
Investigating Web 2.0 in Education: A Discursive Paradigm for Research

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Kurzbiographie

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Investigating Web 2.0 in Education: A Discursive Paradigm for Research

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Abstract

Recent years have seen the rise of Internet technologies that facilitate activities that are above all social and participatory, allowing children and adults to create and share their own content, and to communicate in a wide range of forums. Correspondingly, there has been great popular and expert interest in the potential of Web 2.0 communication technologies for education. The discursive “spaces” enabled by Web 2.0 differ from conventional face-to-face and online educational environments in that communication largely occurs in written form, and is informal and abbreviated. To understand the potential of these new “conversational” communicative practices and technologies for formal education calls for a new research approach: one that focuses on learning through text-based, informal communication. Such a research approach is provided by discursive psychology, a social psychological paradigm that emerged in the 1990s, and combines the insights of phenomenology, ethnomethodology and conversational analysis. The concern of this approach and of its theoretical precursors “with sense-making” has been observed by educational technologists to make “it a natural framework for undertaking a study of instructional practice” (Koschmann et al. 2007: 134). This paper provides an account of this discursive approach in terms of its relevance to education, and explains how it can be adapted in the study of Web 2.0 technologies in educational contexts.

1 Introduction

Over the past fifteen years, the opportunities for the use of Internet and Web technologies in education have developed and expanded significantly. A chronology of important developments would include the proliferation of Web-based course

management systems in the late 1990's (e.g., Blackboard, Moodle), the subsequent growth of blended learning technologies and approaches, and simultaneous developments in e-learning standards, learning objects and open courseware. Common to these developments is a consistent emphasis on formal, institutional functions and requirements for communication and learning: Course management systems mirror and integrate the functions and conventions of the traditional classroom down to the teacher's gradebook and the closed classroom door (with a password from the registrar required for entry); blended learning focuses on the interface of individual technologies (e.g., smartboards, online content and/or communication) with related classroom practices; learning objects and open educational resources, for their part, have found some of their most enthusiastic adopters among curriculum designers who are able to match content components with even the most specific curricular structures and classifications. However, the recent and rapid proliferation of Web 2.0 applications such as blogs, wikis, and social networking sites has put the focus squarely on *informal* communications that can extend well beyond the boundaries of educational institutions (e.g., Downes 2005; Freedman, 2008). Although these technologies can be integrated in a range of ways with conventional educational practices, their design and functions have their origin *outside* of educational institutions, and allow for a wide range of appropriations and adaptations. Our emphasis here is on the wide-ranging potential of these popular but informal technologies in more formal, institutional educational contexts.

"Web 2.0" first came into prominence in 2004 to designate a "new generation" of software design patterns and business models developed specifically for the Internet (O'Reilly 2005). Since that time, Web 2.0, or the "participatory" (Jenkins et al. 2006) or "read-write" (Berners-Lee & Lawson 2005) Web, has been associated with a wide range of complementary technologies and activities. Among the most prominent of these are blogs, wikis, other social software, and XML technologies—all of which offer possibilities for increasing a user's agency for communication, self-expression and learning (Hall 2008). *Blogs* and *blogging* emphasize personalization, dissemination and community building; wikis enable collaborative document development and management (as exemplified in *Wikipedia*); and services like *Facebook* and *MySpace* provide a range of communicative modes for the development of online communities (Brown 2008). These new communicative technologies and forms are characterized by minute or micro-sized pieces of text or information (Friesen 2007), socially-oriented interactions (Mason 2008), and the development of myriad connections between and among users and resources (Siemens 2005). Referring to podcasts (downloadable audio/video recordings) and RSS

feeds (syndication or alert services) Bryan Alexander explains the emergence of Web 2.0 in terms of the metaphors used in naming, designing and using Web genres and content:

These sections of the Web break away from the page metaphor. Rather than following the notion of the Web as book, they are predicated on microcontent. Blogs are about posts, not pages. Wikis are streams of conversation, revision, amendment, and truncation. Podcasts are shuttled between Web sites, RSS feeds, and diverse players. These content blocks can be saved, summarized, addressed, copied, quoted, and built into new projects. (Alexander 2006: 32)

At the same time, it should be noted that the metaphorical appeal contained in the word „Web 2.0“ and in the broadly social, populist and participatory¹ vocabulary associated with it presents challenges for education as well. Metaphorical uses of terms like “participatory,” “personalization,” or “virtual community” can have the effect of misleading rather than clarifying what’s at stake. A community constituted by blog readers of course, is quite different from one constituted by students attending a neighbourhood school. A further significant example of the challenges of this vocabulary is provided by the term „Web 2.0“ itself. The implication of this term and of the conventions of software development and versioning that it invokes, of course, is that the Web has reached a new or discrete stage in its development –a stage that is both complete in itself, and that is also the result of progressive and cumulative investment. But it is not as simple as this. The widespread integration of the so-called „participatory Web“ with mobile applications, for example, has not yet taken place, and the dynamics of collaborative learning using blogs and wikis has only gradually been emerging.

