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The constitution and distortion of electronic public spheres: A conceptual and empirical  
rethinking of online communication outcomes as verbing micro-practices.

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### Abstract

We argue that usual approaches to studying communication in online public spheres is limited and prevents us from pinpointing how communication behaviors either inhibit or facilitate dialogue. We question the dominant emphasis on consensus as a preferred outcome. In an empirical study, we analyze 1,360 postings from three pedagogical discussions devoted to issues of race and popular/elite culture. Our analysis focuses not on outcomes but on verb-ing micro-practices -- dynamic communicative actions through which participants make and unmake public spheres. We have two guiding research questions: (1) How do consensusing and dissensusing when conceptualized as communicative practices -- verbings -- relate to other practices? (2) What are the implications of these relationships for the quality of dialogue among participants holding diverse perspectives? Our boundary-bridging, quantitative-qualitative analysis uncovered previously hidden patterns in communicating behaviors, suggesting that an emphasis on consensusing and dissensusing may inhibit communication processes necessary for effective public sphere dialogue.

The constitution and distortion of electronic public spheres: A conceptual and empirical rethinking of online communication outcomes as verbing micro-practices.

### **Introduction: the case for studying micro-practices within online public spheres (1)**

Within the past several decades, theoretical work in the philosophic tradition focusing on the nature of public spheres -- environments facilitating publicly oriented discussions -- has become highly prevalent. Scholars have long argued that the emergence of such spheres is central to the development of modern democracies (see Dewey, 1933; Fang, 1995; Habermas, 1962/1989; 1992/1996; Schroll, 1999; Schneider, 1997; Schudson, 1997). Theorists typically assert that such spheres are valid only if they are free of systemic constraints. For Habermas (1962/1989, 1981/1984, 1981/1987, 1983/1990, 1992/1996) -- usually cited as the foremost metatheorist of the public sphere -- this involves privileging only the "power of the better argument" (Habermas, 1962/1989, p. 54). The purpose or *telos* of such spheres, he argues, is to create environments where participants can raise competing truth claims, which can then be vigorously debated until a consensus is freely reached among all affected parties. Once consensus has been reached, participants then transform social structures through consensus-guided action or praxis.

More recently, scholars have expanded such theorizing to encompass online, Internet-based environments: web-based discussion groups, e-mail discussion lists, newsgroups, or chat rooms -- electronic spaces where participants gather to discuss public issues. Proponents suggest that computer-mediated networks can be used to simulate dialogic environments promoting democratic discussion and debate leading to consensus and -- ultimately -- critically guided action (e.g., Ess, 1996; Ess and Cavalier, 1996; Fang, 1995; Rheingold, 1993; and Schneider, 1997).

Indeed, Hiltz and Turoff (1978) point out that the use of computer-mediated communication (CMC) for such purposes can be traced to the early 1970s. Additionally, the impact of Habermas' public sphere theory on such research has been well acknowledged (see Brothers, 2000; Ess, 2000; Rheingold, 1993; Sharrock and Button, 1997; Schneider, 1997; and Yates, 2001). Fang (1995) noted that "[m]ore and more communication studies . . . adopt[ed] Habermas's theory in analyzing the new media and civil society" (p. 6).

However, despite positive commentaries on exemplary uses of online communication for creating electronic spheres (e.g., Harasim, 1993; Hill, and Hughes, 1997; Rheingold, 1993; Ess, 2000; Galegher, Sproull, and Kiesler, 1998), many observers have suggested that, in fact, online dialogue perpetuates or creates structures that may actually hinder democratic participation, particularly in multicultural contexts (see Herring, 1993; Schaefer, 2000; Yates, 2001). As the diffusion of computer-mediated technologies continues to expand around the globe, the necessity of dialoguing among participants who do not share perspectives continues to grow (Dervin and Schaefer, 1999; Giddens, 1999). Thus, there is general agreement on the need for better understanding of the processes of dialogue among diverse constituencies – in particular, processes relating to consensus, the assumed goal of dialogue in public spheres.

However, a chasm exists between the communicative action/discourse ethics metatheories that many scholars draw upon when theorizing online dialogue and the concrete practices that constitute public spheres in daily life. Although those theorizing public spheres and communicative action suggest the need for analysis of grounded communicative micro-practices in order to expose system biases and communicative distortions, they rarely explicate such practices (Koivisto and Valiverronen, 1996). Verstaeten (1996), for example, has asserted that "[t]he dynamics of the public sphere can only be understood if one also considers the micro-

level . . . [the] 'sense-making process' realized by concrete individuals in their day-to-day reality" (p. 350). He complains that metatheorists generally have not successfully explicated these processes.

