(MIS)UNDERSTANDING MOOCS: DISCOURSE NETWORKS, ANTAGONISM AND 
THE STRUCTURING OF NETWORKED MEDIA

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by
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ABSTRACT

As with many technologies, the public reception of Massive Open Online Courses (MOOCs) has not been without conflict. Alternatively praised as the salvation of higher education or loathed as the figure of its ultimate degradation, the hyperbole characterizing discussion of MOOCs nevertheless marks the seriousness by which people have argued over what should be understood as a MOOC, and what they mean for a global system of higher education.

This thesis analyzes the discourse network emerging at a prominent point of impact in these discussions: the online discussion forums of The Chronicle of Higher Education over the first two years following the public introduction of MOOCs. Like many networks, these discussion forums are riven by asymmetries of participation: a few contribute much while the majority little. Focusing on the frequencies of participation among actors involved in these forums and the disproportionate practices of production and distribution they enact, this analysis asks: How do discursive practices vary between frequent and infrequent participants to the forums, and how do these frequencies of practice contribute to processes structuring online discourse?

Conducting a case study of the online discussion forums, a grounded approach first explores the discourses and antagonisms, points of incongruity within the discussions, articulated within the forums. Through content analysis, these are then explored in relation to the interactive, rhetorical and articulatory practices of the most frequent and infrequent participants. Conclusions drawn point to inverse tendencies for interaction within the forum, with the most frequent participants directly engaging other participants in points of antagonism and, as a sociotechnical process, constructing durable media configurations structuring the online discussion threads.
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Chapter 1

Introduction

Incitement, rather than proclamation, best characterizes the New York Times article describing 2012 as “The year of the MOOC” (Pappano, 2012). Opening to the fever-pace at which MOOC platform providers such as Harvard and MIT’s edX, or Stanford-born commercial start-ups like Udacity and Coursera, are “growing faster than facebook” (Andrew Ng, as quoted in Pappano, 2012), the Times article places readers at the precipice of… something. Before we are told precisely “what is a MOOC anyway?,” Anant Agarwal, the president of edX, appears to let us in on the big secret: “I like to call this the year of disruption… and the year is not over yet” (Agarwal, as quoted in Pappano, 2012).

The incitement of the piece follows not from who and what are described - MOOC course offerings, student and faculty anecdotes, emerging issues such as student assessment - but from the who and what that are not: the to-be disrupted. Aaron Bady (2013), finding at the end of the MOOC rainbow the demise of public commitment to higher education, notes that these issues are obscured precisely because the real disruption has already occurred:

there’s almost nothing new about the kind of online education that the word MOOC now describes. It’s been given a great deal of hype and publicity, but that aura of “innovation” poorly describes a technology—or set of technological practices, to be more precise—that is not that distinct from the longer story of online education, and which is designed to reinforce and re-establish the status quo, to make tenable a structure that is falling apart. (n.p.)

The status quo to which Brady refers represents an ongoing crisis spurred by disinvestment in higher education, and inequalities between students and universities which can afford traditional, residential
practices of education, and those which, increasingly, cannot. According to Bady, MOOCs stand to not only accentuate this crisis, but “to institutionalize it, render it permanent.”

Yet the incitement of the year of the MOOC follows less from the realization of these predictions, and rather from the speed at which the press could readily proclaim “disruption” before its unwary victims could voice their own stake in these developments. Whether described by Stanford’s president John Hennessy as a fast approaching “tsunami” (Hennessy, as quoted in Auletta, 2012), or The New York Time’s Thomas Friedman (2012) gleefully welcoming the “revolution,” Bady (2013) finds that “in stories told by the New York Times, the WSJ, and TIME magazine that the MOOC comes to seem like an immanent revolution, whose pace is set by necessity and inevitability.” Prepped for landfall, professors, instructors, students, administrators, and the spectrum of interested observers of higher education looked to and sometimes voiced their own opinions in the popular press whose celebratory warnings might soon become their own lived realities.

The fallout of such incitement emerged in The Chronicle of Higher Education, on whose pages and digital forums became waged a comment-to-comment combat in which every MOOC pronouncement was met with outbursts ranging from staunch opposition to watch-it-burn cheerleading. Porterfield (2013) speaks for many, writing:

The past year has seen the meteoric rise of the MOOC, or massive open online course, which lets 100,000 strangers—or more—log on to free classes branded "Stanford" or "Harvard." The New York Times went so far as to call 2012 the "Year of the MOOC." Amid the cacophony of voices calling for colleges to cut costs and reduce student debt, many of us who work in higher education find ourselves playing defense on an issue we don't yet know enough about. (n.p.) Defenses were erected through reactionary op-ed pieces such as Porterfield’s, stumping, for instance, for 2013 to be “the year of the seminar.” More often, however, op-ed contributors and reader comments featured anger and hyperbolic fears. “I don’t want to be MOOC’d,” bewails one professor of many at “smaller, lower-ranked institutions… —those typically with a city rather than a state in their names”
For many, the MOOC, whatever it was, is or could be, conjured a menagerie of fears and insecurities in which, surely, could only be read the end times.

All the while The Chronicle, happily informing its readers, has maintained a special section of its website devoted to “What You Need to Know About MOOCs” (n.d.), complete with timeline, article aggregator, and a first line echoing The New York Times: “Call it the year of the mega-class.” Steve Kolowich, a staff reporter covering technology and frequent contributor on MOOC developments, sets the tone for the Chronicle’s reporting:

If MOOCs portend a "tsunami" of change in higher education, as observers have said, then many colleges have been willingly swept in by the undertow. In less than two years, massive online courses have grown from side projects of a few techie professors into companies fueled by tens of millions in venture capital funds and the imaginations of the entire education industry. For universities worldwide, membership in edX or Coursera has become the hottest ticket in town.

(Kolowich, 2013h)

With each article and every accruing discussion forum, the merits and atrocities, actors, practices, and institutions bound to this technology as innovation/disruption/tsunami/revolution- all under the banner of “MOOC”- are vigorously articulated and re-articulated in an evolving sociotechnical configuration. In tracing the processes by which contributing practices interact and ultimately structure the discourse of The Chronicle, the wake of the “year of the MOOC” comes into view not so much as an accounting of inexorable disruption, but a particular, living, and evolving edifice organizing the limits in which such accounting can be understood. As a result, The Chronicle emerges as a nexus of practice that, in bold outline, traces what such a thing as a MOOC can be and, more subtly, what it cannot.

Yet behind this nexus of practice, or rather at its heart, operates a network of actors not only divided over what is to be made of MOOCs but, perhaps just as significantly, divided along the frequencies of production and distribution characterizing their participation in the forums. This becomes more consequential when participation is granted its breadth of effect, as a practice involved in the
becoming of a sociotechnical process, as well as its digital materiality that sees a network of media continually configure itself and expand through the conditional structures enacted out of regularities of production and distribution defined by participatory practice.

A common yet insufficiently understood feature of many forums, as well as to those of The Chronicle, regards the extreme participation of a minority of users, while others contribute infrequently or not at all. The issue of participation frequency consequently opens a significant question: How do practices vary between frequent and infrequent participants, and how do frequencies of practice contribute to processes of production and distribution structuring online discourse? These questions together seek entry to the processes by which distributed practices structure emergent forms of networked media with which we routinely engage in our everyday lives.

**Thesis Outline**

The case of The Chronicle represents but a single example of how new forms of co-produced, social media emerge through a nexus of digital space (Bruns, 2008; Castells, 2011; Jenkins, 2006a). In this light, discussions surrounding MOOCs can be recognized as an instance in which “the public has gained greater control over the means of cultural production and circulation” (Jenkins, 2014, p. 273). As shifts in social media now see digital audiences becoming content co-producers, new opportunities arise for co-produced “artifact configurations” to emerge in dynamic forms across all areas of social life (Boczkowski, 2005).

However, despite sustained interest and important insights, the nature of the processes organizing the co-production of social media continues to remain opaque (Carpentier, 2011, Larsson, 2012; Orlikowski & Scott, 2015b; Van Dijck, 2009), contingent on material-discursive practices that are “diverse and fractured” (Couldry, 2011, p. 490). Consequently, understanding the online co-production of user-generated content begs questions surrounding the practices production of distribution by which
artifact configurations emerge through the contributions of participants and the interactions between them. A salient and insufficiently analyzed aspect of these practices is the extreme asymmetries of participation among actors involved.

**Literature review**

Research concerning online discourse develops through interest in the capacities of Web 2.0 infrastructures to facilitate processes of mass, many-to-many communication and the consequences of these processes to support diverse social forms. While avoiding an initial architecture or platform-centric conception of user-generated content as a premise for an analysis of online discourse, the extant literature considering online discussion forums tends to find the materiality of the medium recede to interests in the contexts and characteristics of communication and the social forms to which they contribute.

These accounts are categorized as centripetal and centrifugal respective to the theoretical and empirical articulation of difference outlining the limits of the social forms under investigation. Centrifugal accounts find processes wherein difference collapses toward a common center - whether as a specific vision of community, identity, or form of communicative agreement and understanding. Centrifugal accounts, on the contrary, identify the elaboration of difference and the fragmentation of social forms supported by online communication.

Amidst these sundry accounts, however, a growing body of literature has recognized asymmetries of practice among actors - often individual “users” - regarding their interactions in the forums. Most prominently, an active, even dominant, minority who frequently contribute to online discussion forums and tend to receive the most attention and communications from others. Despite multiple accounts identifying their involvement, the specific contribution of their practices, as they might affect the general processes of online communication and the characteristics of the forums themselves, has not been analyzed.
This omission becomes more glaring given developments in network science since the turn of the millennium. The large body of research finding regular, structural asymmetries in networks, commonly described as the “long tail” of relational distributions. Arising through processes of network growth in which the “rich get richer” to the emergence of highly connected network actors, these structural asymmetries have been insufficiently explored as they stand to inform research into the processes defining large-scale networked communications.

As a result, this thesis is oriented by two guiding questions. First, how do discursive practices vary between frequent and infrequent participants? This question follows from an emerging problematic that finds participation in networked processes highly skewed between the practices of frequent and infrequent actors, and empirical and theoretical understandings of network structure characterized by such asymmetries.

The second question thereby follows the first: how do frequencies of practice contribute to processes of production and distribution structuring online discourse? The notions of production and distribution respectively characterize an understanding of discursive practice that recognizes the frequency and material contributions of agents, as well as the spatio-temporal and symbolic patterning of their practices. Approaching this question looks to asymmetries of practice in collective processes as potential mechanisms contributing to the organization or structuring of sociotechnical forms.

**Theory and method**

The discourse theory of Ernesto Laclau (1990; Laclau & Mouffe, 1985), informed by sociotechnical theories of practice, directs an approach to these questions. Discourse regards the everyday practice of actors, linguistic and non-linguistic, as an articulation of differential elements. As discursive practice performs the onto-epistemological structuring of the meaningfulness of the real, discourse also
constitutes the conditions of possibility of any practice or ensemble of practice. The concept of structure regards the limits by which an ensemble of sociotechnical practice takes meaningful, enduring form.

Pursuing the two research questions as they address the sociotechnical process by which MOOCs were discussed, argued, and (mis)understood in the forums of *The Chronicle*, a mixed approach was adopted in the use of content analysis to address frequencies of practice constituting the discussion forum, as well as grounded theory methodology to develop an understanding of the discourses and their limits emergent to the forum. This methodological approach seeks a qualitative, thick description of the symbolic practices inscribed in the comments of the forum, as well as an understanding of the distributions of practice constituting MOOCs as an object of conflict and understanding.

These methods become utilized in a case study of comments submitted to *The Chronicle* discussion forums over a two-year period between 2012 and 2014. A dataset comprising 3950 comments posted by 999 participants to 72 newspaper discussion forums details a process of open discussion in which actors, human and nonhuman, joined together in a process articulating and co-producing the discussion forums as material configurations defining an emergent understanding of MOOCs.

**Case Study**

The case study of *The Chronicle* develops in three parts. First, grounded theorizing develops three central discourses arising among the comments to the forum: the professional concerns of educators, issues of pedagogy, and commercialism in higher education. These discourses articulate an ensemble of differential elements- words, concepts, and arguments- foregrounding, and constituted by, central antagonisms riving discursive practices of actors and precluding a settled or common understanding of what a MOOC is, as well as what it can and should do. Across these discursive formations, central antagonisms develop that define a fractured yet nevertheless simplified discursive space.
The next stage of analysis utilizes content analysis to identify patterns in the production and distribution of practices—through measures of interactive and rhetorical practice—constituting the forums. This analysis highlights the asymmetries of participation among actors in the forum, as well as important patterns respective to the frequency of actors’ participation. Most importantly, the most frequent participants exhibit a strong tendency toward direct interactions with others in the forum. Inversely, those who participate least (contributing only one comment) tend to issue general, undirected comments. This tendency is explored in a close reading and content analysis of the most frequent participants’ articulatory practices in relation to those less frequent commenters. Not only do the most prominent participants interact with the comments of others more often, but tend to be more critical and less equivocal in their comments and replies. Moreover, integrated in a sociotechnical process, these practices function to construct durable configurations of networked media that provide for forms of structuring across the discussion forums.

This study thus presents implications for how we understand discourse networks as they emerge to define meaningful forms through the production and distribution of networked media. The concept of the discourse network is considered as increasingly important for analyses in information science, communications and media theory. Discourse networks stand to conceptualize not only how digital communications technology contributes to the enactment of meaningful social forms—such as might define public understanding of MOOCs—but also how these forms are the accomplishment of processes that are far from determined. Rather, a discourse network involves a multiplicity of heterogeneous actors engaged in practices of production and distribution of media that are highly asymmetric and disproportionate. Moreover, these networks become constructed through social as well as technological logics (Latham & Sassen, 2005), wherein the concept of antagonism lends understanding to the forms of differencing, limit and, consequently, structure, form and meaning these networks support. This study thus begins to understand how these practices contribute to the structuring of networked media, and points to promising directions for future research.
Chapter 2

Literature Review

Research concerning online discussion forums reveals diverse fields and foci of analysis. These studies, however, might be categorized according to the ways they consider processes of organization as a function of differencing. Whether concerned with communicative or symbolic processes, the distribution of media content, or the structuring of networks, research finds opposing tendencies: those accentuating processes of differencing and leading to fragmented structures, or those in which difference is progressively lessened and consequently affording conceptual understandings of community building, rational deliberation, and affective support. The following review highlights these tendencies as centrifugal and centripetal respectively.\(^1\)

The problematic of asymmetric practices of production and distribution in relation to processes of structuring is then considered through research examining structure in online discourse networks, and more theoretically from general conclusions extending from network science. The scientific literature in these areas consistently identifies asymmetries of relations between actors involved in distributed, networked practices and have so far identified either salient features of the network structures that result or, in the case of network science, theoretically abstract mechanisms of growth and preferential attachment to account for structuring processes. Consequently, this review finds necessity and opportunity in addressing the research gap that opens between the observations of asymmetric network structures and the complex fields of sociotechnical practice that are constitutive of these structures.

\(^1\) Notions of centripetal and centrifugal force were first prominently described by Mikhail Bakhtin (1981) in his studies of the novel. See also Montoya (1999).
Online Discussion Forums

Computer-mediated communication in the form of user-generated content occurs across the digital infrastructures of Web 2.0. One form particularly common is the online discussion or comment forum, a ubiquitous space in which users read and post comments in domains ranging from social media to online news, commercial sites soliciting customer feedback to activist and e-government initiatives open to citizen voices, mainstream media outlets to lowly blogs amidst the immense blogosphere.

Empirical analyses of online discourse offer an eclectic and often contradictory collection of perspectives on the character of the practices of communication and the sociotechnical forms they collectively define. Among these, the online discussion forum provides a prominent space for online asynchronous discussion among many diverse participants. Generally, online discussion forums have been described as interactive spaces supporting individual self-expression and collective meaning construction (Canter, 2013, Lindgren, 2011) information sharing (Burnett & Buerkle, 2004), virtual community (Fayard & DeSanctis, 2010), civic debate (Dahlberg, 2001), and emotional support (Cunha and Orlikowski, 2008). The character of discussion in these spaces ranges from playful banter to deep expressions of sympathy and solidarity, considered deliberation to hostility, vitriol, and racist invective.

First, what are here described as “centripetal” accounts, explore networked media as a vehicle for community-building, collective sense making, and new avenues for self-expression and social support. The centripetal character of these analyses extends from characterizing sites of online discourse as minimizing differences in favor of diverse modes of culture or community-building and collective forms of expression and identification.

Constitutively-related, the second tendency of “centrifugal” accounts emphasizes difference, often through individual or collective acts of critical and vitriolic language. Centrifugal characterizations acknowledge homophily among interlocutors yet stress the tendency to the point of extreme differentiation, opposition, and segregation within online discursive spaces. Lacking in both centripetal
and centrifugal accounts, however, is an exploration of the functions by which these tendencies become enacted in distributed processes of participatory production and distribution. Asymmetry among frequencies of the latter stand to potentially contribute to such a function.

Centripetal functions of online forums

Online forums prove, in the conclusions of most research, a space for user self-expression. Canter (2013) concludes that posts to online forums mainly “express a personal opinion on the subject matter,” and “interact with other readers (p. 607). Tied intimately with the discourses of Web 2.0, the online forum becomes identified with the opportunity for others to hear users’ voices, whether understood as citizens (McCluskey, & Hmielowski, 2012), customers (O’Connor, 2008), fans (Jenkins, 2007), or community members (Lewis, Kaufhold, & Lasorsa, 2009). Among commenters to online newspapers, Mitchelstein (2011) finds the majority motivated by desires to express their opinions publicly, often spurred by their opposition to other users’ comments (p. 2020). The expression of individual opinions are necessarily diverse. Typologies such as Van Zoonen’s (2007), "description, reflection, judgement and fantasy are the four categories that summarize what people do in their comments” (p. 546), identify elements of online forums yet risk oversimplifying their complexity as unique discursive spaces.

The additional functions of user-generated content that follow represent commonly recognized tendencies seemingly manifest in online forums. These represent a spectrum that moves from a sense of centripetal interaction binding comments in online forums, to a centrifugal understanding in which interactions foreground difference rather than processes of negotiation and shared meaning construction. Later these alternate tendencies of interaction will be linked to differing conceptualizations of interactivity, and the performative function of the concept when mobilized within empirical analyses of online discourse.
The decentralization of capacities for information sharing characterizes Web 2.0 and features as a prominent mode of user-generated content in online forums (Burnett & Buerkle, 2004; Diakopoulos, & Naaman, 2011; Lindgren, 2012b). Information-sharing may be considered distinct from the more general opinion expression in its communicative function of distributing content considered valuable within particular contexts and communities. In this regard, information sharing has marked online forums as distinct spaces of learning and knowledge management (Adamic, Zhang, Bakshy, & Ackerman, 2008; DeSanctis, Fayard, Roach, & Jiang, 2003), consumer product reviews (Gu, Park, & Konana, 2011), as well as health information (Scanfeld, Scanfeld, & Larson, 2010). Concerns with information sharing in user-generated content often highlight the notion of interaction as a window into the processes of mediation that structure information flows within a network.

Another commonly attributed function of user-generated content consists in the sharing of emotional support. Mediated-practices of collective coping (Lindgren, 2012a), group catharsis and solidarity (Da Cunha and Orlikowski, 2008), and emotional and behavioral assistance (Broom, 2005; Burri, Baujard, & Etter, 2006) are found to occur through online forums. The analysis of online alcohol-related discussions which Coulson (2014) presents indicates the overlap among the modes categorized here as centripetal, that they tendentially understand a relationship between interactions articulating user-generated content and the functional characterization of the online space they perform. Coulson describes themes of “sharing,” “support,” and “sobriety” emergent through mediated communication. Sharing relates closely to the functions of self-expression and information sharing performed in user-generated content. The interactions spurred by the latter in turn contribute to collective processes of emotional support that through ongoing communicative interactions facilitate a “collective goal” and shared meaning of sobriety which becomes recognized as the interpretive context for participants in the online forum.

This movement to shared understanding characterizes the orientation of many analyses of computer-mediated communication. When creative self-expression, information sharing, and various
forms of emotional support and collective encouragement through user-generated content become on-going, reciprocal practices many have recognized processes of collective meaning construction, community formation, and new “participatory cultures” (Baym, 1999; Jenkins, 2006). In this sense, online forums constitute singular spaces for shared meaning construction among spatially and temporally displaced individuals (Lindgren, 2011). Furthermore, for many this function also represents an opportunity to draw together publics through mediated processes of civic communication and deliberation that might contribute toward a more democratic and egalitarian society (Habermas, 2006; Papacharissi, 2002). Bechmann & Lomborg (2013) identify this general orientation with a general concern for user practices of sense-making through digital technologies and how these contribute to social belonging and (collective) identity performances.

**Centrifugal functions of online forums**

The distinction between centripetal and centrifugal notions of interactions among user-generated content, and the extension of these notions to the constitution of spaces such as online forums, centers on the issue of difference. We have seen how studies of online forums have considered functions of self-expression, information sharing, and group support as synthetic performances of solidarity, shared contextual meaning, online community, and participatory culture. These have been considered centripetal in their tendencies to foreground communicative and interpretive processes of centering, gathering, homogenization, and unification.