A similar uncertainty and instability can be observed in the attempts to develop learning, teaching and business models based on vague and relatively unproven constructions like „collective intelligence“ or „swarm effects.“ The difficulty of these metaphorical evocations is illustrated in the following characterization of Web 2.0 from O’Reilly:

If an essential part of Web 2.0 is harnessing collective intelligence, turning the web into a kind of global brain, the blogosphere is the equivalent of constant mental chatter in the forebrain, the voice we hear in all of our heads. (O’Reilly 2005)

Any connection between intelligence and „constant mental chatter“ that may take place in an individual’s mind is, of course, an open question. The larger issue of generalizing this in collective terms is similarly problematic, perhaps leading one to wonder about the

¹ Jenkins et al. (2006), for example, focus on US popular culture whereas in the European media socialization discourse, wider and more political understandings have a long tradition (cf. Baacke 1973).

stability and coherence of such a communal intelligence –an intelligence or intellect which is constantly subjected to chattering voices in its collective forebrain.

At the same time, it would be counterproductive to simply disregard the significance of these terms and metaphors. The frequency with which they appear in educational discourse, and the expanding integration of Web 2.0 technologies and practices into educational activities militate forcefully against such disregard (e.g., Alexander 2006; Anderson 2007; Brown 2008). It is also worth noting that scholars like Marianne van den Boomen (2009) have pointed out the productive side of these kinds of metaphors by referring to them as “transcoding metaphors.” With reference to Katherine Hayles (2002) van den Boomen also calls them “material metaphors.” In contrast to simply figurative language, these kinds of metaphors, she says,

are able to do something in the world, something substantial, material. Material or transcoding metaphors are not just linguistic or conceptual frames, they are hybrid actors in social and cultural configurations (van den Boomen 2009: 47).

Van den Boomen claim is that “these metaphors are the analytical keys to processes of contemporary mediation, as they are able to connect digital code and cultural code” (ibd.). As such, and specifically as they are used in education, metaphors like “participatory,” “personalized,” or even „collective intelligence“ can be seen as illuminating particular technological affordances on the one hand, and specific aspects of educational culture, convention and practice, on the other.

Examples of developments both in technology and in educational culture and practice are relatively easy to find in the recent educational literature. Xin and Feenberg, for example, report on the integration of Web 2.0 Ajax technologies into the otherwise conventional “discursive space” of a Moodle discussion forum. In keeping with the “read-write” emphasis of Web 2.0, these technologies (using a set of software solutions known as “Ajax”) enable students to highlight and annotate specific posting contents, introducing a new participatory communicative dynamic in this setting (Xin & Feenberg 2007). The participatory nature of blogs and wikis, as a second example, is illustrated in accounts of

their use in blended learning settings, such as a writing-intensive language course (Friesen 2008a), as well as in informal and lifelong learning contexts, such as an open and international Wiki-based course (Friesen & Hopkins 2008), and in more self-directed learning situations (Wilson et al. 2006).

Enthusiasm for Web 2.0 in education has found expression in the invention of metaphorical terms and labels such as “connectivism” (Siemens 2005; Solomon & Shrum 2008), “microlearning” (Hug & Friesen 2007) and “(e-)learning 2.0” (Downes 2005; Bartolomé 2008). “Connectivism” refers to a discourse revolving around the “central metaphor” of “a network with nodes and connections” as a way of identifying instructional priorities and effective practices (McLoughlin & Lee, 2008). In keeping with the micro sized pieces of information characteristic of Web 2.0, “microlearning,” for its part, focuses on “relatively small learning units and short-term learning activities” (Jaokar 2007, p. 43). “E-learning 2.0,” finally, has been associated with visions of the widespread use of what is called a “Personal Learning Environment” (Downes, 2005). All of these labels share the characteristics of slogans or catchphrases, rather than identifying systematic programs in research and/or educational systems development. One could say that the potential of such terms and metaphors remains untested and unproven, and that the possibilities for research outlined here suggest ways of testing or proving this potential.

