less interested in becoming part of a community around or within the site itself. Instead, they are more interested in learning about and becoming part of broader academic communities, in a way similar to but not perfectly aligned with legitimate peripheral participation (Lave & Wenger, 1991).

While boundary object theory was not an explicit lens for analysis in this study, the dynamics of coherence and convergence and their implications of reasons for inclusion and exclusion can be seen again. Academia SE users’ desire is for acculturation in the form of coherence to the broader community of academia, which should lead to greater information sharing within academia (cf. Haythornthwaite, 2006; Kazmer et al., 2014) and a feeling of inclusion within the academic community. Most users do not feel included in Academia SE as a “real community”; the site is more directly inclusive of relevant, useful, and valued information, but is not as inclusive socially (see also Worrall, Osolen, & Cappello, 2017).

From more recent interviews with Academia SE users, strong divisions between the social norms and information values of frequent and infrequent users have emerged that may be causing at least an undercurrent of conflict. There is a clear sense of the site’s purpose being purely informational among moderators and frequent or long-term users; they focus on including the most useful information and exclude that seen as irrelevant or extraneous, such as personal details that will not help another user who may come across a given question and its answers. In comparison, those who primarily interact, share, and engage elsewhere have told us they feel the site lacks empathy and personality, and is daunting to and potentially excludes new users who do not understand – i.e. cohere with – the norms, rules, and values (explicit and implicit) of the site. Less experienced Academia SE users can feel excluded if their questions or answers are edited to remove contextual details or altogether removed by more established users and moderators, instead of empathetic and knowledgeable help being provided through answers and comments. These feelings of exclusion may increase further if they are unfortunate enough to observe or directly face some of the bitterness, distaste, and animosity expressed by a few Academia SE users who have a strong motivation of self-efficacy and feel self-important, even if these values also do not cohere with those of the site or of academia (Worrall, Osolen, & Cappello, 2017). Both greater coherence and convergence among the site’s new and experienced users, and a greater acceptance of divergences from that coherence by experienced users and moderators, may help reduce this undercurrent and make Academia SE less daunting for those new to it and to academia.

## **Immigrants and Expatriates**

Many populations that use ICTs and online communities as sources of and places to share information already feel excluded due to pre-existing differences. Immigrants and expatriates, being new to a country, find information sharing via social media an important part of finding information and social support; connecting the global and local elements of their lives and become more included in both; improving their social, emotional, and psychological well-being; and increasing their inclusive and coherent understanding of information, culture, and community (Caidi, Allard, & Quirke, 2010; Fisher, Durrance, & Hinton, 2004; Mehra & Papajohn, 2007). While we know relatively little about immigrants and expatriates' information sharing within and across online communities, we know that feelings of inclusion associated with becoming settled in a new country can often be associated with feelings of inclusion, coherence, and convergence within a smaller group, such as an online community (Chien, 2005).

In recent collaborative work examining information sharing by and cultural memory for immigrant and expatriate members of Twitter (Worrall & Hyduk, 2016; Hyduk & Worrall, 2016), we found that information value determination and negotiation are key for immigrants and expatriates online, with information which can be used in their daily lives seen as most important. This study also did not explicitly include boundary object theory in its lens of analysis, but the importance of contextual and cultural values for immigrants implies a strong role for boundaries. Where values are inclusively shared, common ground forms within subgroups; in boundary object theory terms, these subgroups may converge as communities around common informational and cultural values. Although our findings are still preliminary on whether convergence – and thus even greater feelings of inclusivity – truly occurs, immigrant and expatriate interviewees have expressed that their information sharing via Twitter and other forms of social media – particularly blogging and other social networks – has helped them feel more included both in their new country and in a broader population of immigrants and expatriates worldwide. Further research is planned to learn further about immigrants and expatriates' use of social media and their motivations for doing so in sharing information online, and to what degree coherence and convergence of communities occurs in this process.

## **Implications and Conclusions**

Facilitation of such information-centric and information-sharing communities through ICTs, systems, and services thus needs to strike a careful balance. Inclusivity of social norms and informational and cultural values must be high enough to reduce groupthink and allow for some deviances from what is accepted by established members, so that new members do not feel excluded from an existing “club.” At the same time, norms and values that clearly deviate in ways that could cause significant conflict may be best excluded somehow, but gently enough so as to encourage the acculturation and eventual inclusion of new members and users.

Such facilitation should allow for users to form smaller convergent groups and communities within the larger one, and specifically allow for information behaviour, sharing, and exchange both within and beyond these boundaries. Both LibraryThing and Goodreads have provided for this, but at different levels and through different means. At the time of my study (see Worrall, 2014) there was less overall coherence and greater concerns over exclusion among Goodreads users, because the site's overall culture was under threat from Amazon's acquisition and Goodreads groups are more autonomous than LibraryThing groups. Users felt included within these groups, but excluded from the broader Goodreads culture as Amazon's policies led to changes in norms and values, for example in the acceptance of critique of authors' personal beliefs and politics. In short, Amazon did not fully consider the implications of changes in the

boundary object Goodreads served as, and thus was – unintentionally or not – excluding some users from the broader community. Similarly, moderators and frequent users of Academia SE may be too exclusionary in their behaviour, instead of reaching out to new site users and those new to academia as a whole. Academia SE may also benefit from additional opportunities for members to establish social ties and feel included within a convergent sub-community, as is possible with LibraryThing and Goodreads.

Finally, the use of both Twitter and other social media by immigrants and expatriates speaks to another way inclusion and exclusion may be balanced. Different online communities and forms of social media may have different norms and values, but may be used by the same users to engage with different sets of people or in different kinds of information sharing. Some information and users may be excluded from one community, but welcomed in another; a discerning user can balance both and take advantage of each and its constituent sub-communities (e.g. as represented by Twitter hashtags, Facebook groups, or blogging networks). These different forms of social media are an important focus of planned future research on this population.

Further research should consider coherence, convergence, inclusion, and exclusion in moderation: In information-centric online communities, some of all of these is good, but too much of any one can lead to groupthink and conflict, either explicit in the content shared by users or implicit in the undercurrents of the community. Researchers can study the explicit and implicit content, norms, values, and behaviours of communities, drawing on theories including information grounds, information worlds, social worlds, and boundary objects. In this way, we learn more about the community and how its social, cultural, cognitive, and informational structure and context may be leading to an unhealthy lack of balance in inclusion and exclusion that leaves many users uneasy in their information sharing.

### **Acknowledgements**

Thanks to Michelle Kazmer, Gary Burnett, Sanghee Oh, Alyssa Hyduk, Rachel Osolen, and Alicia Cappello for their help and assistance in the studies discussed herein.

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