Turning to centrifugal notions of user-generated content and online forums directs focus to processes of decentering, dislocation, heterogeneity, and fragmentation. In many cases these opposing tendencies co-exist and co-produce conclusions drawn in regard to the character and function of user-generated content, interaction, and online forums, and their relationship to socio-technical systems. Now
addressing centrifugal conceptions of user-generated content displays these alternate and co-constitutive characteristics of new media.

Perhaps more than anything else, criticism and critique feature prominently in studies of user-generated content. Characterizations of difference alternatively understand these features as socially regressive or emancipatory. The tensions between these characterizations inevitably follow from the discursive matrices in which they appear and are sustained. Turning first to user-generated content as unbridled, deviant criticism and next as new practices of social and institutional critique and civic debate describe various considerations of difference and their relationship to centripetal discourses of communication, community, and culture.

Studies of commenting often evoke cynicism or, at best, cautious restraint in regarding online forums as potentially enhancing civic life. Goode, McCullough, & O’Hare, (2011) proceed from the latter in their analysis of YouTube commenting, a space “often perceived as an outlet for anger, boredom, semi-literacy and self-publicity rather than civil deliberation” (p. 595). Analyses of user-generated content in online newspapers reproduce this cynicism. Loke (2013) and Hughey & Daniels, (2013) find explicit and coded racism pervading user comments to news sites. Similarly, in online commenting surrounding a local murder, Coffey & Woolworth (2004) find that “vitriol, racist denunciations, and calls for severe retribution took precedence over attempts to understand why the event took place or to express sympathy for the victim” (p. 1). These conclusions starkly contradict notions that online forums function as spaces of dialog and negotiated meaning. Rather, they support broad characterizations of the internet as permeated by heightened incivility and an inextricably fragmented space (Sobieraj & Berry, 2011; Sunstein, 2009).
Frequent Participation

The general concerns related to centripetal and centrifugal accounts of online forums have not penetrated fully into the mechanisms supporting these respective processes. Asymmetric participatory practices of production and distribution offer potential insight in this regard. Recently, a particular class of participants was labeled “superparticipants”: an active, even dominant, minority who frequently contribute to online discussion forums (Graham and Wright, 2014). Graham and Wright provide an insightful analysis and address a common yet rarely studied phenomenon of digital participation. The positive functions they identify regard concerns for equal access and participation, concerns addressing both “posting patterns and discursive practices” (p. 626). In the superparticipant or frequent participant, they recognize a significant feature of online discursive practice: frequency.

The figure of the frequent participant has received widespread, albeit collateral, attention. Diverse empirical analyses have recognized the presence of a minority of frequent participants regularly posting multiple comments to online discussion forums (Coe, et al., 2014; Graham & Wright, 2014; Singer, 2009). Various findings have also described frequent participants as more civil than infrequent commenters (Coe, Kenski, & Rains, 2014), characterized by regular sentiment patterns (Kim, et al., 2011), and exhibiting relationship patterns that resemble “an informal group without a clear hierarchy” (Burri, Baujard, & Etter, 2006, S15). Graham and Wright (2014) provide the only apparent analysis specific to frequent commenters. Their conclusions regarding the “positive function” of frequent participants follow Albrecht’s (2006), who writes that an active minority of users “behaved as ‘old hands,’ giving advice and providing other participants with an overview of the debate” (p. 72). According to Graham and Wright (2014), frequent participants “undertake a range of largely positive functions and roles within the forum, including helping other users; replying to debates and summarizing longer threads for new users; being empathetic towards others’ problems; and engaging in (largely) rational critical
debate”. (p. 638). Sketched thus, frequent participants would seem to perform distinct and critical roles organizing the form and structure of online discourse.

The concept of the frequent participants has emerged elsewhere in studies of computer-mediated communication, notably those concerning online communities. Extending from Wenger and Lave’s (2003; Wenger, 1998) theorization of legitimate peripheral interaction as the process by which participation and identity change with increasing engagement in communities of practice, studies have examined the core membership of a practice: those who not only carry out leadership roles and extend legitimacy to and integrate new members, but represent the most active members of the community (Bryant, Forte, & Bruckman, 2005; Borzillo, Aznar, & Schmitt, 2011). Similarly, Huffaker (2010), while analyzing leaders emerging through online communication, concludes that “sheer communication activity is central to being influential” (p. 610).

Such individuals become central to organizing and defining a community through their discursive practices. In a case study of a company’s discussion forum, Da Cunha and Orlikowski (2008) find “an exceptionally active and expressive poster” that shaped employee discourses critical of corporate authorities and promoted employee solidarity by organizing shared, cathartic discussions (p. 142). Importantly, they find that this individual’s comments functioned as “collective artifacts” around which employees came to express their own personal experiences and feelings. Elsewhere, Fayard and DeSanctis (2010) describe the effects generated by a core group of frequent participants within a discussion forum who established a pattern of discursive practices serving as context for community-formation, a sense of “we-ness” that the authors connect to enhanced participation and knowledge exchange (p. 410). These studies at once identify the frequent participant as central to processes occurring in online discourse, and call on further investigation of frequent practice in its contribution to the form and process co-producing social media.
Social science research utilizing network analysis has sought to model, analyze, and describe the forms and processes organizing online discursive practices (Johnson, 2014). This work has also sought the role that significant actors, such as frequent participants or “superparticipants,” play in the structuring of networks (Borgatti, 2003). Although this study does not utilize network analysis as a research approach, work in this area represents the most significant attempts at addressing network form and structuring among online discursive practices. These analyses investigate, as Kelly, Fisher, and Smith (2006) describe, how “macro-level structure arises and is maintained by micro-level discursive choices” (p. 412). Some initial aspects of the analytical approach assumed in network analysis, however, must be specified in order to effectively draw insights from this literature. Overall, network analyses of online discourse reveal significant theoretical and methodological problems that open gaps in understanding the processes by which discourses emerge online.

The overall study of this analysis concerns the practices of production and distribution structuring the discussion forum of The Chronicle as a discursive configuration. This concerns the material construction of the forum— the nature and relations between media content on webpages across The Chronicle website. This content, however, is not divorced from its meaning and thus is approached in a critical-interpretive, double-hermeneutic move addressing the interpretations of texts in their situated contexts within an overall analytical project of research (Glynos & Howarth, 2007). This approach and analysis also assumes the texts as the articulations of participants consistent with the screennames under which the comments are posted. Analysis of participation frequency thus addresses the practices of actors performing these texts through interactive practices constituting The Chronicle as the resultant, constructed nexus of those practices.

What this means with regard to studies in social network analysis is an immediate concern for texts performed as digital traces of interactive practices, rather than the social networks of participants
and potential communities that can be abstracted from these interactions via, for example, bipartite networks (Mitrović, & Tadić, 2012; Newman, 2001). In an analytical move, participants are organized within groups for comparison according to frequencies of participation. However, these are not understood as constituting communities, when understanding the latter concept as a form of close interpersonal relationships between individuals.

The re-direction of concern from online social networks constituting communities to the patterning of practices and their resultant digital traces concerns a fundamental division within network analysis research. Borgatti and his colleagues have drawn this division between “network theory and theorizing networks” (Borgatti & Halgin, 2011; Borgatti, Mehra, & Labianca, 2009; Borgatti & Lopez-Kidwell, 2011). Network theory considers “the proposed processes and mechanisms that relate network properties to outcomes of interest” (p. 40). As such, network theory assumes an endogenous theory of network evolution in which the structure of the network serves as an independent variable to explain dependent phenomena that are also network properties (p. 51). Conversely, theories of networks focus on the antecedents that result in the construction of networks and network properties. Of these two approaches network theory is predominant among analyses of online discourse. In contrast, this analysis concerns “theorizing networks,” how practices interact in collective processes of media co-production.

Specifying this research approach becomes crucial due to the assumptions it carries, and the explanatory powers it consequently claims in theorizing and describing empirical instances of online discourse such as among practices in a discussion forum like The Chronicle. Although Borgatti and Halgin (2011) note complications arising from a division between concern for the “antecedents” leading to network structures and network theory approaches in which these structures themselves premise explanations of network phenomena, they ultimately justify an exclusive focus of the latter:

If a model has been constructed that embodies the mechanisms that convert a given set of inputs at time T to an output at T + 1, then given that input, nothing else is needed to explain the outcome. (p. 1177)
This stark claim understands the mechanisms structuring a network to be internal to the model of that network. What network theory, as prominently espoused by Borgatti, demonstrates is a functionalist, positivist approach to theorizing practice in its relation to network structure. This becomes amply clear in what follows:

any theory of social networks must take into account actors’ agency in creating those networks. The problem with this, as we have pointed out, is that it is not the actors intentions and actions leading to occupying a certain position that creates the outcome but the actual occupation of the position. A rock dropped from the same place in the same way has the same outcomes regardless of whether it was dropped on purpose or by accident. Given the same conditions, the outcomes are the same. (Borgatti & Haglin, 2011)

Here reductions to cause and effect are assumed in a relationship between conditions totalizing each of the latter. In this regard, Borgatti and Haglin soon reveal as much when describing the relations between agency, cause, and effect with particular concern or intention:

It might be argued that this is not true in a court of law, where the consequences for the rock-dropper may differ depending on the court’s perception of the dropper’s intentions. But then the conditions are not the same. From a legal perspective, a rock dropped by accident versus with an intent to kill are two different events. (p. 1179)

Beyond self-contradiction, what is significant for the general approach of network theory is the way that a totalizing conception of conditions might be assumed, that is, that a researcher might model and analyze the full totality of the real so as to understand, objectively, the cause and effect constituting an event.

Specific to the way network theory has understood online practices in processes of structuring discourse, this assumption has allowed critical conclusions regarding the mechanisms driving these processes. Central to these is the conclusion, either explicit or implicit to analyses, that this mechanism is fully internal to the phenomena, in its theoretical and empirical address and analytical modeling as a network. The consequences extending from this assumption lead to a description of the practices structuring a
phenomena, conceptualized as a network, as determined fully within the internal relations and properties of a network and fully exterior to the situated contexts in which such practices occur.

The implications of network theory’s exclusive concern with endogenous factors as determinant of network structure will be explored more fully at the conclusion of this analysis. At this point, however, it becomes necessarily to describe approaches to these factors found in studies of online discourse, and how these have both described and left open the question of network structure, especially as they relate to frequent and infrequent participation to online discourse.

Summarizing endogenous understandings of the organization of discussion networks online, Liang (2014) finds that these generally include reciprocity, transitivity, and preferential attachment as the mechanisms by which interactions construct and stabilize structural network relationships (p. 485-6).

Whereas reciprocity understands the formation of mutual interactions among participants or nodes, transitivity extends this reciprocal communication to including triadic relationships and might describe patterns of cohesive relations or communications among a network (Monge & Contractor, 2001, p. 444). Preferential attachment, however, is often cited as the key mechanism driving the structuring practices online. The latter in turn reflects a network theory perspective that begins from a modelled network structure (power law distribution) and moves to the identification of key actors determined by positioning within that structure. These actors or nodes often have been identified with frequent participants to online discussions. With this structure as premise, these accounts have understood structuring of practices around the concept of preferential attachment. As described by Borgatti and colleagues above, the concept of preferential attachment becomes entangled with assumptions of conditions by which structuring might be explained from properties fully within the modelled network. As a result, gaps open in accounts of network structuring, not only through an inability to understand particular forms of agency in contexts of discussion, but the ways in which these contribute to general structures as a result of recurrent interactions among local practices.
The structural characteristics of online networks have prominently been characterized as following a power law distribution (Barabási, & Albert, 1999; Himelboim, 2011; Panzarasa, Opsahl, & Carley, 2009). In such cases, the majority of nodes remain sparsely connected, while a small number feature a disproportionately large number of connections. These structural characteristics have been observed in online discussion networks as well, in such spaces as online discussion forums (Himelboim, 2009; 2011; Kujawski & Abell, 2011; Kujawski, Holyst & Rodgers, 2007), and social media networks (Choi, 2014a; Wang, Wang, & Zhu, 2013).

In keeping with network theory, these analyses, however, have been addressed from a structural concern for information flows within nodes and among their properties fully internal to the modelled network. Consequently, the individuals or nodal positions marked by disproportional frequencies in communication are addressed as “key players” with respect to their potential to maximally diffuse information or fragment the network itself in the case of their removal (Borgatti, 2003). As a result, Himelboim (2008) suggests that online discussions “are hierarchical and that a relatively small number of have control over the information that flows and the topics discussed” (p. 173). Similarly, Choi (2014b) identifies opinion leaders in social media networks who are distinguished primarily by more frequent messaging than non-opinion leaders, and whose messages are vastly more re-distributed (retweeted) by others… (p. 10).

These and related studies often understand preferential attachment as the mechanism driving processes behind the power law distributions of “scale free” networks (Ahn, Han, Kwak, Moon, & Jeong, 2007; Barabási, & Albert, 1999). Importantly, Johnson et al. (2014) emphasize that online communication and community network structures emerge through complex, diversely motivated and conditioned practices. Instead of a unitary, structural mechanism such a preferential attachment, analyses of network structuring require a multi-theoretic approach allowing for multiple structural and social mechanisms, “as such, power law rank/ frequency distributions emerge from pro-social behaviors and can be viewed as a normative characteristic of online communities” (p. 805). Johnson et al., however, remain locked within
the network theory paradigm. In place of preferential attachment alone, for analysis of “emergent structural network characteristics” they recommend that a “combination of preferential attachment along with least effort, direct reciprocity, and indirect reciprocity is most consistent with observed power law distributions” (p. 805). As they indicate, such measures explain the distribution of network properties, distributions identifying the important positions of frequent participants yet providing little explanation of the situated roles such actors play or the processes of their emergence. Preferential attachment, least effort, or reciprocity measures provide an abstract answer to “how” without attempting answer to “why.” Furthermore, the latter is actively precluded through the assumptions inherent to network theory.

Conversely, an exploration of what “pro-social behaviors” entail will be the focus of this analysis as it looks to the disproportionate frequencies of practice between frequent and infrequent participants to discussion forums. These will be addressed according to the form they constitute but also how form is the achievement of a situated process structuring practices in online discourse. Highlighting how network analysis has approached structure provides a premise to at once focus analyses, structural asymmetries explained through preferential attachment, but also a theoretical opening to explore these asymmetries in a manner that is explanatory of social behavior rather than tautologically descriptive of local networks. This addresses how social media are the outcomes of the living practices of people each with different concerns, motivations, and goals that extend from social worlds that are not commensurable, and extend beyond the local contexts and networks of interaction to which they are antecedent and constitutive.

Furthermore, awareness to a complex of “pro-social behaviors” importantly opens the door to questions surrounding the sociomaterial conditioning of practice, that is, the processes structuring social media revealed through a discursive understanding of online practice. Social network analysis and the concept of preferential attachment do address one aspect of the “choice” implicit to this preferential behavior. This regards the material conditioning of a network, the structural conditions in which practices emerge. This regards the sociomaterial processes ranking, ordering and configuring conditions in which individuals must act. However, these conditions form complex, heterogeneous agencies in the practices of
actors who act within discursive contexts in which their practices are meaningfully guided. This analysis seeks to articulate this entanglement, and in so doing, develop the “pro-social” or discursive systems in which preferential attachment currently only offers an underdetermined description of the processes organizing media co-production and their structuring.

As Johnson, Faraj, and Kudaravalli (2014) explain, Barabasi and Albert’s model of preferential attachment relies on two fundamental premises: “(1) an open system with new entrants, and (2) new entrants being aware of and acting on the preferences of existing participants” (p. 798). The open system which preferential attachment theories assume both implies access as well as closure: the second premise understands a situated context conditioning practices that is delimited, by these particular conditions and their asymmetries, from the “open system” in which it is contextualized and from which gains new entrants. Preferential attachment understands this conditioning occurring within the latter delimited space, but ignores or uncritically assumes that the open system which brings new participants will not also bring “preferences” which might pre-exist the delimited space and preclude necessity to any awareness to local, existing preferences.

Examples point beyond these inadequacies. Important among these are what can be recognized as discursive struggles or conflicts that occur in online space and actively contribute to the organization of structures among practices. Liang (2014), analyzing the organization of political forum discussions, identifies hub-like structuring effects as a result of a dominant, active minority of users that in turn also receive the majority of replies. Nevertheless, Liang found cross-ideological debate between participants to be an independent principle in organizing political forum discussions, even when accounting for the endogenous conditions commonly referenced by network theories to account for patterns of structuring among online practice (p. 497). Similarly, in twitter networks, Yardi and Boyd (2010) as well as Conover, Ratkiewicz, Francisco, Goncalves, Menczer, & Flammini (2011) found participants to more likely cross-ideologically mention others than those whom they ideologically agreed. Hargittai, Gallo, and Kane (2008) observed the same cross-ideological tendency in mentions across web blogs.
Elsewhere, in a network analysis of both health and political newsgroups, Himelboim (2008) compares the interaction patterns between participants engaged in the alternative discourses. Finding variances in reply distribution, he suggests that “the structure of a discussion network is affected by the type of information exchanged within it” (p. 172). This echoes the findings of Kelly, Fisher, and Smith (2006), who describe how “macro-level structure arises and is maintained by micro-level discursive choices” (p. 412). The authors connect these discursive choices to group norms which establish topical relevance for online discussion forums. Finding that users communicate primarily across ideological divides, while ignoring those users whose discussions are deemed irrelevant, Kelly et al. trace these interaction patterns to identify emergent network structures that feature a bi-polar ideological core and a disconnected “fringe” (p. 416).

These analyses draw relationships between online practices and the emergent structures they enact through conflicts that understand a broad and fragmented social space. The patterns emergent in these accounts constitute practices borrowing from discursive contexts that draw attention to the possibility that structuring conditions far extend the local contexts of interaction. The issue of preferential attachment, for example, understands patterns of practice that point to implicit congruencies of decision among individuals, yet cannot account for how or why particular congruencies might arise, especially if outside the artificially-imposed limits of a particular relational dataset that, furthermore, must be the case as a result of the open system on which preferential attachment is premised and purports to explain. In other words, the question can be asked if local spaces can become constructed on the basis of broader, open system logics, rather than local structural conditions alone? This question might be further explored according to the practices of frequent and infrequent participants. First, however, a discourse theoretical approach will be outlined that seeks an alternative approach for analyzing online practices and the conditions and processes contributing to the emergent structures they enact.
Chapter 3

Theory

In focusing on the processes structuring online discourse, the aspects of production and distribution have been highlighted. These aspects are central to the research questions posed: How do interactive practices vary between frequent and infrequent participants, and how do these frequencies in practice contribute to processes of production and distribution structuring online discourse? The notion of distribution recognizes the particular material construction of objects and systems and their mutually constructed meaningful configuration. Production respects the frequencies of practice supporting this configurational construction, and attends to the loci of productive practice sustaining the networked, digital configurations. These questions of production and distribution are theorized discursively, as a way of understanding how practices articulate contexts of meaning, and how they are themselves, at the same time, meaningful within a context. Particularly, the concept of antagonism will be developed in order to understand possibilities by which conflict contributes to the structuring of discursive systems.

Toward articulating this discursive approach, discussion will first specify an understanding of discourse through an explication of Ernesto Laclau and Chantal Mouffe’s (1985) Discourse Theory. This discussion will then proceed to describe how practice-based theories of sociotechnical systems might be understood discursively, as well as contribute to a discursive approach. Lastly, this approach will be developed as an approach toward analyzing the structures and processes of structuring that might be recognized in discourse networks such as that of *The Chronicle.*
Discourse

Discourse conceptualizes how practices articulate contexts of meaning, and how each practice is, at the same time, always meaningful within a context. Discourse accounts for the mutual constitution of actions and meaning as they are constructed, modified, and stabilized within relational configurations (Hall, 1997, p. 44). Thus when Foucault (1972) describes discourse as “practices that systematically form the objects of which they speak” (p. 49), the concept of discourse seeks to describe processes of construction by which objects and subjects become meaningful. Consequently, discourse, as “systems of meaningful practices that form the identities of subjects and objects” (Howarth & Stavrakakis, 2000, p. 3-4), allows theorization and analysis of the ways in which interactive practices co-producing media constitute discursive systems that, in turn, open collective understandings to such phenomena as MOOCs.

Laclau and Mouffe (1985) constitutively tie their definition of discourse to practice. Practice itself is an articulatory action, connecting select elements together and thus resulting in distinctions between included and excluded, inside and outside:

we will call articulation any practice establishing relations among elements such that their identity is modified as a result of the articulatory practice. The structured totality resulting from the articulatory practice we will call discourse. (p. 105)

Discourse thus constitutes a relational system organizing contingently selected elements and excluding others. This relational system is analogous to a context and, as such, the articulated moments of a discourse take their meaning from the particular articulation performed. The formation of discourse through the articulatory practice results in the important distinction between elements and moments:

The differential positions, insofar as they appear articulated within a discourse, we will call moments. By contrast, we will call element any difference that is not discursively articulated. (p. 105)
In addressing the sociotechnical system constituted through the practices performing *The Chronicle* as co-produced media, the system is constituted by the practices of articulation that bring in the moments constitutive of the system: the particular participants who read articles and comment to the forums, the words and their relations they select in each post, the DISQUS platform supporting the comment forums (Disqus, Inc., 2015), the staff and op-ed articles- all are articulated in specific relational configurations to each other. Conversely, the concept of element denotes the field of potential possibility of everything that is not articulated into the discourse/system. The significance of discourse theory addresses the systematic construction of particular systems so as to explain the articulatory principle by which regularities of inclusion and exclusion perform understandings of the included moments of the discursive system, and, furthermore, analyze the ways in which potential elements are systematically excluded.