2 Paradigmatic Problems

Research methods and effective practices suited to Web 2.0 environments have not yet been established. As Michael G. Moore, an experienced authority in distance education puts it:

Evaluating the Web 2.0 technologies against... principles [of distance education research and practice] would require much more space than I am permitted here; it is in fact a program of research that will occupy the field over the next few years, as different individuals empirically test the different technologies, their testing grounded, one hopes ...in some part of the general theoretical framework. (Moore, 2007: 181; see also Mason, 2008)

Moore does not indicate which “general theoretical framework” he has in mind; and of course, there have been numerous investigations of distance education and collaborative learning processes in online learning contexts using a range of theoretical frameworks. A brief overview of these investigations provides further support for a new approach.

Recently, there has been a great deal of research looking at “critical inquiry” and logical “knowledge construction” putatively occurring in text-based, threaded discussion forums (e.g., Bereiter 2002; Garrison & Anderson 2003). This type of research is based on the premise that educational communication online *can* (or ultimately *should*) be understandable in terms of the successive stages of rigorous, cumulative, critical and collaborative epistemological activity. Such activity is typically seen as including the accumulation of different types of evidence (through relatively informal processes of social “sharing” or “exploration”), the formulation of hypotheses based on this evidence, and the testing of such hypothesis through the provision of further, corroborating or contradictory information. Such an understanding of online educational communication is generally operationalized through the use of content analysis heuristics, specifically through the application of an analytic construct or coding frame to a transcript of a given online discussion. This research then allows specific epistemological stages or activities to be identified and quantified as they appear in these online communications.

The results of these kinds of studies, however, generally have not supported the initial premise –namely, that online discussion can or should take the form of rigorous and cumulative epistemological collaboration. Instead, studies typically find that the majority of student messages are “exploratory” or “social” in emphasis, rather than being “critical” or “logical” in character, and that they focus on the unstructured accumulation of evidence rather than on the careful formulation and testing of related hypotheses. So, for example, only 5% to 22% of student communications in Rourke & Kanuka’s 2007 review were found to have engaged on “higher levels” of epistemological or critical activity, and the vast majority of communications have typically been seen as involving the unstructured sharing and accumulation of evidence (e.g., 75% in Garrison et al. 2001; 72% in Fahy

2005). Online student communications, in other words, typically have *not* to reflected formalized epistemological processes nearly as frequently as they have exemplified the *informal* communicative dynamics resembling those of Web 2.0.

This raises the question, of course, as to how this personal and improvisatory interaction can be fruitfully understood in terms of a general, psychological and instructional framework. It is the contention of this paper that such a paradigm is provided by a relatively recent approach to psychology called "discursive psychology." "Discourse," defined as everyday conversation or "talk-in-interaction" (Schegloff, 1986, pp. 111-112) is understood in this psychological paradigm as constituting *the* means through which people construct their social and psychological worlds, "produc[ing] versions of reality and of cognition...in the course of their [everyday] practices" (Potter, 2000, p. 35). In this psychological framework, discourse or conversational interaction coincides rather directly to the kind of everyday communicative interaction associated with Web 2.0: both are informal, social, and even improvisatory in character. The discourse-analytic² methodology central to this type of psychology, moreover, is *conversation analysis*, a form of research that focuses very specifically on casual conversation, and what is "accomplished" moment-to-moment as it unfolds and develops. It examines, in other words, how meaning and order are "achieved" specifically through routine conversational activity or "work" (Schegloff 1986: 111-112).

Conversation analysis and discursive psychology both understand these accomplishments as taking place through the use of a number of conversational or interactional "resources" that can involve aspects of both communicative form and contents. These

² The term 'discourse analysis' covers a wide range of interrelated but varying approaches. Many of these can be applied to the subjects we are focussing on. Among these approaches, those focusing on questions of subjectifying practices sensu Foucault (1979), the analysis of "The Differend" (Lyotard 1988) and (post-)constructivist concepts (cf. Schmidt 2003) appear to present the most promise. The authors will explore the relation of these particular approaches specifically to discursive psychology in a subsequent publication.

