# A doctoral researcher community on Twitter: An actornetwork explication of #PhDchat

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#### **Abstract**

Late in 2010, a small group of postgraduate students discussed meeting on Twitter to discuss areas of interest to doctoral students. This developed into the hash tag #phdchat, which began informally with synchronous discussions on Wednesdays at 19.30 GMT, loosely focused around topics voted upon by anybody wishing to participate. The concept expanded to include people, primarily doctoral students, who discussed areas of shared interest such as motivations for doing a PhD or analysing data, along with various technologies of interest. From the time #phdchat Tweets began to be tracked to the time Twitter limited API use a few months later, there were 4,876 individual Tweets using the #phdchat tag. The 10 most active Tweeters using the tag during this period accounted for 52% of all the Tweets, even though there were 362 unique participants contributing at least once during this period.

What did they talk about? While this seems a natural question with such intensive users, it may be a limiting question to consider, as it only looks at the surface result of the phenomenon, rather than at what held this informal network together. Instead, this research takes its inspiration from Latour's notion that we need "to follow the actors themselves" (2005, p. 12), seeking to "avoid imposing our own views about what is right or wrong, or true and false" when considering social and technical interactions without distinguishing between human or non-human actors (Law & Callon, 1988, p. 284). The assembled bursts of Twitter activity is the result of the contributions of this active group of participants, with the central assembly being the hashtag #phdchat itself. This tag itself will be followed during this period of time, explicating how and in what ways the participation in the synchronous and asynchronous Twitter chats moved and enlisted other actors to bring meaning and support to those involved. This research will be presented as an interactive Pecha Kucha, with participants invited to use a Twitter tag during the session to focus on the issues raised and responses shared amongst those present and distant to the symposium.

#### **Keywords**

Twitter, #phdchat, actor-network theory, ANT, doctoral studies

## **Background**

On the final day of October, 2010, a small group of doctoral students found themselves considering whether they should meet on Twitter to discuss areas of interest to doctoral students. This developed into #phdchat, an informal weekly synchronous discussion using the hash tag, beginning with the # symbol that is used to follow discussions and areas of interest, loosely focused around topics voted upon by anybody interested in participating (Twitter, n.d.). This informal group expanded, comprised primarily of doctoral students, in addition to some both pre- and post-, who discussed, shared concerns, and offered suggestions and support to one another.

Various technologies were introduced within these conversations and to share and track information about and by the participants, including a wiki, Twapper Keeper and Summarizr accounts, Diigo, third-party applications (e.g. Mendeley, Papers, Zotero), and several blogs. One of these tools was used to help track the earlier chats, and from the time #phdchat Tweets began to be tracked on 1 December to the time Twitter began limiting API (application programming interface, a way to share web content across sites and devices) use, effectively stopping Twapper Keeper's archiving of all the Tweets using the shared hash tag on 24 February 2011, there were 4876 Tweets using the hash tag. Of those who first discussed this concept in the previous October, four of them were among the 10 most active Tweeters using the tag during this period. Furthermore, these top 10 interdisciplinary participants accounted for 52% of all the tagged Tweets made, even though there were 362 unique participants contributing at least once during this period. Indeed, those most active 10 participants spent a good amount time over those first few months chatting with one another via 140 character bursts, the

maximum allowed in a single Tweet. With an extended, and extensive discussion in such a short period of time, this area naturally seems a topic for study.

What did these people, specifically these ten most active participants, discuss during this period? While they made references to subjects such as methodologies, strategies for the literature review, and technologies, focusing on their words alone seems only part of the story for what made this community such an engaging experience, not to mention what held it together. Perhaps the question of "What was discussed?" is a question that may instead limit the exploration of the phenomena of #phdchat, rather than expand its implications. It may be more interesting to explore #phdchat through an actor-network theory lens, as that will make for "an unfamiliar take on many familiar issues" (Fenwick & Edwards, 2010, p. 2), here including the people, technologies, thoughts, suggestions, and support offered around the central actor, the #phdchat tag.

### **An Actor-Network Approach**

That networked learning happened through the sharing and collaboration around the #phdchat tag is not so much the issue, nor to what role its support occurred by or through a community of practice or looser structure, nor even how its higher education focus translated to behavioral practices in the individual member's research endeavours, but rather that it happened at all (Fox, 2002; Goodyear & Zenios, 2007; Hodgson, Marshall, & Latham, 2011; Jones, Dirckinck-Holmfeld, & Lindstrom, 2006). Fox's notion of studying "'naturally' occurring networked learning" (2002, p. 89) drives the direction of this study, as the organic Twitter tag was really the central actor in this account, and thus its exploration needs to be the central aspect of this study. The purpose of this research is to engage in an actor-network study of the Twitter hash tag discussion #phdchat, by following the central actor, the tag itself, in its early use.

Actor-network theory (ANT) is not a theory that will seek to explain what happens as a result of using the #phdchat tag, nor about why participants sought to use it. It is, however, especially good at showing how those who engaged it were assembled (Law, 2008). This is highlighted and described in Latour's work where he brings attention to the uncertainties of groups, actions, objects, facts, and the very science of the social, all of which requires that ANT move "agonizingly slow" (Latour, 2005, p. 25) when navigating through complex relations, or networks, that are very complex and constantly developing, or translating. These countless factors, all of which are referred to as actors, have an ability to influence or maintain the networks in which they exist (Callon, 1986). In this way, actor-network theory is a philosophical orientation, and not a singular theory or methodology with clear steps or processes to follow in a research capacity (Fenwick & Edwards, 2010; Latour, 2005; Law, 2008).