Before turning to sociotechnical theories of practice, three specifications of discourse can be established in order to clarify the discourse as a theoretical approach to the study of sociotechnical systems, and develop the question of process as it regards the construction of sociotechnical systems through social media. Laclau and Mouffe (1985) outline these specifications concerning the dimensions, coherence or form, and limits of discourse (p. 105). These, therefore, also apply to the specification of a sociotechnical system.

First, regarding the dimensions of discourse, clarification can be made to the constitution of discourse, what it is, and how it theorizes sociotechnical phenomena. Laclau and Mouffe (1985) immediately reject “the distinction between discursive and non-discursive practices” (p. 107). Rather, all as all phenomena arise through historical processes of construction, discursive attends to material artifacts, linguistic and non-linguistic practice as emergent within discursive totalities (Laclau & Mouffe, 1987, p. 82). This stresses that every action, including linguistic and non-linguistic, is meaningful and does not exist “outside any discursive condition of emergence” (Laclau & Mouffe, 1985, p. 108).
Second, if discourse understands that “every social configuration is meaningful,” the coherence of a discursive formation addresses the form of this configuration, the contexts by which meanings arise. In this regard, Laclau and Mouffe (1987) turn to football:

If I kick a spherical object in the street or if I kick a ball in a football match, the physical fact is the same, but its meaning is different. The object is a football only to the extent that it establishes a system of relations with other objects, and these relations are not given by the mere referential materiality of the objects, but are, rather, socially constructed. This systematic set of relations is what we call discourse. (p. 82)

Looking at practices interacting to create digital systems of relations constituting, like the football match above, spaces of co-produced media, phenomena such as MOOCs stand to emerge within a unique, constructed discursive system. Below, sociotechnical theories of practice extend awareness of this process of construction to the material elements that conjoin with humans in sociomaterial, performative agencies. What becomes necessary, however, is to address the form of discursive systems with attention systems of relations as such: configurations of elements organized through systems of formation resulting in the coherence of a discursive system, football match, or discussion forum.

In order to understand coherence as the result of systemically organized relations, Laclau and Mouffe (1985) extend Foucault’s notion of “regularity in dispersion,” which carries theoretical and methodological requirements. Regarding the latter, discourse analysis “refers to the practice of analyzing empirical raw materials and information as discursive forms” such that the latter are held as traces of ongoing practices actively involved in the construction of discursive systems (Howarth & Stavrakakis, 2000, p. 4). As discursive forms, these traces mark the logics organizing their construction, and as such implicated in contingent historical processes.

Regarding the form of discourse, the notion of regularity seeks to account for patterns of practice that emerge to characterize social configurations across space and time. Regularity is located in networks of rule-governed practices that organize a particular discursive (Dreyfus & Rainbow, 1983, p. 53;
Howarth, 2002, p. 132). As Laclau and Mouffe (1985) explain, “within the archeological material itself, there must exist certain logics which produce effects of totality capable of constructing the limits, and thus of constituting the formation” (p. 146). In this way, discursive systems are constructed through the interactions of practices alone, organized according to particular logics of consistent, rule-governed behavior, and not resultant from an external, non-discursive determining force. As Glynos and Howarth (2007) write, “the logic of a practice comprises the rules or grammar of the practice, as well as the conditions which make the practice both possible and vulnerable” (p. 136). Critically then, logics not only organize practices in construction of discursive systems, but condition processes structuring ongoing practice in both possibility for stability and closure, as well as dislocation and transformation.

Lastly, regarding the limits of a discursive system, any practice and discursive system remains bound within the field of discursivity, ongoing relational practices providing the conditions situating every new practice. Every discourse must thus be constantly maintained through boundary-making practices that actively constitute the discursive system through logics which necessarily and systematically include and exclude elements, whether these be people, artifacts, or forms of information. The processes delimiting a discourse constitute “an attempt to dominate the field of discursivity, to arrest the flow of differences, to construct a center” (Laclau & Mouffe, 1985, p. 112). Significantly, Laclau and Mouffe theorize a process of construction around centers, “nodal points,” that order difference to stabilize meaning and allow for forms of objectivity (p. 113). Regarding, MOOCs as a nodal point, discourse analysis focuses on the form of logics articulating the latter as an objective moment of a discourse. The form by which this articulation takes calls on the concept of antagonism, a concept that will now be described and that will orient the analytical focus of this analysis.

If discourse describes the relational set of practices that construct a system and the meanings of identities and objects internal to that system, antagonism addresses the mechanism of this construction. Antagonism defines the boundaries internal to a discourse, that is, the form of differencing between moments, and also delimits the internal from external and thus the discursive system as such. Antagonism
respects a form of differencing and opposition that recognizes a threat to the constitution of a discourse. The latter results from alternative discourses that, in their conflicting articulatory forms, deny each full objectivity. When speaking of MOOCs, one discourse may describe the latter as equal in quality to traditional, residential courses, while another rejects MOOCs as education per se and instead a supplemental resource. Neither can claim objectivity as each subvert the other, by interrupting the form in which MOOCs are represented across practices constituting discursive space.

As such, antagonism maps limits of discourse at certain points of controversy that emerge when articulatory practices collide, interrupt one another, and fragment the conditions for objectivity. Antagonism might first be looked to as the limits defining particular discourses from those by which they conflict and are threatened:

antagonisms are evidence of the boundaries of a social formation, showing the points where identity is no longer stabilized in a differential system but is contested by forces which stand outside, or at the limit, of the order. (Howarth, 1998, p. 276)

As such antagonisms address how conflict arises between practices differently articulating the relations between moments and, as a result, construct different meanings attached to those elements. This difference destabilizes the objectivity of one articulated meaning by contesting it through alternative articulations. The following two descriptions of MOOCs serve as examples:

The great potential of MOOCs lies in their openness: done right, they are away of expanding access to the university classroom to those who cannot access it because of location, politics, income, life-stage, time, or level of commitment required... (caedmon5, 2013)

MOOCs are like next-generation textbooks, not like courses. They only have "course" in the name to catch people's attention… (BerkeleyDude, 2013)

The first description articulates MOOCs as equivalent to the university classroom and its quality of education. In contrast, the second description compares MOOCs to textbooks and, significantly, explicitly
differentiates the former from the courses and education you would find in university classrooms. As such the two articulations become incompatible regarding the relative equivalence they attribute to MOOCs as a form of education.

The second aspect of antagonism regards the way mutual difference around points of conflict lead to equivalential effects. Antagonism allows for the organization of elements in a discourse by configuring them as equivalent moments mutually opposed to a constitutive negation. The stakes are high in development of this organizing antagonism. As Laclau (1988) writes, antagonism tends to “disrupt a system of differences and simplify the social space” (p. 256). On this point Laclau explains:

Antagonism operates within a system of differences by collapsing differences. And differences are made to collapse by creating chains of equivalences. For instance, if I say that, from the point of view of the interests of the working classes, liberals, conservatives, and radicals are all the same, I have transformed three elements that were different into substitutes within a chain of equivalence. If difference exists only in the succession of the syntagmatic pole, equivalence exists at the paradigmatic pole. Equating differences reduces the possible differential places the system can have. (p. 256).

What Laclau describes is the manner in which an articulated difference, here between those opposed to the working class, might be organized together within a logic of equivalence. Taking the case of MOOCs as articulated in *The Chronicle*, the latter include horizontally organized and community of practice-oriented “cMOOCs,” rigidly hierarchical “xMOOCs,” as well as interactive learning resources intended to supplement residential instruction (“blended” education models). However, when opposed to traditional, residential courses, all three of the former, through a logic of equivalence premised on negation (i.e. not a traditional course), together become constituted as “MOOCs.” The mutual negation that can be established through the operation of antagonism consequently “reduces the possible differential places the system can have” and functions to “simplify social space.” In this regard, antagonism suppresses the range of differences the might be articulated, and thus organizes and simplifies the form of a discursive
system. If constituted through a negation to traditional, residential courses, a logic of equivalence emerges around the signifier MOOC that denies forms of difference among the diverse instances of open, online education.

Given the *The Chronicle* website as a nexus of inscription for a system of actors articulating MOOCs, how does antagonism develop in a socio-technical system? Moreover, how do antagonisms simplify the complexity of interactive, discursive practice around logics of equivalence? As a constructed assemblage of local and networked webpages/articles/comments, MOOCs will be enacted through articulations variously negating discourses that become highly complex, interconnected, and richly textured a result of the scale and distributed interaction enabled by information and communication technologies. In this context, how do logics of equivalence arise as an effect of antagonisms generated across online space? And, importantly, what particular forms of discourses emerge to enable objective understandings to emerges across the *The Chronicle*? This now leaves the critical point of departure at which the theoretical operation of antagonism must be developed empirically in analysis of *The Chronicle* as a construction achieved through the complex practices of a discursive system.

**Sociotechnical Theories of Practice**

Theorizing discourse thus concerns the particular analysis and theorization of practice. Research in sociotechnical systems has invested in practice-centered approaches (Cecez-Kecmanovic, Galliers, Henfridsson, Newell, & Vidgen, 2014; Couldry, 2004; Feldman & Orlikowski, 2011; Scott & Orlikowski; 2014) and this work opens an opportunity in which practice theories might enrich and benefit from discourse theory. Practice-centered approaches draw from Barad (2007), Pickering (1995), as well as actor-network theory (Latour, 1993; Law, 1999) in understanding a relational ontology wherein action or practice is ontologically primitive and constitutive of all phenomena. As Nicolini (2009) describes:
Practices constitute the horizon within which all discursive and material actions are made possible and acquire meaning; that practices are inherently contingent, materially mediated, and that practice cannot be understood without reference to a specific place, time, and concrete historical context. (Nicolini, 2009, p. 1394)

Three important features of practice are thus described. First, as Nicolini describes, practice approaches take everyday activities as constitutive of our experiences of reality. As Feldman and Orlikowski (2011) describe, “everyday actions are consequential in producing the structural contours of social life” (p. 1241). While practice must be recognized as an organizing activity in this regard, a duality is not posited between practice and structure. Rather, practice can be recognized as structural in the historical conditioning of patterning and regularity that develop out of forms of production and distribution constructing a particular, and limited, situation. The structural articulations of practice will be described below. However, practice must first be considered as performative and thus the unit of analysis for understanding the enactment of phenomena (Barad, 2007).

Second, practices are described as both material and discursive (Orlikowski & Scott, 2015a), recognizing the mutual inseparability of actions from meaning and vice versa. Work focusing on the materiality inherent to sociotechnical systems has described meaning, and related “intangible” concepts such as knowledge and experience, as “materially enacted” (Orlikowski & Scott, 2015b, p. 204), that is, that meaning always arises in specific material contexts in which bodies and artifacts are relationally configured. Yet persistence in describing either the “material” or “meaningful” inadvertently tends to imply their distinct and separable character. Rather, meaning and materiality are not distinguishable, ontologically primitive elements, but rather that they are entangled in practice, and always mutually implied, enacted, and constituted in action. Thus the signifier practice recognizes both its constitutive materiality and contextual, situated meaningfulness.

The third feature of practice extends from its material-discursive constitution: that it is always situated in concrete, historical contexts (Introna & Hayes, 2011). These contexts are themselves
constructed through practice and describe the material-discursive context through which every practice emerges. This context can be described as sociomaterial in recognition that it is not the outcome of social construction, wherein human subjects are attributed exclusive agency, but rather that assemblies of humans and nonhuman heterogeneous assemblies perform the world in its becoming (Law, 1992). This is to say that agency is distributed and often complex, and that phenomena are to be traced as the outcome of sociomaterial processes.

That practice is performative, material-discursive, and sociomaterial in constitution provides an initial premise for understanding how co-production processes become organized and constitute particular forms of social media. Looking to analyze the particular form resulting from such processes in the case of *The Chronicle*, the latter artifact configuration consists of the website, the staff published and op-ed articles, the mass of user-generated content, as well as the technologies involved in their construction. The articles and discussion forums in particular are performed through the heterogeneous agencies emerging through relations between these elements. However, what can be said about the process of construction: the forms of organization and structure that emerge as ordering practice in performance of the particular form achieved remains theoretically deficient in theories of practice.

**Discursive Structure**

The concepts of discourse and practice that have been described ultimately fall into each other: practice is discursive and discursivity is constructed through everyday activity. What remains at issue is the forms of this activity that result through the historical modes of production and distribution giving rise to particular discourses while denying others. The concept of structure has traditionally entered at this point and now will also be articulated as a conceptual approach to understanding the asymmetries of production and distribution of practices that condition the possibilities of ongoing and future practices.
Characterizing practice, Feldman and Orlikowski (2011) describe three central theoretical commitments: “(1) that situated actions are consequential in the production of social life, (2) that dualisms are rejected as a way of theorizing, and (3) that relations are mutually constitutive” (p. 1241). These speak to the concept of structure as it relates to the central notion of practice. First, if practice is performative and thus constitutive of social life, concern must be directed to the situated actions from whence in gives rise. Structure seeks a characterization of the horizons delimiting this situation as well the character of its internal configuration. Second, in rejecting dualisms a commitment is made to reject forms of theoretical and methodological reduction that would explain a phenomena on the basis of another to which it is held to be related. In this regard, structure must be conceptually affirmed without resorting to dualistic reduction (e.g. that a structure determines a practice). This might be accomplished through an insistence on empirical practices as the unit of analysis while at the same time recognizing the “space” of contingency, as Laclau (1990) describes, always present in the limited situation wherein agency becomes enacted. Lastly, the mutual constitution of phenomena, “stipulating that no phenomenon can be taken to be independent of other phenomena,” reflects an ontological and epistemological approach sensitive to the historical accomplishment of a situation. Mutual constitution at the same time demands attention to exclusion as well as production. If practices are always inclusive and exclusive, how do patterns of practices enact regularities of inclusion/exclusion that organize the conditioning of practice conceptualized in the notion of structure?

Practice, as performative, recognizes the agency of actors, in their everyday activities, to constitute social life. Consequently the scope of this agency, recognized in “situated action” becomes critical to an understanding of structure. If all we have are practices, how can we describe the historical distribution and production of practice? Moreover, how do these patterns condition the limited situation of actors and in turn organize the possibilities by which social life is produced and reproduced? These questions were notably developed by Foucault, who provides a contrast to the more Derridean Laclau despite their connection previously described in articulating a theory of discourse. Grossberg (1996)
recognizes this in positioning recent theoretical debates as straddled between Foucault and Derrida (p. 94). In contrasting their respective theorizations of discursive structure a productive tension emerges to define a potential way forward.

Describing the Derridean-inspired discourse theory of Laclau and Mouffe, Grossberg (1996) criticizes the latter’s appropriation of Foucault on the basis of what becomes lost:

Foucault's notion of the regularity of dispersion becomes an ensemble of differential positions; the rarity of discourse becomes exteriority as an excess found in the surplus of meaning. And Foucault's concern with subjectivization becomes the centrality of the production of subjects as the basis of the chain of discourse which produces both temporary fixity and the excess which destabilizes it. (p. 95)

Foucault’s concept of a regularity of dispersion, described earlier, is his attempt at presenting the coherence and, implicitly, the limit of a discursive formation- a limit Laclau and Mouffe (1985) criticize for its failure to adequately address the performative aspect of discursive (articulatory) practice. Their specific criticisms, however, are important as they illustrate a theoretical concern that highlights the loss Grossberg finds in their theory of discourse.

First, Laclau and Mouffe (1985) see the concept of “regularity of dispersion” indicating two potential interpretations. The first focuses on dispersion: that a discourse emerges with respect to a particular “point of reference with respect to which the elements can be thought of as dispersed” (p. 106). This interpretation is set aside in favor of the second which, conversely, privileges the aspect of regularity. Regularity describes an “ensemble of differential positions” (as Grossberg points out), and “it constitutes a configuration, which in certain contexts of exteriority can be signified as a totality. Given that our principal concern is with articulatory practices, it is this second aspect which interests us in particular” (p. 106). The loss Grossberg recognizes with the focal concern Laclau and Mouffe direct to the regularity of dispersion is based in Foucault’s historicism, what Grossberg sees as the latter’s concern for
exclusion that is “material and spatial as much as discursive” (p. 94). Thus what arises is actually a different conception of discourse, and as a result, different approaches to an understanding of structure.

Foucault’s distinction between discursive and non-discursive practices has already been remarked. What it highlights, however, is a different approach to the exteriority that would allow for the signification of a discourse as a totality. That is, what Laclau locates in the ensemble of differential positions characterizing a discourse seems to become unhinged from the material and spatial conditioning of their articulation. Following Derrida, difference (différance) Laclau and Mouffe locate in regularity a configurational constitution of discourse according the differential arrangements established between elements. In contrast, an alternative inflection, addressing dispersion, looks to the historical points of reference from which dispersion, responsible for the “material and spatial exclusion of real practices and peoples” (Grossberg, 1993, p. 10). This suggests a more rigorous concern with practices as events, emerging from and limited in the scope of effect to historically-bounded situations.

This distinction between a historical Foucault and “textual” Derrida or Laclau are not entirely clear. For instance, Laclau and Mouffe (1985) center on two conclusions as they re-articulate the discursive conceptions of Foucault:

The first is that the material character of discourse cannot be unified in the experience or consciousness of a founding subject; on the contrary, diverse subject positions appear dispersed within a discursive formation. The second consequence is that the practice of articulation, as fixation/dislocation of a system of differences, cannot consist of purely linguistic phenomena; but must instead pierce the entire material density of the multifarious institutions, rituals and practices through which a discursive formation is structured.

These conclusions hinge on the material character of discourse- the rugged historicity of discursivity when practice must be addressed respective to their spatial and temporal situations. This demands, again, specifying the limits of a discourse, which in turn demands a characterization of their positivity and consequent exteriority. The first understanding of subject positions would then posit the heterogeneity of
the social in which discourses become defined according to material-historical conditions of historicity that restrict their empirical unity. In order to arrive at the specification of this discursive heterogeneity (albeit from the epistemological position of the researcher) requires one to “pierce the entire material density” of sociotechnical practices under investigation. An understanding of discursive structure must incorporate these to define the empirical conditions of exteriority that would define a discursive structure not only in the regularity of dispersion that characterizes an ensemble of differential elements, but the way these dispersions emerge in spatial and temporal contexts that equally mark conditions of exteriority demarcating one discourse from another. The specification of these conditions must arise in the detailing of the practices themselves- as they emerge across networks of actors, human and human. What characterizes a discursive structure must then be located in the dispersion of practices from particular points of reference, actors within an ensemble or network of practice, as well as the regularity observed across these practices as they articulate specific configurational ensembles and thereby particular patterns of meaning.

Consequently, the Derridean concept of structure predicated on an ensemble of differential positions characterized by illimitable différance and the resultant dislocation or contingency of any positive, structural configuration leads to potential empirical difficulties in addressing the historicity of phenomena. In this regard, as highlighted in Grossberg’s critique, this historicity they might constitute material and spatial events defining forms of exteriority that are not recognized when practices are primarily discursive (in the linguistic sense) rather than the full ensemble of activities performed by historically-situated actors. A concept of discursive structure must address both the linguistic grounds of difference practiced as well as how these linguistic grounds are located in historical texts with specific patterns of writing and re-writing, circulation, and effect. Moreover, beyond the written document, empirical research must bring in as data the non-linguistic- though still discursive- practices that Laclau himself sees as necessary to “pierce the entire material density of the multifarious institutions, rituals and practices through which a discursive formation is structured.” Or, in a related sense, this is extending the
Derridean text beyond theoretical relevance to a methodological imperative driving data collection and analysis of historical events.

This imperative would direct research foci in ways recognizing the second and third elements of practice theory Feldman and Orlikowski (2011) describe: the rejection of theoretical dualisms and the recognition of the mutual constitution of relations. This theoretical redirection can be explored through a recent conceptualization of structure that falls squarely in the Saussure-Derrida-Laclau tradition. David Howarth (2013) describes structure along two aspects. The first finds structures as both virtual and real:

Structures are composed of systems of related elements, in which the identities of the latter depend on their differences from others within the system. Structures in this sense are symbolic orders, which are both virtual and actual. The virtual aspect of social structures resides in the fact that certain ‘absent’ differences are always presupposed in the actualization of any particular structure… But social structures are also real in that any particular actualization results in the production, reproduction, and transformation, of particular relations and practices; these practices and relations exist because they are embodied in certain institutions and performed by subjects and agents. (p. 270)

Important is the relation between the virtuality of a structure and its “real” instances of actualization. If the virtual and real were to fully overlap the virtual would be inconsequential as what would be at issue would be found fully actualized in the practices observed. The virtual then arises in two functions that again re-enact the so-described Foucault-Derrida divide. The first function performs the Derridean operation (which Laclau develops) of constitutive negation which constitutes the second aspect of Howarth’s conceptualization of structure:

any structure or system of differences is defined by reference to something that is actively excluded from that system, thus establishing the limits of a particular structure… this means that social structures are incomplete entities that fail to exhaust the virtual set of differences that form the fields within which they are formed… Structures are thus incomplete systems of meaningful
practice, because they are predicated on the exclusion of certain elements, though these excluded elements are required for the very identity of the discourse. (p. 270-1)

The constitutive function of negation requires the posting of a relational ensemble in which negation might operate. Here again is reference to the “the virtual set of differences that form the fields within which they are formed” enacting the dual character of structure Howarth describes: both virtual in the ensemble of differences that are involved, as well as the real actualizations of these differences in practices. Moreover, Howarth here posits a recursive understanding of practice-structuring that has been most prominently developed in Giddens’s (1984) theory of structuration.