"resources" frequently include conversational openings (e.g., "Hi, how are you?"), closings (e.g., "See you later") and turn-taking between conversational locutions or utterances. Discursive psychology originally developed out the work of a number of closely interrelated theorists and researchers. Alfred Schütz and his student, Harold Garfinkel, began by applying phenomenology to social research (Garfinkel 1967; Schütz 1970), and gradually developed the field of ethnomethodology. In collaboration with Garfinkel, Harvey Sacks (1992) pioneered conversation analysis as a rigorous set of research techniques for ethnomethodology. Ethnomethodology and conversation analysis, finally, have been applied specifically to *psychological topics* (e.g. memory, belief, learning) by the British "Loughborough School" of discursive psychologists (Edwards & Potter 1992) and by American researchers such as Michael Lynch (2006). As collaborative learning specialist Timothy Koshmann points out, the concern of this approach and of its theoretical precursors "with sense-making" implies that it is "a natural framework for undertaking a study of instructional practice," for understanding emergent "instruction and instructability" (Koschmann et al 2007: 134). It is such an understanding that motivates the research program that is advocated here.

3 Research Heuristic

Discursive psychology can be applied to Web 2.0 practices and environments through the adaptation of a three-stage heuristic that was originally proposed for the general psychological analysis of *oral* human interaction (Lynch & Bogen 2005). In this paper, we apply this heuristic specifically to *educational* phenomena and to the *written* communications of Web 2.0. Basically, this heuristic takes phenomena usually considered to be mental or psychological in nature and examines them in terms of *external*, observable, social communicative practice. This occurs through three steps:

1. In the first stage, "one or more of the topics associated with cognitive [or other psychologies]" are identified and isolated, specifically in terms of their location in

"organized social settings in which these topics feature as perspicuous phenomena" (Lynch & Bogen 2005, p. 228). In researching Web 2.0 technologies in education, these topics would include issues such as memory, intent, care, boredom, belief, commitment, understanding and more. And these topics would be identified as they are featured in the conversational exchanges recorded in online chats, twitters, and other postings.

2. The second stage consists of an examination of "how the intelligibility of actions and expressions associated with [these psychological] phenomena [identified in the first stage] are bound to interactional, pragmatic... contexts" (p. 228). In the case of Web 2.0 technologies, this can undertaken through the adaptation of established techniques of conversational transcription and analysis to text-based communication occurring online.
3. In the third stage, "assessments about what goes on in a speaker's mind" or in interaction with technology are to be treated "as themselves part of the social interactional field of production" (p. 228). Phenomena such as instruction, understanding and remembering, in other words, are to be understood as manifest *within* the dynamics of conversational interaction.

The application of the three stages of this heuristic can be illustrated through an example from an online discussion, shown below (figure 1). This particular excerpt is taken from a conference or discussion forum hosted in Moodle³ that is enhanced with "Marginalia," a Web 2.0 technology mentioned earlier. As the name itself suggests, Marginalia allows users to add "marginal" comments, queries, and notes to the side of posted discussion messages --much as one would append a note using an advanced word processor feature. Users simply select or highlight a section of text in the message for comment, and are then able to type in a note (not more than 128 characters in length), to which their name is appended, and which is also visually linked to the highlighted text in the

³ Moodle is an open source instructional or course management system.

body of the message. The result typically takes the form of a number of short, informal or conversational notes or commentary, which (like Twitter “tweets” and blog postings) can be transmitted and aggregated using RSS feeds or syndication.

<p>Jill Valery - Saturday, 28 February 2009, 03:23 AM</p> <p>Lisa, I have had similar experiences where I have had no response to a post and also found it disheartening, and then <i>thought it must be because the post was too boring to respond to</i>[1, 2]. I suspect that, because we are being "forced"[3] to write these, I will have a similar cynical and, hopefully erroneous, reaction in the future. I think I need to find a forum over a <i>topic that I am passionate</i> [4] about and see if I <i>react differently</i> [5] there... <i>I could get quite passionate about that [my own students' use of technology] and bore you all.</i> [6] I do not envision myself becoming very passionate about this discussion at the moment. Maybe I will [later].</p> <p>Show parent Edit Split Delete Quote Reply</p>	<p>[1] Donna: There could be many reasons why there is no response. Maybe others are intimidated? Maybe they do not agree and cannot think of how to say so?</p> <p>[2] Lisa: interesting response. Mine is usually "hmmm they don't care" or "I've offended them" - seems my issues are related to interpersonal and not content</p> <p>[3] Lisa: I'm seeing this word frequently - interesting</p> <p>[4] Lisa: which is?</p> <p>[5] Donna: What works for me is just to get the words out and not worry. But in IRL or IM conversation, no response is like being blatantly ignored.</p> <p>[6, instructor] Jill, if you got passionate about how you could use Marginalia in your teaching, I don't think we'd be bored!</p>
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Figure 1: A discussion posting in Moodle; enhanced with Web 2.0 „marginalia.“ Highlighted message text is italicized; numbers instead of visual highlighting is used to connect marginalia to message.