Compounding the problem, researchers of online public spheres who claim to study empirical dialogic processes generally remain at a level that is, at best, vaguely connected to dialogic metatheory. For example, group decision support system (GDSS) researchers have typically explored outcomes related to consensus/dissensus but have not provided a metatheoretic framework that places their findings within broader structural contexts. As the study of electronic tools to assist groups in reaching consensus (and avoiding dissensus) became a popular genre in the 1980s, many researchers employed quasi-experimental designs, comparing participants in face-to-face and computer-mediated conditions on relatively blunt outcome measures (e.g., speed/quality of decision; group satisfaction; number of ideas generated). In these studies, consensus-making and/or dissensus-avoiding were chiefly operationalized as static dependent variables that occurred primarily at the end of an online experience (Gallupe and McKeen, 1990; Hollingshead, McGrath, and O'Connor, 1993; Mabrito, 1992; Olaniran, 1994; Valacich, George, Nunamaker, and Vogel, 1994; Rice, 1980). As a result, researchers have reinforced what we call a noun-oriented or product-centric view of online discourse that obscures the processes of communicative practice. We explain this criticism in detail below.

A research strand that promised to address this oversight resulted from the work of computer-mediated communication (CMC) researchers who explored unstructured or emergent qualities of online dialogues: the development of participants' sense of community, incidents of flaming, development and administration of punishments/sanctions, and so on. However, researchers focusing on these grounded practices often neglected to reconnect their findings to

broader metatheoretical issues. For example, in an innovative study, McLaughlin, Osborne, and Ellison (1997) described participant development of a virtual community centered around a robotic gardening system they placed on the web (where users could earn credits to plant and maintain flowers seen by all, chat about their gardens, share tips, etc.). However, the researchers did not address the metatheoretical implications of the group sanctioning behaviors they observed. Additionally, Schneider (1997) identified large differences in participation levels in a newsgroup named "talk.abortion" but did not adequately explain these distortions vis-à-vis public sphere theory. Likewise, Duncan (1997/1998) observed differences in newsgroup participants' openness to outsiders but downplayed any connection between this finding and dialogic metatheory.

Thus, we are left with two important but unanswered questions: (1) how do grounded communicative practices relate to consensusing and dissensusing within online public spheres?; and (2) what are the metatheoretical implications of these relationships for the quality of dialogue among participants holding a diversity of perspectives? These two questions guide the empirical study reported here.

### **Sense-Making metatheory and the communication-as-procedure framework**

Given the mandate to reconnect communicative metatheory with grounded practice in order to improve the quality of online dialogue among diverse constituencies, the methodologies employed in earlier studies are not sufficient. We needed a methodology which would allow us to reconceptualize consensus (and its mate dissensus) as micro-practices in process rather than as outcomes to achieve or avoid. At the same time, we needed a methodology that would allow us to examine how the micro-practices -- consensusing and dissensusing -- act as continually instantiating features of dialoguing and thus fit in the array of grounded communicative micro-

practices through which participants make and unmake online public spheres. Finally, we needed a methodology that would inform our analysis of communicative micro-practices that constitute the nexus where agency and structure meet -- where individual sense-making efforts may be too often interrupted but sometimes facilitated by structures.

In order to develop a research analytic suitable for zooming in on online communicative processes, we drew upon Sense-Making Methodology (Dervin, 1983, 1991, 1994, 1999) as our primary metatheoretical frame. Sense-Making specifically focuses on human communicative micro-practices that connect agency and structure, which are often treated as rather strict methodological boundaries in social science research. Heavily informed by the theorizings of Carter (in press, 1991, 1988, 1980, 1973), Sense-Making's core premise is its discontinuity assumption: humans, who are always situated in time-space contexts, are mandated continually to bridge "fundamental and pervasive discontinuities or gaps," both ontological and epistemological (Dervin, 1983, p. 4). The bridging is done with ongoing communicative practices -- physical, cognitive, emotional, and spiritual. Thus, Sense-Making mandates a focus on time, space, movement, and gap as encapsulated in the methodology's central metaphor pictured in Figure 1 (see appendix).