The key again here is the conditions of exteriority by which a discursive structure might be described. The constitutive function of negation demands an inclusion of the excluded (by the negation of the structure) such that the excluded field of elements must always be included in the constitution of any structure. When structures are held as virtual as well as real, the conditions defining these excluded elements, Derrida’s dissemination and Laclau’s field of discursivity, become dislocated from their material and spatial standing as historical events. While Derrida finds in this movement of différance the structure of iterability conditioning the possibility of meaning itself through its partial structuring, this movement is predicated on its articulation by actors engaged in practices of deconstructive critique.

Without foregoing the political and ethical possibilities of the latter, possibility nevertheless exists for empirical, historical concerns for the events of this partial structuring in so far as they find actors engaged in practices establishing and reproducing forms of discursive closure. These forms of closure develop when the “virtual” aspects of structure are removed from a posteriori critique and instead emerge in a double hermeneutic operation as the conceptual grounds of Laclau’s hegemony, Derrida’s logocentrism, or Foucault’s episteme by empirically constructing the limited situation of actors. That these situations are limited speaks to the forms of material and spatio-temporal displacement that erase the forms of contingency that emerge with practices exposing the dislocation of a structure. Rather, actors act from a position in which this dislocation remains occluded. Empirically, this directs the analyst to the
everyday activities, linguistic and non-linguistic, that erupt as events in specific times and places with effects in turn erupting across limited gradients of time and space. If a structure addresses such a historically limited situation with its particular forms of closure- symbolic, material, spatio-temporal, then the rejection of theoretical dualisms, the collapse of structure into ensembles of historical practice, finds the mutual constitution of relations limited along these same lines of closure.

Conclusions can then be drawn to orient an analysis of discursive structure while, nevertheless, acknowledging the broad theoretical challenges this discussion has opened. Beginning with the aspects of practice enumerated by Feldman and Orlikowski (2011) heading this discussion, a tentative conceptualization of discursive structure can be described. First, “that situated actions are consequential in the production of social life,” finds structure constitutively identical to these situated actions. As a concept, structure instead addresses the dispersion and regularity of these practices in patterns of production and distribution that allow for analytical delimiting of the situation of their emergence. Second, “that dualisms are rejected as a way of theorizing” reiterates the constitution of structure from everyday activity- practice- with the stipulation that theoretical conclusions cannot introduce a “situation” beyond the historical, spatio-temporal limits bounding the event of a practice. This, however, is always the case as the “limited situation,” however judged as historically valid, remains analytically-derived from a dispersion and regularity of practice and is projected into the supposed historical field of practice as itself an actor. Rather this conceptual situation, one here developed as discursive structure, remains an analytical concept reflexively driving analysis to always return to the ensemble of actors and practices within their historical gradients of agency. Lastly, “that relations are mutually constitutive” becomes affirmed yet limited to a constitutive field of practice bounded by limits defining a historically-specific exteriority and positivity. In this sense, the mutual constitution of practices rests on their emergence within a situation defined by material and spatio-temporal conditions of possibility.
Chapter 4

Method

In order to explore the processes by which discourses became articulated in the co-produced space of *The Chronicle*, a two-stage approach was undertaken. First, a qualitative study of MOOC discourse provides the base analysis of the practices articulating the latter online. Adopting a discourse theoretical approach utilizing grounded theory methodology, this analysis sought to evoke the myriad discourses present within a critical period of MOOC debate in online news media, articles devoted to MOOC issues within *The Chronicle of Higher Education* over a two-year span between June 2012 to June 2014. The qualitative, discourse analysis of the comments to discussion forums of *The Chronicle* provide a rich source of data featuring numerous discourses and their interactions articulated over a critical period in the development of MOOCs.

Second, a content and discursive analysis was performed to address the role frequent and infrequent participants respectively play in organizing the form and processes by which MOOCs became constructed through *The Chronicle*. This analysis delves deeper into the practices of participants, analyzing their interactive, rhetorical, and articulatory aspects in turn. Through the content analysis allowing for an understanding of the patterning of these practices across discussion forums, and the discursive analysis addressing how this patterning relates to the formation of antagonisms within the co-produced media space, the particular conditions and process of emergence of the discursive network of *The Chronicle* emerges into view. The methodological approach of this second stage of analysis will be described below following outline of the data collection conducted in this analysis.

This case study addresses a dataset drawn from co-produced online content published over a period beginning June 6th, 2012 and ending June 13, 2014, thus covering the first two years of consistent
news coverage accorded to MOOCs by *The Chronicle.* The articles and comments were collected between January and June 2014 using *The Chronicle’s* search function in order to retrieve results from the query “MOOC.” Only published articles (in contrast to newspaper blog posts) were selected. Of the results returned from the query, articles were selected if “MOOC” was included in either the title or paragraph description of the article as the query returned many results that were not directly related to MOOCs. The resultant dataset included a total of 72 articles and a total of 3950 reader comments.

Two issues concern the collection of this dataset. First, according to the concept of theoretical sampling associated with grounded theory, data collection proceeds simultaneously with data analysis and is directed according to ongoing theory development (Glaser & Strauss, 1967, p. 45). In this sense, the extensive a priori collection of data would seem to run against a grounded theory methodological approach emphasizing emergent, dynamic data collection practices “not based on a preconceived theoretical framework” (p. 45). However, though peremptorily collected, the dataset collected for this analysis served neither as an absolute or exclusive data source constraining dynamic, ongoing collection based on “theoretical sensitivity” (p. 46). Rather, the dataset served as an initial grounding for theorizing online discourse surrounding MOOCs, and a source through which the ongoing interactions between participants to the forums, and the staff reporters and op-ed contributors could be analyzed.

During the course of analysis new sources emerged, particularly other online news media content published by such organizations as *The New York Times* and *The Atlantic* that extend the intertextuality of online discourse surrounding MOOCs. Commenting readers and news media contributors, journalists and op-ed contributors, spoke to, referenced and framed their discussions in explicit and implicit reference to the discursive contexts organized through diverse online media. Crucially, discourse surrounding a variant of MOOCs labelled cMOOCs was virtually nonexistent on *The Chronicle* website. Only within a single

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2 A keyword search of the *The Chronicle* for “MOOC” returns as the earliest result an article from August 29th, 2010. It is not until June 2012 that MOOCs became commonly discussed in published articles on a monthly basis.
article, a handful of reader comments and outside, pedagogically-innovative media are cMOOCs discussed, often in awareness of their own discursive marginalization among the wider discussions surrounding MOOCs. Only though theoretical sampling were these discourses discovered and included, eventually marking a critical position as a result of their enforced marginality, in the theorization of the discursive formation organizing online MOOC-related discourse. Discussion of these sources, gained through ongoing theoretical sampling directed by references internal to the discussion forums, features in the discussion and implications sections that follow.

Second, theoretical sampling and qualitative grounded theorizing replace positivist requirements for generalizability with an explicit concern for the generation of theory vis-à-vis developing hypotheses relating conceptual categories and their properties (Glaser & Strauss, 1967, p. 69; Urquhart, et al., 2010). In this regard, the exclusive concern of grounded theory methodology for the development of theory replaces imperatives for obtaining a representative sample so as to generalize analytical conclusions to a studied population, such as demanded under a positivist research paradigm. Rather, grounded theoretical analyses generalize from empirical data to an enacted, emergent, and developing theory (Strauss & Corbin, 1994, p. 279; Lee & Baskerville, 2003, p. 237). In this regard, the collected data sample for this analysis serves as initial grounding for the articulation of substantive, descriptive theory.

Content Analysis

Content analysis provides a well establish approach for the study of online media and communication practices (Siles & Boczkowski, 2012). Utilized here within the framework of a grounded theory methodological approach, content analysis provides an empirically grounded, exploratory, and inferential method to further investigate patterning among the discursive practices of frequent and infrequent participants (Krippendorff, 2004, p. 1). Furthermore, theorized discursively, the texts organized and quantified through content analysis are analyzed in view of their contextually-constructed
meaning and situated performance, and not as means to an objective, fixed understanding essential to a
text (Hardy, Harley, & Phillips, 2004, p. 21). Content analysis thus provides further opportunity to pursue
different methodological approaches to attend better to the entwined materiality and meaning

Addressing the comments collected from the forums of The Chronicle over the two-year period
between June 2012 and June 2014, a total of 72 articles and a total of 3950 comments were articulated by
999 participants. From these comments, the five most active participants were identified to address the
specific practices of frequent participants in the forum. Additionally, a group of infrequent participants
were selected, composing the entire group of participants who commented only once to the forums over
the entire two year period. The five most frequent participants account for half a percent (0.5%) of the
total number of participants to the forum (n=999), while the number of comments they contributed
represent 13.2% (n=524) of the total comments in the forums. Similarly, the contributions of the
infrequent participants, who will be described as single posters, represent 12% (n=471) of the total
number of comments in the forums. However, with each poster contributing only a single comment, the
single posters account for nearly half (47%) of the contributing participants. Thus, the frequent and
infrequent participants represent both ends of the spectrum in the respective frequencies of their
participation yet contribute, by volume, roughly the same number of comments (Table 6-2).

Addressing frequency as a critical modality of practice constructing online discourse requires
analytical methods attending to regularities or patterns observable between groups organized according to
frequencies of interactive practice across the discussion forums. Comparisons in this regard open
analytical opportunities to address, empirically and theoretically, the relationship between frequencies of
practice and the material-discursive construction of MOOCs through the enactment of The Chronicle as a
co-constructed artifact configuration.

This comparison extends theoretical sampling by focusing on practices emerging during the
course of analysis and that bear directly on the theoretical relevance of the articulated analysis (Glaser &
Strauss, 1967, p. 55). The groups themselves thus do not consist of representative samplings of the comments within the forum, or its participants. Rather, the groups selected for comparison serve an analytical function in the emergent articulation of the situated grounded analysis, and its articulation to the theoretical concept of antagonism (Glaser & Strauss, 1967, p. 39; Lee & Baskerville, 2003). The selected groups thus constitute six corpora: the collected comments for each of the five most frequent participants and those collected for the single participants.

The choice of single posters, who not are maximally differentiated from the defining attribute of frequent participants, is especially warranted given they represent both the majority of participants contributing to *The Chronicle* over the sampled two-year period. Moreover, as earlier presented, infrequent participation generally characterizes online discussion forums, and has not received specific focus as a mode of practice both in relation to practices of frequent participation and with respect to how these variances in practice contribute to emergent forms or organization and structure. As such they present a critical mode of practice for analyses of online discourse.

Having collected the described data, this analysis proceeded along three steps. First, descriptive statistics of the interactive practices between the selected groups was performed in order to identify patterns in the form of interaction exhibited between practices differing by frequency. These forms of interaction represent the functions supported by the DISQUS system serving as the platform supporting the discussion forums hosted by *The Chronicle*. These forms consist of the three possible forms by which participants can comment within a discussion forum. Comments can be posted as what will be here described as “monologues,” “replies,” and “responses.” Monologues are comments generally posted to the thread, without utilizing the system function allowing for a direct comment to another participant’s comment in the forum. The latter constitute “replies.”

Importantly, whereas monologues are organized chronologically (by time of posting, with the most recent appearing at the top of the forum and previous posts following in ascending order by time and date), replies interrupt this chronological ordering. Replies can be posted by any participant, and directly
follow the specific comment to which they reply, and are marked by an indentation relative to the comment proceeding. While replies can be explicitly directed to only one comment in the vertical arrangement of the thread, a set of comments in reply will, by successive indentations, mark an internal thread within the general, chronological arrangement of the forum. The design of the DISQUS system supporting these commenting practices, while common, nevertheless critically enables different forms of interactive practice within the forum. A participant can, through the design, interrupt and alter the chronological flow of successive comments, selectively intervening at chosen moments to directly confront specific comments. The consequences of this system design for the emergent ordering of the discussion forums will be discussed at length in the following discussions. Lastly, “responses” are identical to replies and represent the indegree centrality of comments aggregated by the six frequency groups. Responses are analytically distinguished in order to measure the relative differences between groups in the number of comments they each receive in reply to their posts.

Next, a content analysis of rhetorical practices was performed to describe interactions among (Weber, 1990) and patterning across participant commenting practices informed by the grounded, discourse analysis undertaken, and directly bearing on theoretical developing the concept of antagonism in the context of The Chronicle forum discussions. This analysis extends that of Graham and Wright (2014), placing it within a discursive and longitudinal analysis such that the rhetorical patterning of practices within the forum and between the two groups might be understood. Importantly, Graham and Wright do not extend their analysis to infrequent participants and thus cannot determine whether the role of frequent participants is unique in organizing discourses within discussion forums.

Lastly, the general discourse analysis of the forum comments was re-evaluated according to the selected frequencies of practice defining groups for comparative analysis. This last stage of analysis, informed by and articulated in constant comparison with the results of the content analysis of rhetorical and interactive practices, sought to develop the particular articulatory practices of frequent and single posters. Analysis proceeded by relating the multiplicity of discourses evoked in the grounded analysis of
The Chronicle data to those of the selected frequent participants and single posters. Consequently, analysis could then focus on how moments articulated across the general themes emergent within the forums, and the antagonisms constituting them, compared to the specific articulations of these five frequent participants, and across the comments posted singly by infrequent, individual participants. The concept of antagonism thus becomes further developed by addressing frequency as a modality central to practices throughout The Chronicle forums and social media practice generally.

Grounded Theory Methodology

As an explication of the articulatory process by which data are systematically obtained and analyzed, grounded theory methodology provides the methodological approach for the discourse analysis performed in this thesis (Glaser & Strauss, 1967). Analysis was conducted through the constant comparative method, the central mechanism of grounded theory methodology. A description of the method across its four steps and its particular practice in this analysis follows.

Grounded theory methodology offers a widely-appropriated empirical approach to qualitative research (Bryant & Charmaz, 2007; Glaser & Strauss, 1967). As a methodology, grounded theory articulates a process of theorization that stresses an explicit, reflexive account of theory development emerging from a mutually informing process of data collection, analysis and the construction of an abstract theoretical framework. Glaser & Strauss describe four stages constituting the constant comparative method central to grounded theory methodology: comparison of incidents to categories and their properties, integration of categories and properties, delimitation of the emerging theory, and, lastly, writing the theory (p. 105). The description of these steps provides explication of the process by which data was analyzed in development of a substantive theoretical account of the discourses featured on The Chronicle, a process of articulation in which discursive texts were gathered and systematically organized and re-articulated in an integrated account constituting this thesis.
Turning now to the constant comparative method by which theory generation occurs, Glaser and Strauss (1967) outline four primary stages that are co-occurring rather than successive within the research process. Thus the first stage, like the others, represents not a discrete stage to be finalized and set aside, but an ongoing process in the generation of grounded theory through the articulation of data into conceptual and theoretical frameworks. In the initial stage incidents or data points are analyzed through open coding in order to generate as many categories as possible (Glaser & Strauss, 1967, p. 105). Successive incidents are then compared to previous incidents similarly categorized, with attention also accorded to intra-category differences (across groups for example). In this process categories and their properties emerge, become differentiated, and modified.

The first stage of open coding concerns the initial and ongoing generation of conceptual categories within a particular field of analysis. Concepts are defined by Glaser and Strauss (1967) as both analytic and sensitizing:

- concepts should be analytic- sufficiently generalized to designate characteristics of concrete entities, not the entities themselves. They should also be sensitizing- yield a “meaningful” picture, abetted by apt illustrations that enable one to grasp the reference in terms of one’s own experience” (p. 28-9).

This dual description represents concern for the articulation of abstract concepts that are themselves new, and not extant in the data. An analytic concept in this sense reflects an organized re-articulation of a set of data, that as sensitizing, speak to the reader not to the subjects, events, and objects analyzed. A key orientation of conceptualization then requires concepts to move beyond description, or interpretation of a particular sited meaning and, instead, present “inferential and explanatory codes which describe a pattern” within the data (Strauss & Corbin, 1994, p. 278; Urquhart, 2007, p. 352). Grounded theorizing, as articulation, assembles and configures heterogeneous data points composing a phenomena of analysis in a practice of extension, whereby these diverse elements become integrated in a new, emergent discourse offered up as an explanatory resource to a future of actors and their re-articulations.
The second stage of the constant comparative method finds the integration of categories and properties with successive incidents now compared to abstracted categories rather than previous incidents (Glaser & Strauss, 1967, p. 108). Corbin and Strauss (1990) later consider this stage as involving two coding procedures: axial and selective. Axial coding extends open coding in the ongoing generation of conceptual categories as they emerge, and additionally sees the development of sub-categories or properties related to conceptual categories (Corbin & Strauss, 1990, p. 13). Glaser and Strauss (1967) implicitly recognize this processes in theory development as involving the researcher in the enactment of theory rather than its discovery in a pre-existent reality. Constant comparison through ongoing, theoretically-directed sampling and analysis of data, considered as “groups” (Glaser & Strauss, 1967, p. 36) or “social units” (Strauss & Corbin, 1994, p. 278) finds the researcher selecting and articulating data points together in productive configurations. This practice Glaser and Strauss (1967) identify as the “control” exercised by the researcher in the research or articulation-as-discovery process: “This control over similarities and differences is vital for discovering categories, and for developing and relating their theoretical properties, all necessary for the further development of an emergent theory” (p. 55). As described in chapter three in a theorization of articulation, difference becomes the constitutive force in understanding meaning as the effect of ongoing semiotic constructions. The researcher’s exercise over the way difference, and similarity in consequence, is performed in a dataset and becomes organized in construction of a descriptive and explanatory discourse recognizes the articulatory practice of theorizing.

Selective coding, in this respect, recognizes the general organization and synthesis performed in the articulation of grounded theory. “Selective coding is the process by which all categories are unified around a ‘core’ category,” Corbin and Strauss explain, “and categories that need further explication are filled-in with descriptive detail” (p. 14). Through this process relationships are articulated between categories and properties in a process of integration that allows substantive theory to emerge. Stern (2007) lists this condition as an element of successful grounded theory methodology: “Integration of the finished product needs to be executed in such a way that every component is in harmony with every other
component” (p. 114). Harmony here implies a theory that accounts for each category and its properties through their inter-definition (Glaser & Strauss, 1967, p. 114).

This aspect of integration recognized in selective coding, especially as it calls for a “‘core’ category” recalls the locus of discovery originally explained by Glaser and Strauss (1967):

The truly emergent integrating framework, which encompasses the fullest possible diversity of categories and properties, becomes an open-ended scheme, hardly subject to being re-designed. It is open-ended because, as new categories or properties are generated and related, there seems always to be a place for them in the scheme. For substantive theory, the analyst is very likely to discover an integrating scheme within his data, since the data and the interrelations of his theory lie so close together. (p. 41)

This critical passage describes aspects of grounded theorizing which concern delimitation, the third stage of the constant comparative method. Delimitation marks the maturing of developing theory as the synthetic articulation of concepts in selective coding recognizes a “‘core’ category” or what is here described as the discovery of “an integrating scheme within the data.” Theorizing articulation as both a theory and practice of (grounded) theorizing emphasizes the function of such loci of integration, as well as problematizes the relationship between the analytically emergent integrating scheme Glaser and Strauss describe as organizing the interrelations of a theory, and the scheme as it is identified “within” the data. This emphasis and problematization can be explored in the description of delimitation Glaser and Strauss outline.

Glaser and Strauss (1967) explain delimitation as occurring across “two levels: the theory and categories” (p. 110). Theoretical delimitation involves the practice of reduction:

By reduction we mean that the analyst may discover underlying uniformities in the original set of categories or their properties, and can then formulate the theory with a smaller set of higher level concepts. This delimits its terminology and text. (p. 110)
Through reduction the development of situated, substantial theory opens potentials for theoretical generalization, in the sense that the developing grounded theory might be articulated into broader theoretical relations (p. 110). Furthermore, Glaser and Strauss find reduction and generalization as fulfilling two central requirements of theory: parsimony and scope (p. 110-1). This explication of grounded theory methodology crucially develops the implications of the emergent integrating scheme developed through selective coding.

What becomes salient here, brought to the fore with respect to a theory of articulation and the constitutive, performative effects of difference when understood along the lines of Laclau’s antagonism, is the deepening of grounded theory as an explication of a process of articulatory practice. Understanding articulation as a way of theorizing social practice as both the relational linking and positioning of elements into meaningful structures or discourses, and extending this understanding to the analytical process itself, the recognition of grounded theorizing as articulatory practices points toward the productive force of antagonism and primary antagonisms, logics that become central to the understanding of phenomena through a practice of theorizing that constitutes the organizing patterns of these antagonisms within explanatory logics.

In short, the integrating scheme or core category that becomes the articulatory principle directing the process of abstraction by which coding, theoretical reduction, and generalization produce meaningful theory must be located in a primary antagonism organizing a social logic. The relationship between the analytically emergent integrating scheme, a social logic, organizing the interrelations of a theory, and the logic as it is identified “within” the data takes the form of articulation- not a necessarily emergent relationship or one predicated on the progressive discovery of transparent reality, but the relationship the develops in the network of practices to which the actors and phenomena investigated and the investigating researcher both contribute.