In undertaking the *first stage* of the research heuristic --identifying perspicuous psychological phenomena in the organized setting provided by the moderated discussion and commentary in figure 1— there are at least two topics of psychological significance. These topics are: (a) students’ thoughts and above all *feelings* associated with the hypothetical case of an online posting that does not receive a response; and (b) the question of motivation for posting a particular kind of message. Specifically, this is a message that gives expression to the poster’s passion, but that may simply bore others in the discussion.

The *second stage* of Lynch and Bogen’s heuristic --asking “how the intelligibility of actions and expressions are bound to interactional, pragmatic ... contexts”—can be addressed by looking at a conversational agenda is, in effect, set by the original posting. This discursive agenda or “interactional pragmatic context” is also illustrated in the way in which the significance of the original posting is played out in the marginalia

subsequently provided by others. Specifically, this pragmatic context-setting occurs through simultaneous actions of concealment and disclosure in Jill's message, and in others' responses to it: Jill first discloses the feelings that arise for her when a discussion posting receives no response: "I found it disheartening... because the post was too boring to respond to." She also discloses or indicates that this presents a dilemma for her since she does "not envision [her]self becoming very passionate about this discussion at the moment." The implication which remains concealed, or at least "un-disclosed" seems to be that her messages are likely to be too devoid of passion to merit a response. Later in the same message, though, Jill says or discloses that she *could* "get quite passionate" if the topic of the discussion were to be different. She indicates that this would be the case if subjects more closely related to her teaching practice were to be discussed—but significantly, she withholds or conceals from her readers the exact nature of those subjects, and precisely how they relate to her passion.

The *third stage* of the heuristic --in which "assessments" about the mental are treated as part of the "interactional field of production" (Lynch & Bogen 2005, p. 228)—can be illustrated both by Jill's comments and by the commentary they elicit. For assessments about the mental, specifically about motivation, feeling and affect are prominent in both: In response to Jill saying that her messages may generally be "too boring" to merit a reply, Donna and Lisa both offer alternative explanations of what may be occurring in others' minds. They offer that others may be "intimidated," that they may be unable to articulate their "disagreement, " "or that they may even have been 'offended'" by the message posted.

Jill's revelation, near the end of his message, that it is specifically the discussion of her "*passion*" --her students' use of technology—that she fears will bore her audience elicits comments that both reiterate and go beyond those made earlier. These comments no longer simply attempt to allay her uncertainties, as the earlier comments did. Instead, they either enact or explicitly articulate an invitation for Jill to post, assuring her of

others' interest in what she has to say. Lisa, for example, asks Jill specifically what her topic of interest is ("which is?"), and the instructor states: "if you got passionate about how you could use Marginalia in your teaching, I don't think we'd be bored! "

Despite their brevity, these marginalia all highlight certain aspects of the "interactional field of production." These aspects, which constitute the conclusion for our study, are only tentative and inspecific in nature. The character of these conclusions follows from both the novel and exploratory nature of this study –both in terms of its subject matter (Web 2.0 in education) and its methodology (the recently developed discursive-psychological paradigm).

Perhaps most significantly, as one of the posters herself observes, the Web 2.0 marginalia analyzed above show how the dynamic of this informal communication is above all "interpersonal [rather than] ...content-related." The message and the marginalia all focus on the issue of *not* receiving a response, of boring (or interesting) others, with the issue of subject matter generally being of secondary importance. It is also significant that mental, affective states (boredom, passion, care, interest) dominate as concerns even when potential technical problems such as software or browser malfunction, or technically-related issues such as opportunities for access, could (and perhaps should) have first been invoked as possible explanations for "why there is no response. " Participants elect to locate causes or topics that could potentially be technical or logistical in nature unambiguously in the realm of the intentional or mental.