The Sense-Making Metaphor serves as a methodological tool mandating the researcher to attend to five key dimensions of sense-making and sense-unmaking in human movement across the gaps inherent in all life-facing. The metaphor dimensions are: (a) situations -- time-space anchored moments where agents face gaps and experience barriers, constraints, and so on; (b) gaps -- the questions, confusions, and muddles agents experience as they face gaps; (c) bridges -- the sense-makings agents use to bridge gaps (e.g. ideas, cognitions, attitudes, feelings, memories); (d) outcomes/uses -- the consequences of the gap bridging (helps, hindrances,

effects, and so on); and (e) verbings -- the communicative energizings or actings, internal or external, cognitive, emotional, spiritual, physical, by which agents move through time-space at the micro-level: situationing, gapping, bridging, and outcoming. Ultimately, every aspect of the Sense-Making Metaphor is seen as implemented via verbing micro-practices.

The Sense-Metaphor has been applied in numerous studies which have yielded results with remarkable consistency, cohesiveness, predictability, and utility over the years (Dervin and Frenette, 2000; Savolainen, 1993), suggesting that utilizing a genuinely process-oriented approach to studying communication can tap aspects of the universality of human sense-making processes without rigidly imposing a priori static categories (e.g. demography, life style, personality) which inevitably require comparing people and communities in such a way that some are marginalized and all are frozen in time-space. Sense-Making breaks out of static noun-theorizing by using a verbing analytic (Dervin, 1991): a common feature in Sense-Making studies is to refer to communicative actions in explicitly verbing terms -- e.g. verbing, not verb; consensusing, not consensus; dissensusing, not dissensus. It is the development of a Sense-Making informed verbing analytic that allowed us to implement the process orientation in our study.

In addition, the centrality of verbings to communicative processes is the core assumption of one particular research analytic that has emerged in Sense-Making studies: the communication-as-procedure framework. Again, drawing on the theoretic inventions of Carter (in press, 1991, 1988, 1980, 1973), Dervin and Clark (1993) proposed the communication-as-procedure framework as a generalizeable tool for conceptualizing verbings pertinent to any research domain. In the framework, human universals are reconceptualized not as transcendent,

across time-space attributes, but rather as moment-by-moment sense-making mandates encountered by humans moving through time-space.

Thus, for example, there remains a struggle in communication research between those who focus primarily on human agency and those who focus primarily on structural constraints. Likewise, there remains a struggle between those who focus on agency bound within community versus those who focus on agency conceptualized individualistically. In Sense-Making's communication-as-procedure framework, each of these boundary-defining conditions is reconceptualized as verbings. Dervin and Clark (1993) posit self-relating-to-self, self-relating-to-others, and self-relating-to-collectivity as three examples of universal verbing mandates of the human condition. These verbing mandates are always present and potentially relevant although for a given sense-maker at a given moment in time-space, they may be either absent or present (or changing). As humans make and unmake sense in specific moments of time-space there is an array of communicative verbings that form the repertoire of possibilities for a given sense-making moment. Dervin and Clark (1993) provided a beginning illustrative list, again drawing heavily on Carter: attending, creating ideas, connecting, confronting, opposing, mediating, recalling, emotings, and so on.

The communication-as-procedure analytic requires reconceptualizing communicative acts traditionally conceptualized as nouns into verbings. Because the framework focuses on "...acts of communication at the microlevel " (Dervin and Clark, 1993, p. 104), researchers typically utilize units of analysis smaller than the individual, often called micro-moments. The focus moves from people (states) to behaviors (processes), allowing researchers to zoom in on consequential aspects of grounded dialogic practice (Dervin & Clark, 1993). It is this methodological potential that facilitates the development of communicative theory of praxis

which focuses on the connection between dialogue and action in the world. It is also this methodological potential which permits teasing out how and under what conditions specific kinds of communicative micro-practices either facilitate or hinder dialogue.