Thus at this moment the following steps of delimiting and writing the grounded theory will be performed in the course of this analysis. Overall, grounded theory methodology provides an established
methodological rigor that manifests itself as reflexivity in analytical practice rather than a set of
guidelines to be followed. Recognizing theorizing itself as a practice inter-connected with the phenomena
studied, this reflexivity in turn calls on transparency in the articulation and presentation of the grounded
analysis. Transparency is understood as a form of veracity revealing both the tools and practices of the
research as engaged in the phenomena described, and enhanced in dialogue with further (re-)articulations
that take those explicit practices of analysis to account. Thus with concern directed toward reflexive and
transparent practice this analysis will proceed.
Chapter 5

Case Study: MOOC Discourses and Antagonisms

Following every article on *The Chronicle* website emerge the voices of educators, administrators, students, and interested readers engaged in often lively debate. Together with which the articles they are paired these forums represent constantly changing configurations of discourse, largely concerned with a single question: what are MOOCs and what do they mean for the future of higher education? The articles and comments constituting *The Chronicle* represent the digital traces articulated and positioned through the interactive practices of participants who together engage in a collective process of co-production. Looking to find an answer to the previous question thus lies in the changeable forms of the artifact configurations they produce and, more importantly, the processes organizing the discursive network through which it is achieved.

The following sections describe emergent themes present in the latter. In their presentation less attention is given to the codes that successively articulated the discourses present within *The Chronicle*. Rather, they present a narrative of the cracks that emerge between articulations of MOOCs, interruptions marking division, threat, and conflict among the discussants to the forums. Looking at these interruptions as sites of antagonism allows, first, an ordering of moments articulated in the discourses, and a delimiting of their boundaries and intelligibility. Second, analyzing antagonisms identifies conditions by which equivalences might be established through ongoing practices that ultimately serve to simplify the discursive space of the forums. Addressing the themes of professional concerns, pedagogy, and commercialism regarding MOOCs and higher education, the differences developed as antagonisms across the websites of *The Chronicle* will now be described.
Professional Concerns

Among discussion of MOOCs across the online forums, frequent issues arise related to the professional concerns of educators who teach MOOCs or stand to be affected by them. These issues reflect how MOOCs might articulate new relations of agency and power for educators positioned in institutional, commercial, and academic contexts. Concerns over employment and remuneration, intellectual-property rights, and professional autonomy and status all contribute to a troubling position for the educator amid changing dynamics in higher education.

The most disconcerting prospect MOOCs pose within the discussion forums is that they might render current educators obsolete or, more likely, redundant. As one commenter explains:

I visited a major department store and asked an employee where to get a certain item from the store? [sic] The employee said something like "if you can't find it here, you can easily go online and order it." I think employees are encouraged to say this. But do the employees recognize they are selling themselves out of a job? If I can order it online, why do I need an employee in a department store? Does that apply here? I have a lot of questions regarding the ramifications of MOOCs. If online education = classroom education… do we need/require as many professors anymore? (Jason, 2013)

Concerns over employment extend uncertainty to the position of educators in institutional structures as they become increasingly articulated within socio-economic contexts defined by commercial efficiencies of scale. The analogy to retail stores is not unique, as another commenter puts it: “this is all about America's ‘Walmart’ mentality” (Gayle K. Brunelle, 2013). Such descriptions quickly move the question of who will be teaching MOOCs, to who stands to be displaced by them.

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3 All citations in this section will refer to primary source references collected during analysis and located in a separate reference section titled “Data References.”
For participants who “don’t want to be MOOC’d,” the positions of educators, dislocated within commercial logics, become articulated such that existing institutional tensions are foregrounded. Opposition between faculty and administration, each organizing the “educational” and “economic” aspects of higher education respectively, becomes invigorated along lines of disruption MOOCs portend. This opposition touches on questions of institutional power, specifically on issues of professional autonomy, remuneration, and intellectual property rights. These issues are often incited when the relative power between these two identities arises:

I am alarmed at how in a number of comments, both in the article itself and in follow-up comments, the question of quality of instruction seems to rank second to some abstract notion of “academic freedom.” This seems to imply that instructors want to be able to say or do anything that they wish without any sort of accountability… it seems to me that there should normally be some sort of evaluation process… As an academic administrator, I have often been surprised at the level of sophistication shown in end-of-course evaluations. While a few students do complain about the hardship of being expected to learn and do homework, most -- even the ones who do not do all that well in the course -- seem to appreciate a reasonably challenging course. The things that make them unhappy are not surprising… professors who insult students, professors who cannot express concepts clearly, professors who do not follow the syllabus, etc. (jmb5b, 2013)

The above comment presents a highly-tuned, though no less common, provocation in the way in which faculty competence might be questioned against a criteria of “quality of instruction” tied to administrative processes of evaluation. Importantly, determination of educational quality is here removed from faculty decision and instead attributed to administrative and student powers of evaluation. Powers that, in the context of MOOCs, become increasingly aligned to cost-benefit analyses tailored to student-consumers:

This is the holy grail for administrators: 1. replace difficult-to-deal-with T-T professors (and eventually whole departments) with IT personnel and MOOC delivery administrators; 2. outsource [sic] for online adjuncts (who could be in a different city or even a different country) as
MOOC facilitators to correct student work; 3. market "Harvard"-branded courses to give the impression of optimal educational value through "partnerships" with an elite institution; 4. Receive [sic] a substantial pay raise for the above. The final nail in the coffin of the academic life? Many will be pleased, I'm sure. I mourn, though, predicting that change is not improvement in this case. (doctoryes, 2013)

The attribution of institutional power stands at issue. MOOCs become instrumental in this regard, a tool challenging the powers for institutional authority held by (especially tenured) faculties. The comment provides an example of the logics of equivalence articulated around MOOCs; tenured-professors pitted not only against administrators, but “IT personnel,” outsourced “online adjuncts,” and the weighty market force behind elite, Ivy League-branded courses offered through licensing models. Unsurprisingly, many forum threads emerge as cabals of the oppressed.

Other professional concerns feature defenses against financial and intellectual-property threats posed by MOOCs. The issue of remuneration becomes consequential within a perceived MOOC production model that privileges the institution and commercial platform provider in comparison to academics who create and teach (at least initially) the courses. Consequently, cynicism pervades reactions to Chronicle reporting on emerging MOOC revenue models: “I would like to know how much money in royalties did those 28,000 books sold to students taking the class MOOC brought in to the lecturer?” (deptlanguages, 2013). Another significant concern relates to the retention of intellectual-property rights by professors working between a home educational institution and partnerships with commercial platform providers. Such questions provoked public recommendations by the American Association of University Professors (Schmidt, 2013), and align with concerns over the growing commercialization of higher education:

It is the intellectual and creative classes giving their stuff away for free so some Silicon Valley venture capitalist can reap tens of millions of dollars by providing new mode of delivery. Those who actually provide the content get zilch! (pols437, 2013)
These concerns culminate in the fears articulated earlier: that MOOCs enable and precipitate trends threatening the employment and professional autonomy of educators. Specific among these trends figures the rise in part-time or adjunct positions relative to tenured faculty. The issue of adjunct hiring commonly becomes articulated within processes of institutional cost-cutting, state disinvestment, and the curtailing of faculty power relative to college and university administrations:

Frankly, it seems to me that this is just another push to take jobs away from adjuncts and another way to cheapen the student's experience. Adjuncts are 78% of the professoriate. After all if you "educate" more students with canned lectures and classes of 350 students why bother with adjuncts? Besides the obvious, the educational experience is cheapened we need to ask ourselves how more people will be thrown out of work? (Paige McAdoo, 2013)

As just described, many through the comment forums find MOOCs as a worsening of an already general crisis of employment in institutions of higher education. Again these comments contextualize the consequences for MOOCs within existing discourses, re-activating their tensions in ways that question what precisely is new about MOOCs, and in turn the organizing logics constituting the latter as a particular extension of a complex field of practice in which the latter emerges.

The forum discussions destabilize the position of educators within institutions of higher education by, in turn, articulating these institutions within socio-economic fields that stand to be re-organized with the development of MOOCs. The latter are distinct simplifications: presenting education as a product produced and consumed along an efficiency of scale in an unvariegated consumer market. These articulatory practices contextualize MOOCs so as to re-activate existent, intra-institutional professional tensions. Consequently, faculty and administration oppose each other in a distinction pitting commercial efficiency and consumerist values against education proper, that is, a practice properly defined free from commercial imperatives and in which the educator’s autonomy and authority remain unfettered. These delineations foreshadow discourses that will be presented across the following three themes. However, what begins to shape is a manner in which the diverse articulations contextualizing MOOCs find a center
of gravity around a particular articulating principle that is here theorized as antagonism. The understanding of education enacted in the forums of *The Chronicle* and central to developing this antagonism can now be explored in discussions of pedagogy.

**Pedagogy**

Discussions of MOOCs evoke reflections on pedagogy. Here debates over the lecture as effective practice, student individual differences, and assessment and epistemic legitimacy figure prominently. Discussions organized around the theme of pedagogy open to analysis what counts as education, teaching, and learning, and how these concepts apply to the practices associated with MOOCs.

The lecture, held as traditional pedagogic practice, becomes the object of sustained, conflicting discussion. On one hand, the lecture is interpreted as a hold-over of outdated and failing educational models that prevent student engagement and active learning:

Most Harvard undergraduates get little more than the MOOC experience -- they sit in a large lecture hall, reading email, doodling, playing computer games, while the lecturer drones on. A well-presented MOOC would be a breath of fresh air. Then the school could put resources into helping faculty create engaging and educational experiences for students -- not just lectures.

(mgkcnm, 2013)

In this sense, the MOOC provides possibility for digital spaces in which engagement might be enhanced through technologically-afforded interactive exercises and the adoption of new “blended” pedagogic models that flip the common practice of classroom lectures and assigned homework completed outside class. Rather, in a flipped classroom, lectures occur digitally, outside of class, and classroom time becomes dedicated to engaged, practical exercises in which students interact with professors and receive direct assistance.
Conversely, the “canned lecture” frequently emerges to generally define MOOCs as a failed educational model inherently fostering student passivity and non-interaction. As one commenter argues against lecture-based MOOCs:

Proven track record in doing what? It's interesting that an appeal to "the power of the lecture" is touted here - "we've bottled up the good ol' passive lecture!" when virtually all of educational theory for the last god knows how many years has argued that passive lecturing is not real education. (Chris Panza, 2013)

Importantly, these arguments implicitly address a variant known as xMOOCs, not the blended models described above, as they assume the student to be entirely reliant on video lectures alone and not physically co-present and regularly interacting with professors. Interactivity thus becomes a point of differentiation:

The problem with most online lectures - and especially in MOOCs - is that they typically lack in meaningful student-to-student and faculty-to-student interactions. This is one of the reasons why online learning retention rates are typically poor in comparison to face-to-face courses. (glorenzo1253, 2013)

As a result, the lecture becomes a target of criticism for both traditional, embodied teaching as well as MOOCs (xMOOCs). In these conflicting arguments, often within the same comment thread, the possibility for a blended course model in which MOOCs supplement traditional classroom instruction becomes lost or ignored.

Yet the issue of educational quality itself serves as a point at which interruptions emerge across the forums. Responding to an open letter issued by faculty at San Jose State University explaining their rejection the use of an EdX-sponsored MOOC, commenters re-articulate claims of diminish quality:

Refreshingly transparent :“replace professors, dismantle departments...” and, oh yeah, students will suffer. Maybe or maybe not. I think it is not a given that giving students access to material [course lectures, course notes, and class interaction] 24/7 from any location for repeated viewing
will result in a degraded education. The primary focus of his concerns are clear and I suspect it is the same with most academics. (miamisid, 2013)

Seen as a push to "replace professors, dismantle departments, and provide a diminished education for students in public universities." It seems the professor got the order wrong. Diminished education should be the priority. Unfortunately many professors see themselves, not students as the reson [sic] for higher education (Agrelou, 2013)

Quality becomes a nodal point around which discourses alternatively articulate educators as necessary and expendable. Discourses such as these define stakeholders within MOOC discussions and position educators as either part of an ossified educational establishment and vocally resistance from a status quo preventing educational reform and progress:

Never underestimate the power of the Mandarin professoriate to slow progress in an effort to preserve its hegemony. (R117532, 2013)

Never underestimate the power of shameless capitalists to offer something crappier for more money and call it progress. (Henry Vandenburgh, 2013)

Discussions of educational quality demonstrate how diverse articulations might alternatively position actors, whether educators, technology providers, or commercial investment firms, in practices constructing very different understandings of MOOCs. In examples such as these, discourses become contested, and consequently reveal very different logics organizing these understandings.

Debates over quality consequently point to more fundamental questions. The lecture serves as a lightning rod for divergent understandings of pedagogic practice itself. Two prominent discourses emerge: teaching as content delivery versus teaching as creative and experiential. This division alternatively describes the distinction between instructivist or constructivist pedagogies. In an op-ed “plea for slow education,” Rachel Steir (2013) illustrates the division between these discourses and the way in which they position key actors associated to MOOC developments:
To refer to professors’ class preparation as “content development” reveals Stanford University, where Koller got her Ph.D. and teaches computer science, as less a university than a farm team for Silicon Valley. Even worse, Koller seems unaware that some students already "have meaningful, engaged dialogue."

Similar distinctions between content delivery and “engaged dialogue” arose in reporting on Amherst College’s rejection of a proposed participation with the Harvard and MIT-supported MOOC provider EdX: “MOOCs run counter to Amherst’s commitment to ‘learning through close colloquy’; they might ‘perpetuate the ‘information dispensing' model of teaching’” (Kolowich, 2013c). These distinctions tend toward absolute divisions when substantial, even necessary, overlap might exist. Thus when one commenter states, “content delivered is not the same thing as content learned. Never will be,” MOOCs become articulated such that, as in the case of blended pedagogies, an exclusionary either/or is effected between residential, co-present and online education (Keith Williams, 2013).

In this way, divisions between constructivist and instructivist pedagogies tend to demarcate models of interactive and non-interactive learning, as well as extend these chains of equivalence to embodied, co-present courses and online models respectively. “The only issue is whether a MOOC is education or data transmission? [sic],” one commenter neatly summarizes (theron, 2013). Or, as another states, “what I can teach one student, sitting together looking at one paper, about his or her writing, cannot be transferred into a MOOC platform” (newshounder, 2013). The image of the classroom in which professor engages with students in close colloquy pervades the discussion forums, and cuts a hole in articulations of the “educational” possibilities of MOOCs. Articulating MOOCs as solely a technical platform for information transmission, leaves the latter looking on, literally outside the classroom. Articulated within this equation by which teaching and learning are measured, MOOCs must always come up short. The issue of pedagogy thus cuts deeply to the very understanding of MOOCs as a form of education.
Commercialism

Participants to the forums of *The Chronicle* often recognize an inherent commercialism in developments surrounding MOOCs. Behind a seemingly altruistic model, for many, remains a crass effort at monetizing higher education, “an Amazon-like strategy to pre-empt the market and control the (uncertain) future; it isn't an egalitarian effort to democratize education” (Goldenrose, 2013). In articulations of MOOCs as commercial vehicles a discourse of market competition arises that defines the motives and functional role of MOOCs and, similarly, commoditizes higher education such that a “discourse of ‘students-as-customers’ and ‘degrees-as-products’ is created and reinforced” as one commenter explains (chino_actual, 2013). Consequently, the position of educators in this context is further dislocated as a result of articulations of higher education as a commercial industry.

As participants wrestle with the consequences MOOCs pose for the institutions and actors of higher education, a regular starting point often becomes the commercial motives driving MOOC development. In this regard, among interpretations of a reported partnership between San Jose State University and Udacity, a commercial MOOC provider, one commenter speculates that “they are clearly aiming to benefit from the long tail here. Of course it won’t be profitable with 300 students but what if all (or even a fraction) 82,000* 1st year undergrads in California took Algebra from the SJSU MOOC?” (Genxnative, 2013). Of course “they” are not educators, rather the administrators and their business partners recognized as driving the MOOC movement: “Do you know that most of the MOOC providers were set up with venture capital money?” writes one commenter, “they will remain free until they reach a critical mass of acceptance, then they will start charging money” (Unemployed_Northeastern, 2013). Questions of revenue generation and speculated business models consequently arise, a collective effort at pulling back the curtain to explain what MOOCs truly represent and whom they benefit.

Through these articulations, discourse of an education industry develops and concerns institutional and individual competition within a student-as-consumer market. In this context MOOCs
emerge as institutional branding efforts: “Catholic Universities are not likely to team up to offer
MOOCs,” explains one participant, “…because, like the rest of higher education, they compete with each other and otherwise tend to protect and strengthen their brand in the marketplace” (jpmurphy, 2013).

Competition raises, in turn, other concerns as elite institutions carrying more brand weight become better positioned to capitalize from a MOOC-transformed education market:

The great danger of MOOCs lies in their massiveness: as we have seen in the last couple of years, they can also be abused as a form of "big box" education--i.e. a category killer that allows a couple of large international brands to wipe out smaller competitors in the competition for market share. (caedmon5, 2013)

The danger arising in the “category killer” MOOC becomes threatening only to the degree that who and what are threatened become articulated within such a category. In this respect, the massive, open model of MOOCs figures as a standardizing force; one professor can teach one course with nearly unlimited student attendance.

As a result, discourses articulating a higher education industry opened to the free market positions MOOCs, institutions, and those who they employ within a logic of open competition such that the “market share” of the majority of educators faces encroachment by star academics at branded institutions:

To the extent lectures are needed, it's surely better for students to get them from the best in the world (which is what EdX provides) rather than from whoever is available on the local campus.

My advice to htinberg is to figure out how to make yourself valuable in this new world - and not to rely on your now lost monopoly position. (Douglas Levene, 2013)

Against this new world, arguments that MOOCs would lead to a “narrowing of discourse” (gfitzger, 2013) seek to defend educators and institutions perceived as less “marketable.” Here pedagogic arguments begin to contrast commercial ones. As another participant writes: “wonder why we think that a few research "stars" are better at teaching a subject than teachers with much more experience are. Or why we don't appreciate the diversity of viewpoints class to class when we have a large number of professors
teaching something” (puck, 2013). Such comments articulate educators between positions of commercial inferiority or pedagogic value, and thus foreground negations emerging between alternative discourses in the forums.

The general discourse of commercialism in the forums of The Chronicle describe MOOCs in a manner that both reinforces and dislocates the prominent antagonisms emerging with respect to the professional and pedagogical concerns of educators. Articulated as commercial vehicles within an open educational market, MOOCs again align with prerogatives outside the proper reserve of education as defined by the close colloquy between co-located teacher and students. In this respect, discourses of commercialism further articulate the context by which MOOCs have emerged to threaten the latter.

What could be interpreted as a defining moment in MOOC-related press occurs April 29th, 2013. An open letter signed that day and published in The Chronicle on May 2nd, responds directly to Professor Michael Sandel of Harvard University. Sandel’s EdX course “Justice” was submitted by the San Jose State University administration to the philosophy department for trial use as part of a blended course model. In response the philosophy department drafted an open letter that in part speculates on the consequences that might follow from adopting such a course model:

should one-size-fits-all vendor-designed blended courses become the norm, we fear that two classes of universities will be created: one, well-funded colleges and universities in which privileged students get their own real professor; the other, financially stressed private and public universities in which students watch a bunch of video-taped lectures and interact, if indeed any interaction is available on their home campuses, with a professor that this model of education has turned into a glorified teaching assistant. Public universities will no longer provide the same quality of education and will not remain on par with well-funded private ones. Teaching justice through an educational model that is spearheading the creation of two social classes in academia thus amounts to a cruel joke. (Dept. of Phil. SJSU, 2013)
The issue of educational inequality occupies many objectors as well as proponents of MOOCs and MOOC platform-afforded course models. The claims of the San Jose State Philosophy Department articulate concerns of many, particularly in the identification of MOOCs with a growing divide between elite, often Ivy League, universities and less prestigious, populous institutions. The two class university system the philosophy department fears articulates this divide along points of the static, video lecture, (non-) interaction, and the disempowering, deskilling, and liquidation of the traditional role of the professor. These together draw a primary antagonism between MOOCs and what are believed to be the true bastions of education: the embodied, traditional classroom. Heightened through discourses of hypothesizing new forms of structural inequality, the motivations behind the hyperbolic fears and staunch opposition to MOOCs become clearer.

As described above, commercial articulations of MOOCs also open a gap internal to the academy of educators that, in other discourses, had been held entirely opposed from those instigating the development of MOOCs. Through the logic of market competition, an antagonism develops between elite academics and institutions sponsoring MOOCs, and those educators and institutions who cannot compete within such a context. As a consequence, while educational quality remains bound to traditional, residential models, this discourse alone cannot serve to consolidate opposition to the threat of MOOCs as the fragmentation between elite and more populous institutions becomes subversive of this antagonism.

**Antagonisms**

The narrative above describes points of conflict that emerge with the interactions of practices differing in the logics by which they describe MOOCs. Developing the concept of antagonism at these points of conflict articulates here, theoretically, the discourses emergent to the co-produced media of *The Chronicle*. Organizing the coherence and limits of discourses, and the logics by which equivalences form, antagonism theorizes the diverse interactions throughout digital space to recognize the outlines forming
The Chronicle as a discursive system. The three themes elaborate particular antagonisms that intertwine to constitute the latter. The latter are not absolute, exclusive, or uncontested. Rather they provide critical points of articulation around which the traces of practices contributing to The Chronicle become organized and take form.