Students (and the instructor) are all addressing issues of response, non-response, passion, boredom, as well as interest and potential dis-interest in what the other has to say. In this context, statements in the message and (perhaps especially) in the margins serve as "resources" in at least two senses: 1) In terms of the "form" of the comments, in that they are able to (literally) highlight particular aspects of the original message, and

to address highlighted issues very specifically.⁴ 2) In terms of the particular *way* that these comments address issues raised in the original message. The marginal comments do this specifically by enacting interest and availability (Lisa's response of "which is"?) and by explicitly insisting on such interest and availability ("I don't think we'd be bored!"). Conversational "resources" in this sense (e.g., exclamations, interrogatives, the psychological concepts of interest, passion, etc.) are thus mobilized by participants in a concerted effort to continue and expand the interaction.

The use of these resources in these comments has another important characteristic. Especially later in the message, the question of boring or exciting an audience becomes less hypothetical and increasingly focused on the actual participants: It is not a question as to whether given contributions are somehow intrinsically boring or passionate, or whether they will garner response from a hypothetical audience. Instead, it is a question as to how Lisa, Donna or the instructor --as particular concrete individuals-- will respond. Any "content-related" concerns are firmly embedded in a concrete and particularized interpersonal relationships. In the language of ethnomethodology, the communication occurring here is thoroughly "indexical." The term "indexical" refers to the characteristic of indicating or pointing to a particular person, place, thing or state of affairs. It is exemplified by the use of terms that serve a grammatically indexical function –terms such as "you," "me," "here" or "there." This indexical character of the communication, as Harold Garfinkel, the father of ethnomethodology points out, implies that the meanings constructed conversationally are understandable only in terms of the emergent order of those conversations themselves (Garfinkel 1967). Questions of interest, disinterest, response and non-response, in other words, are questions of *your* interest or response,

⁴ Understanding "resource" in this way is similar in some respects to what designers and analysts have referred to as "affordances:" "A characteristic of an object, esp. relating to its potential utility, which can be inferred from visual or other perceptual signals" (OED, 2009). In this sense, the characteristic or capability (affordance) presented by Marginalia for highlighting and responding "in the margin" to particular parts of an original message might be said to "afford" certain types of interaction. However, this in itself is not a resource for conversation, or for talk-in-interaction. A resource in this explicitly discursive sense would refer to the way that a particular affordance is mobilized and actualized in particular conversational acts.

of *her* silence or reassurances, or of *my* indifference or enthusiasm. Another way to put this would be to say that content does not arise independently from concerns about interrelationship and relational affect. Instead, it is only emerges together with these other characteristics, in a manner which makes it inextricable from them.

4 Conclusion

In terms of the approach and the tentative conclusions illustrated above, learning, instruction and education appear in a new and particular light. As already indicated, the indexicality of conversational interaction means that learning about any given subject or content appears as inseparable from the concrete social and personal dimension of the interaction. The phenomena of "instruction and instructability" as Koshman and his co-authors put it, emerge interactionally, through acts of improvisation and extemporization. But perhaps the most innovative aspect of the understanding of learning and education implied by this approach is precisely *where* it locates these activities. As the example above illustrates, discursive psychology analyzes and interprets the psychological activities associated with learning *without* appealing to a notion of the inner workings of the mind. The improvisational construction of meanings and order and even instruction and learning themselves are seen in each case as occurring *without* being controlled by or ultimately reduced to cognitive processing or mental representational processes. In this sense, the psychological paradigm and associated methodology suggested here for use in the study of Web 2.0 environments have both been described as being "post-" or "anti-cognitivist" in nature.

As Michael Lynch explains, analyses of the kind presented in this paper show how putative cognitive or mental phenomena can be investigated without seeking to fix their ultimate causes or explanation in a hidden and speculative domain of cognition. As Lynch puts it, this type of research does not attempt to trace "manifest practices to a deeper substrate that is inaccessible from the vantage point of the acting individual or an 'ordinary' observer" and visible only to the expert (Lynch 2006: 102). Instead, this

research can be understood as identifying and describing a veritable "alternative universe of ...practices situated in historical and cultural circumstances" (Lynch 2006: 101). Everyday events, observations and interactions, such as those provided above, and occurring with increasing frequency on Web 2.0, are seen to possess a startling complexity and an explanatory self-sufficiency at their surface. As Lynch says, this "a surface" is one "that is thick with complicated actions and interactions" (2006: 101) and that is characterized by its own profuse intricacy, detail and interpretive richness. It is this intricacy, richness and detail that we argue is captured in educational engagement with Web 2.0 technologies; and it is this complex „surface“ that we suggest can yield up evidence showing how complex learning events can emerge from everyday, conversational interactions, negotiations and improvisations.

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