ANT emphasizes the interaction between actants, so little can be studied without seeing it in connection and development in relation to other actants. In this manner, symmetrical leveling, an actor-network concept that treats all parts of a network in the same way in order to gain new insights regarding the influences and assumptions on how we act, is the approach taken. Seeing how human and non-human actors exert influence on one another, rather than a more traditional only privileging of the human role in all situations, is beneficial in exploring the rich complexity of interaction (Barnacle & Mewburn, 2010). The complexity in how these networks are layered should not be underestimated, in that doctoral students "do not occupy one singular actornetwork but are part of multiple and overlapping actor-networks, including the university, the home, the academic discipline (perhaps with a related professional cohort) and broader policy environment—just to name a few. All these other, potential actor-networks are folded into any given PhD candidate actor-network, and all contribute to performing different kinds of 'reals', subjectivities and subject positions into being" (Barnacle & Mewburn, 2010, p. 435). Central to the experience of the participants engaged in #phdchat was the tag itself, and thus it will be the focus of our explication.

## Analysing the Tag

The #phdchat tag is evasively simple, comprised of 8 characters, and somewhat discoverable as a combination of a hash symbol, the abbreviation PhD, and the notion of chat (communication). Together they symbolize an interaction of, by, and about a group of people using an open system (open to anybody who wants to engage or read these messages) about a shared experience, one that may have been simpler or more complex than initially appeared. A thematic analysis of the tag's use over the first several months of the chat could result in more understanding of technology recommendations, words of support and encouragement, and even of strategies to

address writing and conceptual concerns of the doctoral experience, but ANT may reveal a different vantage for this phenomenon, particularly through the approach known as translation.

Translation is an approach to a theory of power, how one thing seeks to define and use another within a networked relationship. In the world of actor-network theory, this is often based on the four steps as identified in the work of Callon (1986). These include problematisation, the way in which actors define their situations and relationships; interessement, where they seek to box in or solidify the roles and identities of other actors in relation to the initial problematisation; enrolment, where they define and interrelate the roles attributed to the other actors; and mobilisation, where the other actors are convinced to act out the roles assigned, or defined, for them (Callon, 1986; Law, 1986). At face value in exploring the Tweets during this period, there are not many examples of participants trying to exhibit power on one another; though to conceive of this would miss the value of the notion of translation itself. In an ANT critique, the power in the translation relationship was the tag #phdchat itself, as without using it the participants would not be able to readily locate or follow one another in a way that would allow for the desired sharing and community. This could only come about through Tweets listed with the tag. Misspellings are not allowed, as those would fall away without the benefit of the community's notice. Likewise, participants could communicate with one another, but deviating from the confines demanded by using the tag would leave those Tweets out of the shared conversation. In this way, the tag #phdchat exhibited control over how people engaged with one another if they wanted to be a part of the networked community.

Beyond its use as a fundamental element in its theory of translation, how else was the tag used to maintain the network of those who sought to use it? In a temporospatial manner, it called participants to action, in that the synchronous chat happened on a weekly basis, and to participate in the distributed chat meant showing up during its period of activity. While Twitter's Tweets are open and remain online to be interacted with and replied to whenever anybody wants, for the community to communicate at the same time, and in real-time (regardless of time zone or geospatial location), the time established for the community to meet meant that the tag was heavily used, in rapid succession and with active interaction, once a week, at a set time.

Regardless of when people sought to catch up with reading the Tweets, the conversations, if not the active engagement, were archived for anybody to see and still open for others. It was not unusual for participants in the tag's use to engage with it at other hours of the day or night wherever they were present. As a microblogging tool, Twitter technology maintained the connection of all discussions, including the threads that may have arisen through its use, along with durable timestamps and alerts automatically generated through notifications of replies, favorites, and reTweets when the tag was used. Regardless of when the interaction with the conversations were initiated, participants were called to read and often replied using the #phdchat tag, insofar as they wanted to remain part of the public narrative concerning their shared doctoral experiences.

As the tag translated action of the human actors, all this happened across a variety of technologies—website browser on computers, iPads and tablet devices, smart phones—in addition to the myriad of tools to track, archive, and manage these discussions. They were all focused around the central actor that invited its users to interact in a shared way. That this could be done on any device, anywhere in the world (unless blocked by other actants such as governments or organizations that limited access to Twitter itself), the tag was easy enough to remember, readily findable through a simple search, and commonly shared by participants with their own networks—all expanding its reach to a wider audience beyond the central ten.

While the tag did not account for the exact status of participants did not matter; all who used it and wished to speak about aspects of the doctoral experience were welcome. The majority of these people wanted to share, discuss their experiences, and seek support or recommendations for completing their doctoral studies. Where they studied, modality, disciplinarity, funding, time commitment—none of it mattered to #phdchat, and thus all were accepted as being equal parts of the community who gathered around, and were supported by, those adherents of the tag. Welcoming even went to those who were not intentionally active members or participants in the community, though who reTweeted or otherwise interacted with the authors or content of the Tweets themselves without awareness, interest, or even knowledge of the #phdchat tag. Enrolment was broad in its scope, including those who returned frequently and travelled the doctoral path, along with those mobilized to participate in other capacities.

## **Discussion and Next Steps**

What value does a focus on this tag have, as it never Tweeted on its own, spoke, or had direct contributions to make? This is the value of considering the notion of translation, as for #phdchat to work, which it did well beyond the expectations of those initial ten participants (many of whom have since completed their studies), there had to be a common way to communicate. This took the form of a simple tag that, once shared, demanded a mobilization on behalf of its followers in order to be a part of something much larger, wiser, more connected, and durable than any of its advocates. Without exploring this from an actor-network lens, the limited perspective of people using the tag would be the common way to consider the phenomenon, and the value in the expanded network would be minimized, if noticed at all. The richness in these implications will continue to be explored, both in theory and in practice.

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