The professional concerns of educators develop a clear antagonism between faculty and administration, the latter as featured subject positions around which discourses organize. In the most frequent articulation, a discourse emerges around this antagonism that activates institutional tensions that, on one hand, pre-exist and outreach the scope of MOOCs, and, on the other, become re-articulated and energized such that concerns over adjunct hiring, professional autonomy, and administrative evaluation and oversight emerge as renewed threats spearheaded by the institutional adoption of MOOCs. This antagonism demarcates the space of division across which institutional power is distributed between faculty and administration, and in which MOOCs become meaningful as an administrative tool to lessen faculty autonomy and power, and achieve financially beneficial efficiencies of scale. MOOCs become, consequently, neither new nor revolutionary, but another moment in an equivalence constructed via “old” tensions within institutions of higher education.

Discussions of pedagogy develop an antagonism between residential, traditional education and MOOCs. Traditional education becomes defined in this relation as the exclusive reserve of student-teacher interaction through “close colloquy,” and of situated, holistic conception of education as experiential rather than “content delivery.” The latter in turn describes MOOCs which, through logics of equivalence organize the former notions attributed to traditional education and construct MOOCs as a non-interactive, technological channel for information. Discussions over pedagogy demonstrate the contingency characterizing discourses surrounding MOOCs. Debates surrounding educational equality, interactive teaching, and the lecture as pedagogic best practice, alternatively become articulated to praise traditional, residential education, or the new “interactive” potentials opened through MOOCs. Antagonisms emerge at the limits of these discourses with articulations alternatively subverting
residential, traditional education’s exclusive claim to effective pedagogy and MOOCs as a viable alternative for higher education.

Lastly, discourses around the commercial aspects of MOOCs fragment the antagonism between faculty and administration and re-articulate an antagonism pitting the majority of less recognized educators against a narrow elite of professors and administrators producing MOOCs. Discussion of the higher education industry demonstrate the interconnections between the themes characterizing discourses across *The Chronicle*. In a significant example, articulations of higher education as an industry providing services to student-consumers evokes a discourse of market competition that sees elite institutions and “star” professors gaining a competitive advantage through MOOCs. An antagonism consequently arises between such elite institution and faculty and those at less prestigious, more populous institutions who stand vulnerable to lose their market share of students when the latter are given opportunity to choose their courses on the open market opened by MOOCs. The effect of this antagonism demonstrates how the subject positions configured within a discourse become transformed with the introduction of new antagonisms. As such, discourses holding educators collectively against MOOCs become fragmented. On one side tenured faculty stand against MOOCs who now become linked with the elite professors making them, and the growing numbers of adjunct professors the widespread adoption of MOOCs seemingly portend.
Chapter 6

Case Study: Frequent Participants

In order to address the articulation of these antagonisms at the level of practice, attention will now be directed to the practices of two groups of users significantly contributing to the discourse of *The Chronicle*. First, a description of the online discussion forums of *The Chronicle* will be described. Importantly, this description identifies the disproportionate contributions of a minority of participants, as well as the minor contributions of the majority. Moreover, these frequency groups exhibit different interactive tendencies that will be analyzed as significant to the processes constituting the forums as a discursive space.

Second, given the problematic opened though the literature review, namely asymmetries of production and distribution observed empirically in discourse networks, an analysis is presented of interactive and rhetorical practices of the individuals and groups constituting the most frequent participants as well as participants who post only a single comment. The measures of interactivity and content analysis of rhetorical practices investigate the character of production performed by specific actors or actor groups. These practices will then be addressed in context, in a thick, qualitative description, as to how they present particular practices contributing to the collective construction of discourses defining MOOCs.

Together these analyses address the production and distribution of practices across the two-year period of MOOC-related discussions in *The Chronicle*. Specifically, analysis looks to these practices respective to frequent and infrequent participants and participant groups. Conclusions drawn begin to understand how such asymmetries in participant practices structure the processes performing discourse networks, such as the discussion forums of *The Chronicle* that increasingly emerge through widespread engagement with digital media and communications technology. First, however, the description of the general commenting practices constituting the discussion forums of *The Chronicle* will be presented.
Online Discussion Forums of The Chronicle

Like many online discussion forums, those of The Chronicle are constituted through the extension of threads of individual comments. The Chronicle’s forums, supported by the DISQUS platform, are located immediately following published, online articles and present two general affordances to readers/participants (who must be registered and logged in to DISQUS). The first provides a reading, rating and content sharing opportunity: participants can scroll down through the comment thread liking or disliking, sharing (via Twitter, Facebook, etc.), and recommending comments or the newspaper article and forum generally. These features become additionally significant as the hosting platform, DISQUS, integrates registered users’ discussion forum practices with an internal social media network. Consequently, liking or sharing a comment or article in turn distribute the content through the DISQUS user’s follower network as well as notify the content author of the comment. The online discussion forum of The Chronicle is thus a discourse network not only in the sense of linking threaded media among participant contributors to a discussion thread, but extends through participants’ DISQUS profiles across expansive and overlapping networks of follower and following relationships.

The second affordance presented by the forums is commenting, and will be the central focus of this analysis. Commenting occurs in two ways that are significant to the construction of the discussion thread. First, one can comment generally to the forum using the commenting interface heading the thread and immediately following the article. Importantly, due to the placement of the interface for general comments, a commenter does not have to view, much less, read, the existing discussion thread. Commenting in this fashion performs two operations. First, the submitted comment becomes published in reverse-chronological order (this is the interface default- ordering can be modified through “oldest,” “newest,” of “best” sorting options), with the most recent placed atop the thread. Second, general commenting to the forum, submissions that will be termed “monologues,” untethers the monologic
comment from the numerous nested subthreads that constitute, at intervals between monologic comments, the forum discussion thread.

The second means of commenting requires a participant to scroll through the thread, identify a particular comment, and click the “reply” function to compose and post a comment. These comments will be referred to as replies. Significantly, replies function differently than monologic comments. Rather than enter a default chronological, or otherwise individually-manipulated ordering of the thread, replies tether to the comment to which they respond and immediately follow, creating a nest, subthread. Replies juxta- pose comments to each other in a stable ordering established by the poster and interrupt the chronologic growth of the discussion thread. The reply function of the discussion forum, and the nested subthreads it generates, creates a staccato effect to the forum: miscellaneous monologic comments are interspersed with stable, more discursively coherent subthreads that extend from two to 54 comments in length (the longest subthread observed in this analysis). Replying creates chains of discussion wherein juxtaposed comments directly respond to each other in performance of more or less sustained communication between individuals. The registration policy and social media network of DISQUS encourage this by notifying individuals when a comment they have submitted has been replied to or (dis)liked, and providing in turn the opportunity to respond in kind. As a result, asynchronous discussions emerge between individual participants or groups of participants that construct nested, subthreads durably structuring forum discussion threads.

MOOC discussion forums: June 2012 – June 2014

Of the 3950 comments collected from 72 newspaper comment forums over the two-year period spanning June 2012 through June 2014, 999 individual users posted comments to the discussion forums. Notably, the majority of comments are posted as replies (60%) rather than monologues (Table 6-1). The
differential tendencies among actors and actor groups in this regard will feature as a major aspect contributing to the structuring of the forums.

Table 6-1. Online discussion forums of *The Chronicle*

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<tbody>
<tr>
<td>Participants</td>
<td>999</td>
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<tr>
<td>Articles</td>
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</tr>
<tr>
<td>Subthreads</td>
<td>645</td>
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<td>Comments</td>
<td>3950</td>
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<td>40%</td>
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<tr>
<td>Avg. # of subthreads/forum</td>
<td>21.00</td>
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<tr>
<td>Replies</td>
<td>2388</td>
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<td>%</td>
<td>60%</td>
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</table>

Collected over a two-year period between June 2012 and June 2014, participation among the forums was far from consistent. Rather, the discussion forums became performed through an assembly of diverse actors. First, as the forums themselves are contingent to the published news stories to which they are attached, the publishing practices of *The Chronicle* figure importantly in not only publishing media content that might be publically discussed, but also affording the spaces of discussion themselves. Figure 6-1 charts the posting of comments across three-month intervals spanning the time period for which data was collected and analyzed.

The prominent spike in commenting among participants corresponds with a flurry of news media interest in MOOCs. Between April and June 2013, 24 articles were published by *The Chronicle* focusing on MOOCs. During this same period 482 individual commenters posted to the 24 forums connected to these articles, submitting a total of 1562 comments. Of these, 1022 were replies distributed across 557 subthreads regularly punctuating the chronological ordering of the forums.
The figure also details the disproportionate production of frequently contributing participants. The top one percent of participants, defined according the volume or frequency of comments posted over the two-year period (specifically, those posting over 50 comments), constitute only 10 individuals (at least screennames) yet account for 879 (22%) of the total comments posted to the forums. This disproportionate production becomes more extreme when taken with the next 9% of frequent participants. This top 10%, 100 participants, produces 2116 (54%) of the total comments. Comparatively, the remaining 90% of participants (n = 899) contribute 1834 (46%), with 47% of all participants (n = 471) contributing but a single comment across the entirety of the two-year span.

As the discussion in the literature review makes clear, these distributions are not a singularity. Rather, they define a consistently observed aspect of participatory networks: the extreme participation of a few alongside the minor contributions of many. This asymmetry in media production, what can be theoretically tied to the dispersion of discourse, beckons further analysis as a potentially significant force contributing to the structuring of discourse networks. Figure 6-2 plots the distribution of the four frequency groups described relative to the number of comments they posted and responses they received (comments (replies) directed to their comments). The general link observable between number of
comments posted and received follows similar findings in analyses of online discussion forums (Himelboim, 2008; 2011).

Figure 6-2. Distribution of participant comments and responses

Like many observed networks, these basic characteristics of the discussion forums of *The Chronicle* recommend analysis into the possible mechanisms or logics contributing to their achievement. The small locus of frequent participants provides one potential starting point that might be illuminated when coupled to the opposite. The following analysis thereby begins this investigation with an analysis of the practices characterizing the most and least frequent contributors to the forums.

**Content Analysis: Frequency Groups**

The following content analysis of interactive and rhetorical practices develops an analysis of the practices of frequent and infrequent participants. The notions of interactivity and rhetorical interactivity used here to understand these practices represents only an analytical frame from which analysis can develop toward a more complex articulation of the practices involved. Looking to interactivity and
rhetorical interactivity identifies patterning among dimensions of practices that can be further analyzed for the ways in which these regularities stand in relation to the complex dynamics of practice observed.

Turning to these practices reveals distinct patterning within the online comment forums of *The Chronicle of Higher Education*. An active minority of participants frequently posting comments are clearly in evidence as 10% of the users (n=100) contribute over half (54%) of the total set of comments. Moreover, the five most frequent participants contribute approximately 13% of comments to the forum while the nearly half the total participants, the single posters, contribute a similar 12% (Table 6-2). These actors and actor groups represent the polar ends of participation within the forum and, consequently, might be profitably compared. The discussion of the results below highlights significant variances in the patterning of practices between the two groups.

Table 6-2. Interactive practices among frequent participants and single posters

<table>
<thead>
<tr>
<th>Username</th>
<th>Comments</th>
<th>Monologues</th>
<th>Replies</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ilhan2000</td>
<td>176</td>
<td>66 (37%)</td>
<td>110 (63%)</td>
<td>77 (44%)</td>
</tr>
<tr>
<td>aaron</td>
<td>94</td>
<td>16 (17%)</td>
<td>78 (74%)</td>
<td>46 (56%)</td>
</tr>
<tr>
<td>archman</td>
<td>107</td>
<td>28 (26%)</td>
<td>79 (74%)</td>
<td>60 (56%)</td>
</tr>
<tr>
<td>Henry Vandenburgh</td>
<td>83</td>
<td>23 (28%)</td>
<td>60 (72%)</td>
<td>55 (66%)</td>
</tr>
<tr>
<td>Keith Williams</td>
<td>64</td>
<td>17 (26%)</td>
<td>47 (73%)</td>
<td>44 (69%)</td>
</tr>
<tr>
<td>Freq. Participants</td>
<td>524 (13%)</td>
<td>150 (29%)</td>
<td>374 (71%)</td>
<td>282 (54%)</td>
</tr>
<tr>
<td>Single Posters</td>
<td>471 (12%)</td>
<td>353 (75%)</td>
<td>118 (25%)</td>
<td>227 (48%)</td>
</tr>
</tbody>
</table>

Immediately apparent, a nearly inverse ratio exists between single posters and frequent participants’ monologue/reply ratio. Whereas frequent participants most often reply directly to other comments (71%) than issue general, undirected monologues (29%), single posters perform the opposite. Among their comments the majority (75%) are monologues with only 25% as replies. That the tendencies exhibited between frequent participants and single posters in their interactive practices are nearly inverse
hold important consequences for the interaction patterns of each group, and their role in the discursive structuring of the online discussions.

Table 6-3. Content analysis of rhetorical practices (Totals)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgment</td>
<td>21.6%</td>
<td>18.1%</td>
<td>12.4%</td>
<td>8.5%</td>
<td>32.3%</td>
<td>18.6%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Argument</td>
<td>16.5%</td>
<td>26.6%</td>
<td>27.6%</td>
<td>39.0%</td>
<td>19.4%</td>
<td>25.8%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Advice</td>
<td>11.4%</td>
<td>0.0%</td>
<td>2.9%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.8%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Humor</td>
<td>0.6%</td>
<td>1.1%</td>
<td>3.8%</td>
<td>1.2%</td>
<td>3.2%</td>
<td>2.0%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Interpretation</td>
<td>39.2%</td>
<td>36.2%</td>
<td>33.3%</td>
<td>29.3%</td>
<td>38.7%</td>
<td>35.3%</td>
<td>33.5%</td>
</tr>
<tr>
<td>Providing info</td>
<td>10.8%</td>
<td>3.2%</td>
<td>6.7%</td>
<td>2.4%</td>
<td>1.6%</td>
<td>4.9%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Demeaning</td>
<td>0.0%</td>
<td>3.2%</td>
<td>12.4%</td>
<td>11.0%</td>
<td>1.6%</td>
<td>5.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Personal Exp</td>
<td>0.0%</td>
<td>8.5%</td>
<td>1.0%</td>
<td>6.1%</td>
<td>3.2%</td>
<td>3.8%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Request info</td>
<td>0.0%</td>
<td>3.2%</td>
<td>0.0%</td>
<td>2.4%</td>
<td>0.0%</td>
<td>1.1%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

A content analysis of the rhetorical practices among these participants extends the work of Graham and Wright (2014) by addressing infrequent participants, and opens up the nature of commenting practices engaged by these differentially participating actors. Regarding the rhetorical practices performed by both frequent participants and single posters, both groups engaged in multiple practices corresponding to the findings of Graham and Wright (2014), with practices of acknowledgment, argument, and interpretation featuring as the primary practices of both groups. Frequent participants tend to offer acknowledgement and praise (18.6% vs. 14.9%) as well as engage in critical argument more frequently than single posters (25.8% vs. 19.9%) while the latter were more likely to provide personal anecdotes and
request information. Both groups most often provided interpretive comments, with frequent participants doing so slightly more frequently (Table 6-3).

Table 6-4. Content analysis of rhetorical practices (Interaction: Monologues)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgement</td>
<td>9.1%</td>
<td>0.0%</td>
<td>7.4%</td>
<td>16.7%</td>
<td>6.7%</td>
<td>8.0%</td>
<td>15.1%</td>
</tr>
<tr>
<td>Argument</td>
<td>6.1%</td>
<td>0.0%</td>
<td>7.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.7%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Advice</td>
<td>13.6%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.7%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Humor</td>
<td>0.0%</td>
<td>0.0%</td>
<td>7.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.5%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Interpretation</td>
<td>59.1%</td>
<td>80%</td>
<td>74.1%</td>
<td>66.7%</td>
<td>93.3%</td>
<td>74.6%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Providing information</td>
<td>12.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>4.2%</td>
<td>0.0%</td>
<td>3.3%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Demeaning</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>4.2%</td>
<td>0.0%</td>
<td>0.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Personal Experience</td>
<td>0.0%</td>
<td>20%</td>
<td>3.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>4.7%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Requesting information</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>8.3%</td>
<td>0.0%</td>
<td>1.7%</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

In their respective forms of interaction, the rhetorical practices of frequent participants and single posters point toward additional variances in practice within the forums. Among monologues, interpretation features as the predominant practice of both groups, however, frequent participants much more often contribute interpretive and clarifying comments than single posters (74.6% vs. 37.5%). These comments primarily respond to the content of the news article heading the forum and offer a generalized re-articulation of the news content presented, often in context of corresponding discussions in the forums (Table 6-4). Significantly, this represents the primary activity of single posters while frequent participants inordinately post replies to other users.
Table 6-5. Content analysis of rhetorical practices (Interaction: Replies)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgment</td>
<td>29.1%</td>
<td>21.8%</td>
<td>15.2%</td>
<td>12.1%</td>
<td>40.4%</td>
<td>23.7%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Argument</td>
<td>22.7%</td>
<td>32.1%</td>
<td>34.2%</td>
<td>48.3%</td>
<td>25.5%</td>
<td>32.6%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Advice</td>
<td>10.0%</td>
<td>0.0%</td>
<td>3.8%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Humor</td>
<td>0.9%</td>
<td>1.3%</td>
<td>2.5%</td>
<td>1.7%</td>
<td>4.3%</td>
<td>2.1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Interpretation</td>
<td>27.3%</td>
<td>28.2%</td>
<td>20.3%</td>
<td>13.8%</td>
<td>21.3%</td>
<td>22.2%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Providing information</td>
<td>10.0%</td>
<td>3.8%</td>
<td>7.6%</td>
<td>1.7%</td>
<td>2.1%</td>
<td>5.1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Demeaning</td>
<td>0.0%</td>
<td>3.8%</td>
<td>16.5%</td>
<td>13.8%</td>
<td>2.1%</td>
<td>7.2%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Personal Experience</td>
<td>0.0%</td>
<td>6.4%</td>
<td>0.0%</td>
<td>8.6%</td>
<td>4.3%</td>
<td>3.9%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Requesting information</td>
<td>0.0%</td>
<td>2.6%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

Among replies both frequent participants and single posters primarily acknowledge, argue, or interpret through their posts (Table 6-5). The rhetorical practices among the replies of both groups are remarkably alike. The most common practices of critical argument (32.6% vs. 31.5%), and interpretation and clarification (22.2% vs. 21.5%) are especially similar. Although consistent across groups, these findings suggest important consequences when remembered that replies constitute the majority of posts by frequent participants. This will be discussed among the implications of this case study in regard to the role of the materiality of practices in the forums of *The Chronicle*, and in relation to the sociotechnical agencies extending from material traces, participant interactive practice, and the design and use of the DISQUS comment platform.

Lastly, in the responses offered by other users to the comments of frequent participants and single posters, significant variances emerge (Table 6-6). Both frequent participants and single posters often
receive argumentative responses from others, with the former the more likely recipient (36.9% vs. 21.4%). Variances emerge in responses of acknowledgement, with frequent participants twice as likely to receive responses of agreement or praise (23.7% vs. 14.8%). More significant, observing the disparity in acknowledgement between the participant ilhan2000 and the remaining four frequent participants- who will be later described as “the professoriate”- the response frequencies identify variances in the reception of some comments within the forum over others, suggesting these relate to differences in discursive practices between individuals. Averaging among only the professoriate, the responses of acknowledgement to frequent participants increases to 49.2% compared to the 15.2% of single posters. Different responses of interpretation are received between the two groups as well. The comments of single posters are much more likely to be met with an interpretive or clarifying response than frequent posters (8.7% vs. 37.5%).