### **Specific purpose**

It is, of course, the potential connection between dialogue and action which propels optimistic hopes for the value of dialogue in online public spheres. Thus, Sense-Making's communication-as-procedure framework seems ideally suited to address recent challenges for the reconceptualization of communication within public spheres as process (see Braman, 1994; Brothers, 2000; Cissna and Anderson, 1990; Cissna and Anderson, 1998; Eisenberg, 1994; Ess, 1996; Koivisto and Valiverronen, 1996; Verstaeten, 1996; Whitworth, Gallupe, and McQueen, 2000), which have generally been ignored by researchers. As pointed out by Cissna and Anderson (1998), "[d]espite an abundance of dialogic literature, no contemporary account with which we are familiar explicitly theorizes dialogue as a momentary phenomenon and discusses its implications by relying on such a foundation" (p. 67). To this end, Verstaeten (1996) explicitly has called for the development of "public sphere dynamics" (p. 353).

It is this purpose to which the study reported here is directed. We utilize a Sense-Making informed communication-as-procedure analytic for studying the communicative dynamics within several online pedagogical public spheres. Our empirical purpose is to examine how consensus and dissensus, when redefined as the verbing micro-practices of consensusing and dissensusing, co-occur with other kinds of verbing micro-practices. Our theoretic purpose is to draw implications from our results for ongoing efforts to develop viable and democratic public spheres which enable praxis, or participatory action in the world.

## Methods

Our study draws on methodological mandates from different, and sometimes competing, research approaches. On the one hand, we are informed by descriptive studies of online communication discourse; on the other by critically informed metatheoretic work challenging optimistic visions for online democracy and explicating why and how communicative practices stand in the way. In addition, we are informed by qualitative approaches to research as well as quantitative. And we are informed by Sense-Making Methodology, an approach which has been explicitly designed to be at one and the same time qualitatively deep yet amenable to systematic and quantitative analyses.

In stereotype, it could be said that in this paper our literature review, statement of general research purpose, and development of conceptual categories proceeded in ways more normative in qualitative and critical studies whereas our analyses and mining for results proceeds in a way more normative in quantitative studies. This juxtaposition has been intentional, reflecting, we propose, a growing emphasis in communication research on bridging the boundaries between seemingly disparate approaches (see, in particular, Best & Kellner, 1991; Dervin, 1999; Murdoch, 1997; Weber, 1990). In the end we would argue, of course, that the polarizations between research approaches are artificial. We aimed for a synergistic meeting of alternatives.

**Sample.** The data for this study consisted of 1,360 postings contributed to three web-based discussion groups at a large U.S. midwestern university in 1999 and 2000 by 124 undergraduate students. All postings were contributed by participants as part of required course work. One course explored racism, while the other two addressed various aspects of media/cultural studies (in particular, the popular/elite cultural divide). Students came from many states in the U.S. and several foreign countries. As is typical of the undergraduate student body

at this university, the students were about 59% female, 79% Caucasian, and 93% in their 20s. Their socio-economic characteristics were, again as is typical in this university, more diverse. They reported their family heads-of-household as being roughly 12% blue collar, 21% white collar, 33% middle management, and 32% professional.

**The conduct and foci of the classes.** The pedagogical approach in the three classes was informed by the Sense-Making Methodology which intersects its emphasis on verbing micro-practices as new kinds of universals of the human condition with the humanistic emphasis on dialogic practice of Rogers (1956/1995, 1980) and the critical emphasis of Freire (1970). Students were involved in regularly mandated self-reflexive exercises which related class readings and discussions to their personal lives and to their relationships with others and society. Among the exercises were: (a) weekly feedback sheets; (b) in-class dialogic rounds using a "talking stick" procedure; (c) self-interviews and interviews with peers and relatives focusing on lived experiences relating to racism or to cultural products and their impacts, and (d) required postings to web-based class discussion groups.

For all class exercises, students were required to use the Sense-Making metaphor (see Figure 1) as a guide for their discussions. Hence, they were asked not only what they thought or questioned or felt, but how that related to their life situations, their place in society, and with what consequences (i.e. impacts, effects, helps, hindrances). The use of Sense-Making in this way for these classes was deliberately designed as a minimal intervention in normal discourse processes. In normal class discourse, students say what they think, feel, conclude, and question. But they typically do not focus on the connections between these bridges and life and societal contexts. By mandating a Sense-Making way of talking in these classes, the intent was to invite and facilitate talk outside the usual agreeing-disagreeing (i.e. consensusing-dissensusing) mode

which dominates so many discussions. Additionally, grading of the Sense-Making components of the class focused not on the content of student contributions but on student thoroughness and whether they attended to four of the aspects mandated by the Sense-Making metaphor -- situation, gap, bridge, and outcomes. This mandate applied to all class discussions, most of which involved controversial topics related to racism and media/cultural studies (e.g., affirmative action; reverse racism; slavery reparations; media coverage of the Columbine High School massacre in the U.S., stereotyping in media, media effects, media responsibility in society).

