

A dual-level approach for investigating design in online affinity spaces

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Abstract: In order to address "design talk" within online gaming fan spaces, content analyses were used first to classify the predominant forms of design talk, then to provide a principled segmentation of forum data to come under further Discourse analysis. Serial implementation of these two approaches affords researchers of informal learning the ability to (1) identify productive exchanges within gaming affinity spaces to come under further d/Discursive analysis and (2) combine analyses of learning using both *nomothetic* (content analysis) and *idiographic* (Discourse analysis) approaches.

Learning in Gaming Affinity Spaces

Recently, learning scientists have focused on the educational implications of productive, "in the wild" (Hutchins, 1995) communities that have arisen to discuss games online (e.g., Steinkuehler & Duncan, 2008) and, within which, participants can develop sophisticated peer instructional materials (e.g., Squire & Giovanetto, 2008), tools for others to interact with games, and environments in which participants can negotiate the meaning of their gaming experiences. In this light, both the designed and ad hoc communities of practice (Lave & Wenger, 1991) that have come to exist "around" games are increasingly relevant for researchers interested in moving beyond appropriating games for traditional learning models toward understanding the dynamics of learning with popular media.

A renewed focus on social affiliations, collaborative problem-solving, the development of projective identities (Gee, 2003), and concomitant other skills and dispositions associated with gaming has become an important new emphasis for games and learning research, leading to a shift in focus from the individual gamer to communities of learners that critique, modify, and further explore game play. Toward this end, I investigate Gee's (2004) concept of "affinity spaces," or fan sites, often instantiated online, with shifting memberships in which participants can develop and express an affinity for a like-minded group around a particular media artifact. Although it has been a productive concept for understanding engagement with digital media (see Black, 2008; Duncan, in press; Gee and Hayes, in press), important methodological questions abound, including how best to analyze textual interactions within affinity spaces, as well as how to relate different forms of analysis with one another.

In this poster, I argue for the use of both content analysis (Mayring, 2000) and Discourse analysis (Gee, 2006) as productive means to make sense of the learning practices present within these affinity spaces. Using examples from analyses of online discussion forum text in the affinity spaces around three different games, game series, or gaming distribution platforms (*World of Warcraft*, *The Legend of Zelda*, and *Kongregate*, respectively), I forward an explicitly *dual-level implementation* of these methodologies.

Content Analysis

By "content analysis," I refer to the principled means of applying a qualitative coding scheme to the text present within the online discussion forums that make up much of the asynchronous, distributed discussions present within gaming affinity spaces. Mayring's (2000) content analysis model has similarities to other approaches for assessing verbal data (e.g., Chi, 1997), and has seen parallels with attempts to understand other phenomena, such as informal scientific reasoning within online gaming forums (Steinkuehler & Duncan, 2008). By applying a fundamentally *nomothetic* — or attempting to discern a general "state of the world" — approach to online discussion forum text, we can highlight the prevalence of the learning practices being studied within a potentially representative sample, and make generalizations regarding the typicality of the learning practices within the case(s) being analyzed.

I have developed a coding scheme to capture elements of *design thinking* (the iterative collaborative and competitive construction of artifacts) within the online discussion forums around three gaming affinity spaces. Basing the coding scheme largely upon Donald Schön's (1983; 1988) theories of design, this coding scheme was developed to assess discursive practices, design practices, and content of each case's forum text. Applying the coding scheme to representative samples of each case (*World of Warcraft* $n = 242$ posts; *Zelda* $n = 125$ posts; *Kongregate* $n = 130$ posts) the applicability of Schön's scheme was found to be only partial, with some codes highly applied while others found to be a poor fit to the particulars of a case. And yet, these were only the first step in the analysis: Addressing the prevalence of the design codes was useful for determining their general applicability and the overall commonality of some design practices, but did little to help "unpack" the finer details of specific meaning-making exchanges within the forums.

Discourse Analysis

Across a wide range of domains, Gee's (2006) "big-D Discourse theory" has put an emphasis upon understanding language acts as situated within cultural and social frameworks. As a methodology, it has provided a great deal of utility for the investigation of meaning-making, learning, and the social construction of knowledge (see, for example, Steinkuehler's, 2006, analysis of in-game Discourses). In terms of online gaming affinity spaces, the methodology's key utility is in helping to make sense of specific interchanges between participants in an online affinity space, and identifying the ways that particular turns of phrase represent larger social and cultural concerns.

Thus, following the content analysis methodology presented above, I have conducted Discourse analyses on specific exchanges within each of these three affinity spaces (*World of Warcraft*, *The Legend of Zelda*, and *Kongregate*). Shifting focus from analyzing design practices within each space to isolating how a subset of debates within the forums formed and evolved, I argue that Discourse analysis provides an important *idiographic* — or characterization of unique and situated meaning-making — approach to understanding learning within these spaces. In the three affinity space cases, these led to the uncovering of common framing narratives regarding the design practices within each space (design as a "science," design as a "technical literacy" and design as "fan activity"). For, as Discourse analysis ideally helps to situate specific exchanges in social and cultural frameworks, the results of the analyses can be revealing regarding important phenomena (e.g., framing narratives) that could not be easily uncovered via a content analysis based on an *a priori* coding scheme (à la the one based upon Schön's 1983; 1988 work).

A Dual-Level Interpretation of Text

The staged, dual-level approach described here is beneficial for two key reasons. First, content analysis addresses the overall coding saturation of a particular interpretive scheme, but does so necessarily divorced from individuals' unique trajectories of meaning-making; by incorporating Discourse analysis, we are thus able to address the "gaps" in one method by the judicious use of another method on a subset of the same data. Second, Discourse analysis is necessarily fraught with issues of sampling, and the results of a previous content analysis can help to provide justification for *why* certain excerpts of data are chosen for subsequent Discourse analysis. By using the results of a content analysis to justify which segmentation of the data is most promising to further investigate using Discourse analysis, assessments of the text within online affinity spaces become multi-faceted. In understanding learning within these spaces, researchers need to both be able to address the overall prevalence of a given learning practice, while also developing a stronger basis for data selection when using qualitative methodologies such as Discourse analysis.

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