Table 6-6. Content analysis of rhetorical practices (Interaction: Responses)

<table>
<thead>
<tr>
<th>Interaction: Responses</th>
<th>ilhan2000</th>
<th>aaron</th>
<th>archman</th>
<th>Henry Vandenburgh</th>
<th>Keith Williams</th>
<th>Freq. Part. (Avg)</th>
<th>Single Posters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgment</td>
<td>3.9%</td>
<td>45.7%</td>
<td>31.0%</td>
<td>36.0%</td>
<td>45.2%</td>
<td>32.4%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Argument</td>
<td>50.0%</td>
<td>19.6%</td>
<td>43.1%</td>
<td>48.0%</td>
<td>23.8%</td>
<td>36.9%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Advice</td>
<td>1.3%</td>
<td>0.0%</td>
<td>1.7%</td>
<td>2.0%</td>
<td>2.4%</td>
<td>1.5%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Humor</td>
<td>5.3%</td>
<td>0.0%</td>
<td>5.2%</td>
<td>0.0%</td>
<td>2.4%</td>
<td>2.6%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Interpretation</td>
<td>6.6%</td>
<td>17.4%</td>
<td>10.3%</td>
<td>2.0%</td>
<td>7.1%</td>
<td>8.7%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Providing information</td>
<td>11.8%</td>
<td>6.5%</td>
<td>3.4%</td>
<td>2.0%</td>
<td>4.8%</td>
<td>5.7%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Demeaning</td>
<td>15.8%</td>
<td>2.2%</td>
<td>0.0%</td>
<td>4.0%</td>
<td>4.8%</td>
<td>5.3%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Personal Experience</td>
<td>5.3%</td>
<td>6.5%</td>
<td>5.2%</td>
<td>4.0%</td>
<td>9.5%</td>
<td>6.1%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Requesting information</td>
<td>0.0%</td>
<td>2.2%</td>
<td>0.0%</td>
<td>2.0%</td>
<td>0.0%</td>
<td>0.8%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>
These findings present an interesting though superficial depiction of interactive practices constituting the online discussion forums. Significant interaction patterns and rhetorical practices between frequent participants and single posters include: (1) the inverse ratio of monologues to replies between the interactive practices of the two groups; (2) the shared primary rhetorical practices of interpretation, acknowledgement, and argument, especially among replies to other participants; (3) the tendency of frequent participants to offer interpretive monologues whereas single posters engage in various practices, (4) Frequent participants are much more likely to receive polarized responses, either in acknowledgement or argument, whereas single posters tend to receive interpretive or clarifying responses. These findings, however, necessitate contextual elaboration within a qualitative, discursive analysis identifying the ways in which these interactive and rhetorical practices constitute articulations that enable and constrain meaning within the comment forums. Furthermore, analyzing these practices discursively allows an understanding of interaction patterning along lines of antagonism which the latter serves to perform and thus actively shape, maintaining discursive boundaries and contributing to the emergent structuring of the online discussion forums.

Frequent Participants

The following discourse analysis invigorates the three significant interaction patterns revealed through the content analysis described above. Among the five analyzed frequent participants distinction is made between the first user, ilhan2000, and the remaining four, collectively labelled “the professoriate.” This distinction follows from the defining feature of the discourses articulated across the two year period analyzed in *The Chronicle*, what can be described as a primary antagonism, a difference constitutive of wider logics of equivalence that organize the multiple, disparate discourses and secondary antagonisms along an intelligible topology. Along this antagonism the unique functions respective to frequent
participants as they differ from single posters, presented last, becomes similarly intelligible, and will be followed throughout this discussion.

**The Dreamer**

“MOOCs will die soon,” begins the first posting by ilhan2000, the most frequent commenter (n=176) throughout the two-year period in which prognostication and interpretation would feature as his forte (ilhan2000, 2012). This death sentence he later explains:

You do not understand what MOOCs is. MOOCs is an acronym created by marketing company Coursera. MOOCs are just an experiment. But unfortunately universities did not understand that and everybody tried to jump into bandwagon. Sure MOOCs will die. But meanwhile a new structure came up. ONLINE by elite universities such as MIT Harvard Stanford. They said it is free now but with a small fee later. Now edx progress very strongly toward to provide degrees too. Cost per person so low therefore they will charge a small fee too such as $ 50-100 may be less. Then what Thrun said will be realised in 10 years not 50 years [sic]. (ilhan2000, 2013)

An earlier May respondent summarizes ilhan2000, or ilhan’s, general reception: “If this is satire, it's brilliant. If it isn't, no critic of MOOC-based learning could possibly make a better case against them” (david_williard, 2013). In reading a sort of farcical prophecy portending a future of cheap, open online courses opening access to the most prestigious American universities, fellow commenters often easily dismiss such comments. Acknowledging that “I am a dreamer,” ilhan’s dream, which cements to a faith in the future MOOC revolution of higher education, presents a discourse and figure that are argued against with a deep seriousness among participants to the discussion forums (ilhan2000, 2013). As a result, the figure and discourse of ilhan evokes constitutive tensions organizing user discourses in the discussion forums of *The Chronicle*. 
The dreamer self-identifies as Turkish, and “a graduate of Stanford in engineering” who helped design “the first anticollision [sic] devices for airplanes.” “I read all coments,” he writes, and “I write very often to Governer [sic] Brown of California” (ilhan2000, 2013). (3) A consistent interpretation is articulated by ilhan who problematizes MOOCs along specific, determinist lines: technological innovations now afford the cheap and global delivery of college courses such that a massive transformation of higher education has begun. With prophetic certainty, ilhan draws three central conclusions: the development of online open platforms represents the inevitable paradigm of future education; given high start-up costs and an open market, students will inevitably select MOOCs offered by prestigious institutions that, through economies of scale, will achieve global, mass enrollments and, according to ilhan, will eventually begin offering degree (e.g. MITx); thus, the only alternative for community colleges and less-renown universities will be to accept a licensing model where a few elite schools produce and license courses to other institutions which are allowed to cut spending and tuition, improve access, and stay viable in a market driven by prestige brands and their undoubted educational quality.

The interactive practices of ilhan present a twofold pattern: one consistent with other frequent participants and the other presenting an important variance. Ilhan, like all frequent participants, (1) predominantly replies to other users, as well as (2) primarily exhibits rhetorical practices of acknowledgment, argument, and interpretation. In these practices he seeks to interpret and clarify issues (3) present in the attendant article according to his specific interpretations (39.2% total; 59.1% of monologues), while also acknowledging others who similarly describe MOOCs (29.1% of replies). Conversely, interlocutors respond to these interpretations in overwhelming disagreement (50% arguing/critiquing) that significantly slips often into demeaning critiques (16.9% demeaning), while at the same time offering few acknowledgements/agreements (3.9%). These critical responses identify and challenge the salient claims and their assumptions ilhan routinely puts forth. To the inevitable march of technological progress: “And all change is for the better and all resistance of all change is futile. Sad”
(Thumocides, 2013), rejecting the “dream” of degree-bearing MOOC programs: “Yes, maybe that works in the ilhan world of fantasy, but here on Earth, Stanford costs ~$60,000/year and isn't about to grant actual Stanford degrees online for a few hundred dollars” (Unemployed_Northeastern, 2013); and addressing the absence of concern for educational quality: “If you bothered to look at some data, you would have seen this coming. There is plenty of research that shows low-achieving and younger students struggle online—even in classes of 25” (pols437, 2013).

In the interaction between ilhan’s interpretive claims and other participants’ disagreements and dismissals, the figure of ilhan emerges as part-unwitting laughing stock humoring the comment forums and, simultaneously, a representative characterization of those supporting the MOOC movement. As the latter, ilhan is received with a serious, sneering opposition that articulates the eccentricities of ilhan’s commenting as general attributes of a commercial and technocentric menace threatening higher education in pushing the adoption of MOOCs. As such, ilhan features as a novel regular to MOOC discussions:

Where is ilhan? Has anybody seen him recently? It's been forever since he showed up to burble [sic] about MOOCs. I'm worried about the little monomaniac. (weeks, 2013)

probably got a higher paying blogging gig for endorsing hydraulic fracking or removing evolution from textbooks. (archman, 2013)

Clearly noted for extremism, ilhan is approached across the primary antagonism organizing the forums aligning him within a disparate assemblage of actors commonly labelled neoconservative. Beyond humor, the numerous grammatical errors and syntactic quirks distinctive of his comments become a point of sober derision, a stigma of the inferiority of MOOCs as an educational model. Thus both the comments and figure of ilhan become representative of a political enemy: “Behold the argument against MOOCs,” begins one reply to ilhan’s post, “If this is the product of MOOCS, then I would like to add this: Well. MOOC doesn't teach write effectively. MOOC no teach think well. MOOC fail to achieve goal of education. MOOC bad” (3rdtyrant, 2013) This line of ridicule is not isolated, another respondent links
another ilhan comment to the news Georgia Tech will offer an online master’s in computer science, “This response reads like the typical online student response to a discussion board question, lacking both depth and insight. But no cause for alarm -- you will receive credit for this response at Georgia Tech” (Publaw, 2013). Elsewhere:

They are facts" is not an English sentence. Neither is "Yes teachers 1,000,000 will be jobless in 10 years." But when MOOCs have completed their destruction of the American system of higher education, no one will be left who knows that. Illiteracy rulez! Go for it, venture capitalists!

(Observer, 2013)

Throughout the comment forums the recognition of ilhan as a regular (“Has anyone seen ilhan? Isn't ilhan supposed to be here?” (weeks, 2013)), eccentric novelty quickly darkens as interlocutors successively articulate his figure among a host of actors made equivalent in their inimical positioning relative to discourses stressing the quality of traditional, residential education.

**The Professoriate**

The remaining four frequent participants all self-identify as professors. There is, apparently, a gratefully-former adjunct (Aaron, 2013), a professor who likens MOOCs to Twinkies ("don't eat the twinkie!" - (archman, 2014)), an “ex-state college professor who got [sic] PhD at 51” (Henry Vandeburgh, 2013), and a University of Virginia physics professor (Keith Williams, 2013). Like ilhan, these commenters stand out for their frequent contributions (n=343). However, unlike ilhan, they articulate discourses organized around the particular, primary antagonism that rejects MOOCs as inferior to the embodied, traditional university classroom they perceive as under threat. Along this antagonism, before any shared professional characteristics, their gathering as members of what will be labelled “the
professoriate” ultimately takes shape, and, again like ilhan, defines an organic position within the discourse.

This position finds orientation through articulation of the primary antagonism organizing their discourses throughout the forum. Across the comments of “the professoriate,” (2-3) a consistent interpretation pervades:

I'm sorry, but a MOOC is not teaching (Aaron, 2013)

By their very nature, MOOC's are *not* student-centered… you end up with *inferior* services. (archman, 2013)

MOOCs are worse even than normal online classes, which are worse than anything live. (Henry Vandenburgh, 2013)

MOOCs have taken on a parasitic aspect that concerns me… I see real promise for MOOCs in the preparatory and continuing education sectors. That is where the focus should be, in my view. (Keith Williams, 2013)

Articulating a spectrum in which the traditional, embodied classroom is privileged, these users draw a primary antagonism that serves to organize discourses within the online comment forums. As primary, the difference between the traditional classroom, understood as the unique locus of effective teaching and learning, and MOOCs translates the range of elements brought into discussion.

This antagonism intensifies with the common assertion that “MOOC's are being heavily pushed as for-credit surrogates for college classes” (archman, 2013). Consequently, the classroom, site of “an intimate process,” (Henry Vanderburgh, 2013) remains under threat by models which are “not equivalent” (Aaron, 2013) and worse represent “attempt to "TA" the professoriat [sic] (like "flipping" only worse.)” (Henry Vandenburgh, 2013). Importantly, this threat follows from the same prestige universities/brands ilhan perceives as unmistakable signifiers of quality education ready to be opened (licensed) to the global
masses. Instead, for the professoriate, they become heralds of a widening professional and social inequality gap:

Yes, colleges will "adapt". The poorest colleges will outsource their courses to contracted MOOC's, and not even have faculty, or even classrooms. The wealthiest colleges will boycott MOOC's altogether, except for the MOOC's they themselves sponsor and "sell" to private industry. You can see where the trend is going. An even greater disparity between educational quality in higher education. (archman, 2013)

Turning to the discourses of these frequent participants reveals the primary antagonism structuring discussions within the forums: the inferiority of MOOCs to the traditional classrooms they stand to displace. From this articulated, constitutive difference are ordered a range of other elements that enter discussion and which are then ordered by logics extending from this primary antagonism.

If we recognize a structuring of discourses across the comment forums as articulated around the primary antagonism described above, discourses become defined, that is, arguments form to which users such as those of the professoriate become inscribed. As with ilhan2000, the professoriate articulates these discourses with a consistent and rigid discipline, enforcing antagonisms that both accord privilege and identify opponents. In this regard, if the traditional university classroom is the only site of quality education then only professors teaching those courses are fit to make judgments that might transform the traditional educational model:

The actual fact of the matter, is that we in the professoriate fully understand (better than anyone else, since we actually *do* the teaching) that some pedagogy models work better than others for learning. (archman, 2013)

What makes you think the average student will learn better? We who actually teach them know that MOOCs won't work. (Henry Vandenberg, 2013)

Well now... this is unfolding *exactly* as many of us predicted. (Keith Williams, 2013)
There is a confidence, a distinct certainty in the incontrovertible facts discernable through the chains of equivalence generated from the antagonism that follows from discourses defending the unassailable quality of traditional education. This certainty is not constant; rather, it rises only when the primary antagonism stands threatened. However, when threatened, lines become quickly drawn yielding opponents (such as ilhan) from whom all bases of authority are pulled out from underfoot. In this regard, the (1) tendencies of frequent participants to reply (71.7%) rather than issue monologues (24.2%), as well as (2) adopt rhetorical practices of either acknowledgement/agreement or argument/criticism shapes the discursive topology of the comment forums. In reply to comments infringing on discourses articulated by the professoriate, especially those praising the educational virtues of MOOCs, become directly opposed to arguments to the contrary, replies re-articulating the delinquent or variant comment along lines that would re-establish the integrity of the primary antagonism organizing the professoriate’s discourse. Importantly, the practice of replying articulates both semiotic and material resources, as it utilizes affordances of the interface to position replies selectively within the comment thread.

**Single Posters**

An objective of this analysis sought to compare frequent participants to other, less frequently contributing users. Turning, consequently, to the practices of single posters opens a comparative opportunity to analyze how frequencies of participation relate to different forms of participation in the construction of co-produced media. As earlier revealed in the content analysis of the interactive practice between frequent participants and single posters, an inverse pattern of interaction was found in the contribution of replies and monologues to the forum.

This leads to important consequences for the organization of the discussion forums. Posting a majority of monologues, single posters comments thus conform to the default chronological ordering of the comment threads. As a result their ordering reflects less a critical aspect of practice than instead the
confluence of time of participation and the functioning of the DISQUS system. In contrast to frequent participants who critically target and respond to select comments, single posters contribute undirected, monologic comments that contribute to discussion threads lacking discursive interaction, cross-reference, and general sense of cohesion.

Additionally, single posters include greater rhetorical diversity than frequent participants. As has been explicated, interpretation features as a primary rhetorical practice shared by both frequent participants and single users. In marked distinction from the certainty of the former, (2) the interpretations of single posters are often tentative, inquisitive, and qualified, as well as often articulated around posed questions:

I am intrigued by how this is being analyzed… (ghsmith76, 2012)

I have a lot of questions regarding the ramifications of MOOCs… (Jason, 2013)

I'm not certain that there will ever be an ideal solution to this issue… (Staffnadjunct, 2012)

This relates interestingly to the higher frequency of interpretive and clarifying responses single participants receive. As described below, the generally open articulation of single poster’s comments becomes the focus for responses that offer definitive responses.

Practices of single posters often feature diverse, particular comments, such as anecdotes, within their discussions. Whereas frequent participants frequently post, they do so while articulating a consistent, disciplined discursive program that eschews speculation for certainty, the particular for the panorama. These differences also relate to the broader distribution of rhetorical practices performed by single posters than frequent participants, the former more often expressing personal experience and requesting and providing information. The example below finds a single poster’s comment responded to by one of the five analyzed frequent participants:

Very well; I would agree with a critique on the idea of credit for its own sake… but I'd have to disagree with many critiques on content. Anecdotally, I've heard from students who are blown away (and happy to the point of tears) at having found free access to structured, vetted, high-level
information… There are plenty of complexities that my "anecdotally" rolls right over, but speaking in absolute terms, there is positive intrinsic value and often financial/professional value in free online courses. (seanconnor, 2013)

Not "free" for very long. Jeeze. (Henry Vandenburgh, 2013)

Though this response may be uncharacteristically short, the interactions do exemplify patterns observed in the discourses of single posters: qualified, tentative judgments, and anecdotal evidence. For frequent participants, in contrast, the curt response exemplifies the tendency to reply in disagreement and certitude when alternative arguments are expressed.
Chapter 7

Implications

The implications of the preceding discussions address the discourse emergent to *The Chronicle* as a co-produced configuration of networked media, and the way in which this configuration enacts particular social objects, like MOOCs, as meaningful. These implications extend from the practices constructing this configuration, producing digital content in ways that vary between different frequencies of participation, and which perform the *The Chronicle* as a nexus of inscription within a network of actors. Conceptually, the practices of these actors have been understood along logics organized according to antagonisms emergent to the forum. These discussions lead to a consideration of the ways in which a discourse network becomes organized and structured through the sociotechnical enactment of antagonism.

The following discussion will also address more general questions concerning the emergence of a discourse network in networked digital media. Having conceptualized a process of structuring the latter through the concept of antagonism, exploring what this entails for theorizing processes structuring online practice might reveal new insight into the discursive conditions of these processes.

Frequent Participation and the Structuring of Practice

As the content and discursive analysis describes, frequent participants and single posters exhibit differences among the interactive, rhetorical, and discursive practices contributing to *The Chronicle*. These include: (1) the inverse ratio of monologues to replies between the interactive practices of the two groups; (2) the shared primary rhetorical practices of interpretation, acknowledgement, and argument, especially among replies to other participants; (3) the tendency of frequent participants to offer interpretive monologues whereas single posters engage in various practices, (4) Frequent participants are much more likely to receive polarized responses, either in acknowledgement or argument, whereas single
posters tend to receive interpretive or clarifying responses. These interactive and rhetorical aspects of their respective practices contribute to the articulation of the antagonisms described above. These center on the disputed understanding of MOOCs as a form of education. Whereas the professorate strictly demarcates the latter from the educational legitimacy of traditional education, ilhan articulates MOOCs as full proxies for the latter and sets about systematically planning their development and expected consequences for higher education.

These practices, in their discursive, interactive and rhetorical aspects, actively construct the discourse network organized around *The Chronicle*. The question of the process of this construction, as differently contributed to by participants either frequently contributing or contributing only once, becomes critical to understanding the formation of the artifact configuration emerging to organize social understandings of MOOCs. Three conclusions can be made:

*Interaction patterns feature the ongoing appropriation and re-articulation of discourses within broad, generalized discursive formations organized around a central antagonism that, in turn, actively shapes the emergent discourse network.* Returning to the interesting case of the frequent participant ilhan2000, the interpretations he articulated by themselves structure a consistent discourse in which elements (quality of prestige universities, technical affordances which drive down prices while increasing delivery capacities, licensing models, etc) are related within a consistent, coherent argument. Through his interactions with other frequent participants (i.e. “the professoriate”), however, certain elements latent to his writing (poor grammar, misspellings) became abstracted, appropriated, and re-articulated within an alternative discourse that positioned him as a partisan of the MOOC movement to displace traditional higher education, but also a representative of the claimed educational poverty identified with this movement.

This cannot be addressed as a singular example. Rather, as the capacities of the internet potentially allow increased participation and a diversity of perspectives to interact in locally-global sites such as news media discussion forums, a concurrent tendency responds to the diversity and complexity of
these discourses with more expansive antagonisms that function to organize and make intelligible this complexity. In the discursive field emerging through *The Chronicle* forums, the primary antagonism organizing discussion between those who would seek to uphold traditional practices of higher education and those supporting a MOOC movement to destroy it performs this organizing, discursive function.

Recalling the conclusions of Kelly et al. (2006), the capacity for appropriation and re-articulation of others’ interpretations in the service of alternative, ideologically-opposed discourses evidences the function of boundary maintenance the authors recognize. They write:

> In anarchic… online political discourse networks, there is active boundary maintenance, informed by group norms held even among those who disagree strongly with one another about the topics under discussion. An author must be interesting to be engaged. The discourse network is shaped, and maintained, by *demand*, not *supply*. (p. 417)

In this sense, “the professorate” clearly finds ilhan2000 interesting as his discussions threaten and subvert discourses articulating the exclusive legitimacy of traditional, brick-and-mortar courses. Here interaction patterns emerge in the discursive demand for his comments as a resource and evidentiary support for their own articulations. This relates closely to the identification of ideological divides, here conceptualized as antagonisms, that Kelly et al. (2006) find as primarily shaping online discourse networks, and yielding a: network structure in which an author population of discursive opponents, though politically clustered into two (or potentially more) distinct groups, are tightly bound in a central discussion core by dense bonds of replies that tie opponents to one another more tightly than allies. (p. 415)

The antagonisms which organize the boundary maintenance practices of participants actively shapes the emergent network structure of online discussions, arbitrating between a polarized yet densely connected core, and outlier or “fringe” discourses which fall outside articulations of the antagonism.

Furthering the conclusions of Liang (2014) identifies cross-ideological debate between participants to be an independent principle in organizing political forum discussions, this analysis provides evidence of such cross-ideological debate, and further suggests that the structural and
conversational mechanisms associated with frequent participants extend from the operation of antagonisms that characterize their interactions and, as result of the volume of their contribution, serve to organize interaction patterns along these lines of antagonism within online spaces and in turn contribute to the structuring of online discussion networks.

*Interaction patterns between frequent participants and single posters vary according to the space each leave open to contingency, with the former contributing to discursive closure within the discussion forums.* The inverse ratios between monologues and replies exhibited between the two user groups coincides with tendencies for definitive, conclusive arguments by frequent participants, while single posters more often articulated tentative, speculative comments or provided personal anecdotes and requests for information that similarly avoided determinate conclusions. Considering the online comment forums as a discursive space organized along lines of antagonism, the often monologic interactions and rhetorical practices articulated by single posters more often function to open spaces of contingency within the forum, inviting new possibilities to the discussion. Questioning, qualification, and requests for information serve to invite new discourses, increase complexity, and thus the potential for more diverse or dynamic discussion.