**On-line postings: the raw data for this study.** Among class assignments, students were required to make a minimal number of postings to online class discussions over the 10-week period of each class. Students could post under their given names or under self-selected pennames. Use of quotes in this paper are identified only by pennames. Students could choose to exclude their postings from research analyses. No students asked to do so.

The required number of postings per class ranged from six to 29. It is these postings which provided the raw data for the study reported here. The data set consisted of 1,360 postings contributed in three classes over a 30-week period in 1999-2000: 673 from the racism course, and 427 and 260 from the two media/cultural studies courses. For this study we combined the postings across courses because our focus was verbings -- the "hows" by which students contributed to online dialogues -- and not the substantive content of their contributions.

**Content analyzing verbing micro-practices.** To analyze the communicative micro-practices within the postings, a customized verbing coding template was developed (2). This template drew upon both deductive and inductive analytic frameworks: deductively, Sense-Making's communication-as-procedure framework and our assessment of the verbings implied in

public sphere and computer-mediated communication (CMC) literatures; and, inductively, the procedures of grounded theory (Charmaz, 2000; Strauss and Corbin, 1998).

Following Dervin and Clark (1993), the template was designed to encompass verbing processes related to three relational mandates of the human condition: self-relating-to-self, self-relating-to-other, and self-relating-to-society. The aim was to provide an array of verbing micro-practices representing these three mandates in order to see how these micro-practices co-occurred with consensusing and dissensusing. A decision was made to limit the template to those verbings that appeared to reflect central themes within two literatures -- that focusing explicitly on dialogue (e.g., Buber, 1929/1958; Dervin, Higgins, Huesca, Osborne, and Jaikumar-Mahey, 1993; Cissna and Anderson, 1990, 1998; Dewey, 1933; Freire, 1970; Giddens, 1984; Habermas, 1981/1984, 1981/1987, 1983/1990; Rogers, 1956/1995, 1980; Schudson, 1997); and that focusing explicitly on computer-mediated communication (CMC) and group decision support system (GDSS) research (e.g., Gallupe and McKeen, 1990; Hollingshead, McGrath, and O'Connor, 1993; Mabrito, 1992; Olaniran, 1994; Poole and DeSanctis, 1992; Rice, 1980; Sudweeks, McLaughlin, and Rafaeli, 1998; Whitworth, Gallupe, and McQueen, 2000). A final criterion for including a verbing micro-practice, of course, was its salience in the data corpus.

After multiple readings of the data set, a content analysis scheme encompassing three key verbing micro-practices for each of the three relational mandates was developed. The final codebook featured a total of 11 verbings -- the two consensusing and dissensusing verbings and nine others. For the purposes of this paper, we conceptualized the consensusing and dissensusing verbings as criteria in order to examine the extent to which other kinds of verbings co-occurred with consensusing and dissensusing. The next two sections explicate the conceptualization and operationalization of all 11 verbings. (2)

**Predictor verbings.** We divided our 11 verbing micro-practices into two groups. The predictive verbings were the nine verbings in this study developed to represent the three communicative situational mandates derived from Dervin and Clark (1993): self-relating-to-self, self-relating-to-others, and self-relating-to-society.

For self-relating-to-self, specific verbing micro-practices identified were: situatings (a participant discussed a specific, time-space anchored experience); emotings (expressed oneself in explicitly emotional terms); and self-growings (referred to self-learnings and realizations).

For self-relating-to-others, specific verbing micro-practices identified were: engagings (one participant addressed another by name/directly); perspectivings (referred to views or words of other participants); and empathyings (referred to emotions of other participants).

For self-relating-to-society, specific verbing micro-practices identified were: generalizings (a participant stereotyped or essentialized society or societal sub-groups); reflectings (offered social critique); and conscientizing (referred to actions taken or planned to change a critiqued social structure). These verbings with their definitions and exemplar quotes from online participants are presented in Figure 2 (see appendix).