Conversely, frequent participants articulate determinate, consistent and often argumentative discourses that seek out contingency in the discursive field and engage, via replies, these comments in efforts of critical appropriation, re-articulation, and closure. Importantly, the technical platform and interface of the comment forum positions replies directly opposed to the initial comment to which it is a response, interrupting the default chronological order of the comment thread. Thus acknowledgment or argument, articulated in reply, functions to reproduce discourses or introduce antagonisms respectively, both present articulatory and material displacements that serve to open or close spaces of contingency within the discussion forum.

This finding relates closely to the leadership and moderating role recognized in core members of online communities. Analyses have recognized these members as motivated in “safeguarding the
integrity” of a particular practice (Alonso & O’Shea, 2012, p. 212; Bryant et al., 2005), with individuals in online forums assuming the role of the “informal moderator” (Jahnke, 2010, p. 540). The frequent participant’s interjectory interaction patterns, stepping in at selected points throughout the streams of discussion, functions as a form of moderation. Re-directing discussions, framing issues, and praising posters sharing similar perspectives while highly critical of those who don’t, frequent participants emerge as an informal moderating presence in the forums. Recalling Graham and Wright’s (2014) conclusion that frequent participants roles included “replying to debates and summarizing longer threads for new users,” or Albrecht’s (2006) label of “old hands,” the rhetorical practices and interactive patterns of frequent participants, in contrast to the majority of single contributors, suggest their active role in shaping, constraining, and enforcing community practice within online discussions. In qualification of the “positive functions” recognized by Graham and Wright (2014), this analysis suggests that frequent participants significantly contribute to discursive closure within online discussion forums.

Frequent participants contribute to the structuring of online discourse. This analysis has emphasized the function of interaction patterns and rhetorical practices in the articulation of antagonisms contributing to the emergent organization of online discourse. The antagonism organizing an understanding of MOOCs as potential surrogates for traditional, brick-and-mortar courses defined the boundaries of relevant conversation on the discussion forums hosted by The Chronicle. As observed in this analysis, comments in these discussion forums held closely to the ideological divide organized by this antagonism, with the positions of participants organized as either partisans of an apparent MOOC movement to supplant traditionally-defined higher education or its obdurate defenders. In addition, frequent participants and single posters in this analysis were identified as exhibiting variant interactive and rhetorical tendencies, encouraging the closure or opening of discursive contingency respectively within the spaces of the comment forums.

Together these two conclusions influence a third, which recalls the recognition initially motivating analysis of frequent participants: the very frequency of their contributions. In their ongoing
activity, constancy, and tenacity performing the tripartite practices of acknowledgement, argument and interpretation, and doggedly positioning these in a material and discursive re-assembly of the interface, frequent participants provide an articulatory core maintaining the primary antagonisms structuring a discursive space. By their very presence and recurrent practices, frequent participants serve to establish durable structures within dynamic comment threads.

*The Chronicle as Discourse Network*

This section addresses the three antagonisms organizing discourse in *The Chronicle* and analyzes how these antagonisms are achieved through practices configuring material traces across the online forums. The particular form of discourse that results defines a discourse network that enacts a particular understanding of MOOCs and constrains others through logics extending from these antagonisms.

Three varieties of MOOCs have become established and, at points, are each articulated within the space of *The Chronicle*. The first and most prevalent can be described as xMOOCs, a general model prevalent and popularized through platform providers such as Coursera, edX, and Udacity. According to Downes (2013), xMOOCs constitute a “MOOC as eXtension of something else.” The extension indicated adopts a linear e-learning model, translating professorial lectures to digital videos and pairing them with supplementary course materials, exercises, and assignments. Articulations of xMOOCs “follow an ‘instructivist’ online course design in which learning goals are predefined by an instructor, learning pathways structured by environment and learners have limited interactions with other learners” (Littlejohn, p. 3). xMOOCs are structured hierarchically with the instructor controlling information distribution to students, giving the courses a “monological” character (Adams, Yin, Vargas Madriz, & Mullen, 2014, p. 203).

The second variant, less prominent than xMOOCs but still often discussed in the forums regards MOOCs as a supplemental teaching aid within a model of blended learning. MOOCs as a component of
blended learning models modify co-present, brick-and-mortar courses with the use of digitally-accessed resources and activities. According to Bonk and Graham (2006), blended learning systems “combine face-to-face instruction with computer-mediated instruction” (p. 5). MOOCs thus provide a computer-mediated component to embodied classroom activities, opening access to new instructional resources for teachers to utilize in course designs.

Last, and very infrequently discussed, are cMOOCs or connectivist MOOC. The cMOOC features most prominently in its omission. Although its origins include the coinage of the term MOOC itself, the Chronicle largely ignores ongoing connectivist experimentation using MOOC platforms. In the earliest Chronicle article describing MOOCs, the experimental first MOOC taught by Stephen Downes and George Siemens at the University of Manitoba is described in speculation over the “future of open teaching” (Parry, 2010a). Downes (2008) identifies cMOOCs with connective knowledge, an emergent property of the ongoing development of networks. Connectivism strives for the development of “knowing networks” in which diverse and autonomous actors interact within open network structures, and produce resources of collective, “connective knowledge,” and its attendant processes of learning (Downes, 2008, p. 99). cMOOCs thus concern the development of such networks and the emergent resources they produce through processes of growth and interaction not dissimilar to those of communities of practice.

Taking these three forms as discourses that at times emerged in discussions in The Chronicle, both in staff articles and by participants in discussion forums, the question can be asked as to why a particular discourse emerges across the The Chronicle to characterize a collective understanding of MOOCs as an object of knowledge. Through the antagonisms described this understanding centers on a construction of the xMOOC. This construction is not derivative of reporting by The Chronicle as a mass media; it is not a received understanding but one actively constructed through sociomaterial practices and agencies emergent to The Chronicle.

Discussing the relationship between the limits of a discourse network and antagonism, Laclau (2004) describes the performance of limits both internal and external to a discursive system as such. An
internal limit reflects the articulations of conflict previously described in the antagonisms between faculty and administration, traditional education and MOOCs, less prestigious educators and star professors. Laclau (2004) can regard this as an “inclusive exclusion,” that which is excluded is “internal to the space of representation” as a moment of the discourse, but it is articulated in a relation of negation that excludes it from that which it is negated (p. 319). In this sense, members of “the professoriate” frequently discuss MOOCs yet they hold it in opposition to the form of traditional, residential education they value and against which define the inferiority of MOOCs. The examples of antagonism described have all demonstrated the “inclusive exclusion” Laclau describes as internal to the space of representation. As earlier described this form of antagonism tends to “disrupt a system of differences and simplify the social space” (Laclau, 1988, p. 256) through logics of equivalence that can, for example, organize the field of higher education between pedagogies of interactive, close colloquy and those of merely content delivery.

As a discourse network, The Chronicle has been shown as riven with these antagonistic simplifications of space that constitute the discourses in which comments are held meaningful between the interactions of participants. If these antagonisms organize discourse internal to the discursive system as a space of representation, what becomes necessary, however, is defining the external limits of the system, what can be described- extending Laclau’s description- as the “exclusive exclusion” of the discursive system. When Laclau (2004) describes discursive antagonism in relation to the limits of a discourse or discursive system, he conceptualizes antagonism as performing both the internal divisions of the system, its inclusive exclusion, but also the limits of the system itself, a demarcation between the system and a “a kind of radical nonrepresentability” (p. 319). This nonrepresentability consists of the comment never posted, the article never published, and the website never created. Recalling that discourse understands the logics or rules organizing practices, nonrepresentability arises through the systematic exclusions that result from discursive systems of rule-governed practices.

What emerges in The Chronicle are discourses featuring antagonisms that at once define its internal space of representation as well as what is not represented. In this sense, the three antagonism here
articulated, between faculty and administration, traditional education and MOOCs, and the majority of educators and star professors, organize logics defining the way MOOCs are discussed and, implicitly, how they are not. These antagonisms construct an internal exclusion ordering these subject positions and educational models in specific relations of opposition, however, these antagonistic relations define an exterior that is precluded as a result of the logics antagonistically organized. Critically, these antagonisms center on an institutional articulation of education. This context sees education constructed as an institutional provided and governed practice. Articulated as an institutional practice, education organizes the intelligibility of the full space of representation constructed in The Chronicle. The institutional discourse is not prior to or external to the antagonisms developed in the practices of The Chronicle, rather it is constructed precisely through these antagonisms which include and organize what institutions, institutional actors, practices and their relations constitute this discourse.

Finally, these three antagonisms can be said to construct both the internal divisions, between the nodal points described, as well as the external boundary of the system, as defined by an institutional discourse contextualizing the issues discussed concerning MOOCs. As a result xMOOCs emerge to define the social understanding of MOOCs. xMOOCs become constructed around the antagonisms that define the internal divisions and external boundaries organizing practices in The Chronicle. Additionally, according to these same antagonisms, cMOOCs become largely ignored, relegated to the periphery or not discussed at all. cMOOCs remain, in the context of the discursive system organized around The Chronicle, irrelevant and even meaningless as “MOOCs” as their articulation lies external to the institutional discourse in which education and, in turn, MOOCs become understood. As practices external to the provision, accreditation, and authority of institutions of higher education, cMOOCs become excluded through the organizational principle discursive system of The Chronicle.
Chapter 8

Conclusion and Future Work

Earlier, literature in network analysis was discussed as an area attempting to understand the structuring of online discussion networks. Issues were identified relating the theoretical scope and form of explanation offered to explain processes structuring the interactions between actors online, and how the approach of network theory precluded analyses of structural conditions extending outside the properties of modeled networks. In light of the implications discussed above regarding the concept of antagonism, discussion will now turn to the possibilities for future work that might address deficiencies related to network theoretical approaches.

Turning again to the notion of preferential attachment, the premises on which it is based allow an opening to the problem of theorizing and analyzing the processes behind emergent network structures. The concept of preferential attachment would seem, at first glance, inappropriate given the particular case study in which, for responses received, no participants to the comment forums receive disproportional attention from other participants to the extent a power law distribution becomes applicable. The concept remains generally directive, however, as it orients much contemporary research. First, as discussed in the literature review, many significant accounts of the structuring of online practice extend from network analyses of online communities in which the structuring mechanism is related to preferential attachment. This analysis seeks to provide an alternative perspective. Second, the concept itself illuminates the theoretical approach of network theory, one argued here to be increasingly problematic when extended to social and co-produced media practice. Lastly, the very lack of power law distributions becomes significant in itself as many analyses take such to be “a universal organizing principle that governs the way in which many different real-world networks evolve over time” (Panzarasa et al., 2009, p. 917-8). As a result, the complexity of exponential structural distributions remain obscure.
Johnson et al. (2014) explain that Barbasi and Albert’s model of preferential attachment relies on two fundamental premises: “(1) an open system with new entrants, and (2) new entrants being aware of and acting on the preferences of existing participants” (p. 798). As described before, the open system which preferential attachment theories assume both implies access as well as closure or limit. A system is open if new entrants might enter the system. This same system, however, must constitute some element of closure in that it must be defied as a system as such. As a particular system, limits must characterize the boundaries of the system and give meaning to processes of entry or, conversely, non-entry or exclusion. New entrants are important because it is only through the aggregate of their practice that certain nodes in a network take on asymmetrical properties, most commonly a disproportionate amount of response or attention by other actors in the system. The second premise explains that new entrants require access to the system as a prerequisite for their understanding and agency to align with existing conditions of such a system.

In the context of this study, these two premises stand out for two reasons. First, as described earlier, the concept of antagonism describes the discursive mechanism by which limits are constructed, both defining the internal configuration of a system as well as its external limits. The Chronicle was thus described as a discursive system configured internally along an antagonism in which the extent to which MOOCs constituted a form of education became disputed. Specifically, over the issue of MOOCs as a substitute for residential post-secondary courses. The external limits of this system were described as coterminous with an institutional discourse: a configuration of online texts hosted by and constituting The Chronicle overwhelmingly constructed a context in which MOOCs and the aforementioned antagonisms organizing their understanding were meaningful through the common understanding that education per se constitutes an institutional experience, service, product, etc.

In this respect, antagonism provides a theoretical approach for understanding the character of an “open system” that problematizes the common understanding of openness as free access to participation. The Chronicle provides such an open access system, most anyone given an internet connection can post
comments to any one of the numerous article-attendant discussion forums. Yet *The Chronicle*, and the articles and discussion forums - the webpages - analyzed here, represents a small portion of the total space or participation associated with *The Chronicle*. There are numerous other articles, stretching back years and continuing to grow, that one can contribute to and that have nothing to do with MOOCs.

Consequently, the discourse network articulating MOOCs within the space of *The Chronicle* represents an emergent configuration performed by particular participants and their practices, in addition to the newspaper and technologies involved. As social and co-produced media increasingly develop across networked expanses of online space such that their boundaries becomes less immediate, a corresponding need arises to define the limits of emergent media or artifact configurations constructed at local points through particular participatory practices. Theorizing antagonism, as demonstrated in this analysis, provides an analytical approach for not only defining the internal configuration and external boundaries of a particular discourse network, but of addressing such a network’s position in broad, complex and developing media ecosystems.

The second premise offered for preferential attachment, and the last point to be made, concerns the situated character of participant agency in online discourse: “new entrants being aware of and acting on the preferences of existing participants.” The issue of preferential attachment thus understands patterns of practice that point to implicit congruencies of decision among individuals, yet cannot account for how or why particular congruencies might arise. As described above, the nature of an “open system” becomes complex with emergent forms of social and co-produced media that cannot be identified, for example, with a single webpage, but rather constitute networked artifact configurations that draw together diverse media content. Understanding these as a discourse network reflects an understanding of discursive coherence that binds a configuration along particular logics that govern and are performed in participatory practice. Furthermore, the concept of antagonism has been described as organizing these logics to define the boundaries of a discourse and thus offer a significant theoretical approach to identifying the forms in which participatory practice might exhibit patterns of congruent decision making.
However, extending from the first premise, the concept of preferential attachment understands access to an open system as *prerequisite* to entrants coming to become aware of and act on the preferences of the system. According to a network theory perspective, this awareness and agency remains internal to the system, to which the entrants are allowed access and thus a particular conditioning. This study provides an interesting case in which new entrants, for example single posters, can participate within a system and yet exhibit preferences markedly aligned with those of existing participants. Antagonism theorizes this preference in the context of *The Chronicle* as a particular conflict between discourses over the educational legitimacy that MOOCs can claim among institutions of higher education. That single posters, who may or may not have observed the discussions of the forum before posting a comment, can often align with this antagonism, and especially the institutional discourse of education, points to the problem of the “open system” just described. Significantly then, as social and co-produced media participate within broad, online media ecosystems, it becomes increasingly likely that broad discourses stretching across networked space can provide points of coordination for participants as they interact in anonymous, collective processes of media production. Furthermore, theorizing these discourses as organized around antagonisms, these points of coordination become based in conflict and oppositional practice. Rather than focusing on notions of homophily or community, antagonism theorizes a more primary ground for forms of coordination and organization in processes of distributed, collective, and socially anonymous participation.

A final point becomes important here as well. Discussion has touched on the material character of the artifact configurations that emerge in social and co-production of media. Regarding the particular case of *The Chronicle* studied here, the materiality of the discussion forums enabled frequent participants in particular to structure threads of discussion through the form of interaction they adopted: choosing to selectively reply to other users rather than post monologic comments. Forming an entangled, sociomaterial agency with the DISQUS system, these interactive practices of frequent participants disrupted the chronological ordering of the forums and, through the frequency and consistent articulations
characterizing the latter, transformed the discussion threads into a structured pattern foregrounding the primary antagonism organizing the collective discourse. Returning to the notion of an existing preference characterizing a system that is understood in the concept of preferential attachment, this material displacement and structuring of the comment forums by frequent participants performs this “existing preference” in a particular, material way. Organizing the threads of the forum along a distinct patterning between, roughly, pro-MOOC argument and anti-MOOC argument, participants condition the “preference” of the forum by structuring the conditions by which new entrants might interact within the forum, and how those interactions will be attributed meaning. One conclusion that follows would be to understand preferential attachment, or any understanding of congruencies of decision in online practice as discursive congruence rather than a social congruence. This is to say in online spaces where interaction between participants is largely anonymous with respect to their past interaction histories, interaction patterning around congruencies of preference can be theorized as shared preferences emergent to a particular discourse and not necessarily a particular individual participant or actor. Again, any particular discourse exhibiting shared preferences must be organized around constitutive antagonisms.

These conclusions thus extend the implications of the case study and point to promising theoretical approaches to inform further empirical analyses of structures emergent to online discursive practice. The concept of antagonism, as theorized by Laclau and Mouffe, provides the central premise for these approaches, enabling a new focus on the way open systems of social and co-produced media can be understood as processes of collective practice organized around social conflicts that both configure and limit the practices and systems they constitute. As people continue to turn to networked, digital media as both a source of information as well as a primary space of activity informed by and co-producing this information, analyzing the forms of practice and structuring characterizing these activities becomes central to their understanding and broader consequence.
References


Littlejohn, A. (2013). Understanding massive open online courses (CEMCA EdTech Notes). Retrieved from


News Article References


Comment References


Aaron. (2013, May 9). Because humans have changed so much in the past 10 years… [discussion forum comment]. Retrieved from http://chronicle.com/article/As-MOOC-Debate-Simmers-at-San/139147/

Aaron. (2013, May 9). I'm getting really annoyed at those who say faculty who oppose this are only concerned about their jobs and their self interest… [discussion forum comment]. Retrieved from http://chronicle.com/article/As-MOOC-Debate-Simmers-at-San/139147/


archman. (2013, March 18). Unfortunately, the model you are drawn to is *not* the same one… [discussion forum comment]. Retrieved from http://chronicle.com/article/The-Professors-Behind-the-MOOC/137905/#id=overview


david_williard. (2013, May 2). If this is satire, it's brilliant… [discussion forum comment]. Retrieved from http://chronicle.com/article/Why-Professors-at-San-Jose/138941/


Gayle K. Brunelle. (2013, May 2). I think that whether or not you think there are "too many professors" depends on what you imagine teaching to be… [discussion forum comment]. Retrieved from http://chronicle.com/article/The-Document-Open-Letter-From/138937/

Genxnative. (2013, May 9). I think it is well publicized that the SJSU pilot was not designed to be profitable from the start… [discussion forum comment]. Retrieved from http://chronicle.com/article/As-MOOC-Debate-Simmers-at-San/139147/


Goldenrose. (2013, August 8). There is potential for enhancing traditional classroom teaching with some of these technological experiments with pedagogy… [discussion forum comment]. Retrieved from http://chronicle.com/article/MOOCs-May-Not-Be-So-Disruptive/140965/

Henry Vandenburgh. (2013, April 29). Okay. You've further convinced me that you IT guys who push this MOOC crap are just blithering idiots… [discussion forum comment]. Retrieved from http://chronicle.com/article/Why-Some-Colleges-Are-Saying/138863/

Henry Vandenburgh. (2013, March 18). The usual pattern is for elite school professors to lack teaching skills... [discussion forum comment]. Retrieved from http://chronicle.com/article/The-Professors-Behind-the-MOOC/137905/#id=overview


Jpmurphy. (2013, September 18). Catholic Universities are not likely to team up to offer MOOCs... [discussion forum comment]. Retrieved from http://chronicle.com/article/A-Catholic-Case-Against-MOOCs/141611/

Keith Williams. (2013, May 1). I think what you're describing in your first paragraph is not a MOOC, it's a "flipped" class... [discussion forum comment]. Retrieved from http://chronicle.com/article/Why-Some-Colleges-Are-Saying/138863/

Keith Williams. (2013, May 9). Well now... this is unfolding *exactly* as many of us predicted... [discussion forum comment]. Retrieved from http://chronicle.com/article/As-MOOC-Debate-Simmers-at-San/139147/

Keith Williams. (2013, September 26). Oh, I understand that half of the argument very well... [discussion forum comment]. Retrieved from http://chronicle.com/article/In-Colleges-Rush-to-Try/134692/

mgkcnm. (2013, May 2). Most Harvard undergraduates get little more than the MOOC experience... [discussion forum comment]. Retrieved from http://chronicle.com/article/Why-Professors-at-San-Jose/138941/


oneseking. (2013, May 9). When I read the comment from American University, I had the sense it was venturing into an antitrust zone... [discussion forum comment]. Retrieved from http://chronicle.com/article/As-MOOC-Debate-Simmers-at-San/139147/

Paige McAdoo. (2013, May 6). Frankly, it seems to me that this is just another push to take jobs away from adjuncts... [discussion forum comment]. Retrieved from http://chronicle.com/article/Why-Professors-at-San-Jose/138941/


pols437. (2013, May 2). Of course. It is the intellectual and creative classes giving their stuff away for free... [discussion forum comment]. Retrieved from http://chronicle.com/article/Why-Professors-at-San-Jose/138941/

puckk. (2013, May 29). I wonder why we think that a few research "stars" are better at teaching a subject than teachers with much more experience are… [discussion forum comment]. Retrieved from http://chronicle.com/article/Outsourced-Lectures-Raise/139471/


theron. (2013, July 17). The only issue is whether a MOOC is education or data transmission? [discussion forum comment]. Retrieved from http://chronicle.com/article/Were-All-to-Blame-for-MOOCs/139519/

Thumoeides. (2013, May 2). And all change is for the better and all resistance of all change is futile… [discussion forum comment]. Retrieved from http://chronicle.com/article/Why-Professors-at-San-Jose/138941/