What is important about the array of nine verbing micro-practices selected for use as predictors in this study is that they emerge from an intersection between the metatheoretical resources that inform this study and the empirical mandates of our data. The verbings are, thus, suggestive of the verbings human beings universally engage in communicatively as they proceed with sense-making and life-facing. They are useful conceptual tools for the purposes of our immediate research; and, at the same time, they provide a beginning account of the array of verbing micro-practices which we will need to identify if we are to be able to deeply study communicative dynamics.

**Criterion verbings.** Given the emphasis within computer-mediated communication (CMC) and group decision support system (GDSS) literatures upon consensus and dissensus as standard online discussion group outcomes, we reconceptualized these concepts as ongoing verb-ing micro-practices -- rather than as outcomes -- and renamed them consensusing and dissensusing. We define and illustrate these concepts in Figure 3 (see appendix).

**Units of analysis.** Following Dervin and Clark (1993), the unit of analysis for our study was defined as the individual posting; each posting was then coded dichotomously for the presence/absence of all eleven verb-ing micro-practices. In this study, these units of analysis are called posting moments. This terminology is intended to remind us of the inherent time-space bound character of online communication.

**Quantitative analyses.** In the remainder of this paper, we first compare overall participation levels of the different demographic groups which comprised the online participants. Second, we highlight the percentages of posting moments which exhibited each of the different verbings -- both predictor and criterion. Third, we utilize factor analyses to extract four underlying factors from the nine predictor verbings. We call these extracted factors predictor meta-verbings. Fourth, we utilize one-way analyses of variance to examine the co-occurrence between the presence of predictor meta-verbings and consensusing-dissensusing. It is important to note that the conceptualization of meta-verbings as predictors and consensusing-dissensusing as criteria is driven by a choice of how to most clearly address our research question and is based on the assumption that the prediction involved in this analysis is one of co-occurrence. All calculations were performed using the SPSS-X computerized statistical package (Norusis, 1990; SPSS, Inc., 1988). Specific details are incorporated in the results section below.

## Results

**Demographic comparisons.** Given the charge by Herring (1993), Yates (2001), Schneider (1997), and others that online discussion groups foster unequal levels of participation, demographic analysis was utilized to identify the impact of gender, age level, ethnic heritage, or socio-economic status upon participation. These data were provided by the participants via self-reports as a regular part of their course work. Since specific levels of online participation in these classes was required and graded, we would expect few differences in level of participation. Indeed, we aimed to eliminate the usual inequalities in participation levels in order to give our attention to verbing micro-practices its sternest test.

Table 1 (see appendix) shows the percentages of participants and posting moments and the average number of posting moments by demographic sub-groups. The F-tests for one-way analyses of variance comparing demographic sub-group categories predicting average number of postings were all not significant.

Out of 124 participants, females contributed 58.5% (n=795) of the postings, averaging 11.7 each, while males contributed 41.5% (n=565), averaging 10.1 each -- providing evidence that the discussions had not been dominated by males, as frequently reported in previous research on academic groups (e.g., Herring, 1993; Yates, 2001).

With respect to racial identity, those claiming a Caucasian heritage contributed 78.8% (n=1,071) of the postings, averaging 11.3, while those reporting other heritages (African, Asian, Hispanic, or Mixed Caucasian) contributed 19.7% (n=268), averaging 11.2.

Regarding age, participants were divided into two groups -- those in their twenties and those thirty/older. Those in their twenties contributed 92.7% (n=1261) of the postings, averaging 11.2, while those thirty and older contributed 4.7% of the postings (n=64), averaging 16.0. This

increase was primarily accounted for by one student who participated at a level slightly higher than average. The difference between means, however, was not significant.

For socio-economic status of parental household, participants from blue collar/laborer backgrounds contributed 12.1% (n=164) of the postings, averaging 10.3; white collar/functionary participants contributed 20.5% (n=279), averaging 10.0; white collar/middle management participants contributed 32.6% (n=443), averaging 11.7; and professional/executive participants contributed 32.3% (n=439), averaging 12.5 postings.

Thus, our results show that participation by different demographic groupings was essentially proportionate to their presence in the participant group. Observed differences in participation levels based upon demography were quite small, accounting for no more than a one or two posting difference, on average. The lack of differences is most likely explained by the imposition of course rules mandating levels of participation.

**Percentages of posting moments exhibiting each verbing micro-practice.** The second set of analyses focuses on the relative presence across the 1360 posting moments of each of the eleven verbing micro-practices -- the nine predictors and the two criteria. Figure 4 (see appendix) reports these results for the nine predictor verbings; Figure 5 (see appendix) for the two criterion verbings.

For predictor verbings, results show a wide range of percentages. At one extreme, reflectings were present in 76.1% of the posting moments; at the other, empathyings were present in only 12.1% of the postings. Additionally, given that the stated purpose of the classes was to promote dialogue on controversial issues related to racism and media/cultural studies, it was not surprising that the top grouping of verbings was reflectings, emotings, perspectivings, and generalizings. These verbings highlighted bridge-building practices that students would

likely utilize when participating in class-based discussions about controversial issues. Also of interest were the relatively low occurrences of conscientizings and empathyings. This is of particular note because the organization of the courses utilized in this study were based on principles of critical pedagogy (Freire, 1970), which emphasizes the importance of conscientizings and empathyings for the construction of community and community-empowerment. Despite this, these two verbings were the least frequent in the online discussions. Further, the relatively high levels of consensusing and low levels of dissensusing within the groups (see Figure 5) -- despite the controversial nature of the topics -- suggested that participants' ongoing practices privileged agreeings and discouraged disagreeings.

For the criterion -- 52.1% of the postings featured consensusing, while 20.7% exhibited dissensusing. Initially, the two criteria -- consensusing and dissensusing -- were categorized according to four mutually exclusive groups, as illustrated in Figure 5: (a) neither consensusing nor dissensusing -- 43.1% of the postings (the most frequent grouping); (b) consensusing only -- 36.3% of the postings; (c) dissensusing only -- 4.8% of the postings (the least frequent grouping); and (d) both consensusing and dissensusing -- 15.9% of the postings. However, given that slightly more than 75% of the postings which exhibited dissensusing also exhibited consensusing, a decision was made to use only two criterion measures: (a) the presence of consensusing (regardless of whether a posting moment also exhibited dissensusing) and (b) the presence of dissensusing (regardless of whether a posting moment also exhibited consensusing). The advantage of this decision was that the resulting measures mirror-image the focus in previous online research on achieving consensus outcomes versus avoiding dissensus outcomes.

**Factor analysis of the nine predictor verbings.** Recall, as noted above, that the predictor verbings for this study were developed primarily by intersecting the warrants from literatures focusing on dialogue metatheoretically and online public spheres empirically, with warrants from Sense-Making's metatheoretic focus on communication-as-procedure, and the qualitative force of our data set. The nine resulting predictor verbing micro-practices each were categorized as representing one of the three situational verbing mandates explicated in Dervin and Clark (1993). Thus, as shown in Figure 2, situatings, emotings, and self-growings were categorized as self-relating-to-self verbings; engagings, perspectivings, and empathyings were categorized as self-relating-to-others verbings; and generalizings, reflectings, and conscientizings were categorized as self-relating-to-society verbings.

Because of the scarcity of empirical work utilizing a verbing approach to communication practices, however, these categorizations were informed metatheoretically but not empirically. To do an empirical test, we utilized principle components factor analysis. Results of the Varimax rotation utilizing standard procedures is reported in Table 2 (see appendix). Following established convention, only loadings of .30 or higher are reported. The results yielded four factors which were named otherings, societyings, selfings, and transformings. Taken together, the four factors accounted for 61.2% of variance. (3)

The four-factor solution provided partial support for the original communication-as-procedure predictor groupings (self-self, self-others, and self-society), while suggesting that a fourth grouping be added. Factor one -- otherings -- featured strong positive loadings on both perspectivings and engagings and a moderate positive loading on empathyings. Factor two -- societyings -- featured strong positive loadings on reflectings and generalizings. Factor three -- selfings -- featured a strong positive loading on emotings, a moderate positive loading on

situatings, and a weak positive loading on empathyings. Finally, factor four -- transformings -- featured a strong positive loading on self-growings and a weaker but still strongly positive loading on conscientizings.

Some of the complexities shown in Table 2 are worth special mention even though space in this paper does not allow us to disentangle their full implications. The transforming factor is formed by two verbings which broke off correlationally from their originally conceptualized groupings. The self-growing verbing -- originally hypothesized as belonging to the self-relating-to-self category did not have a factor loading above .30 on the selfings factor. Instead, its loadings were highly positive on the transforming factor, and moderately negative on the societyings factor. At the same time, the conscientizing verbing -- originally hypothesized as belonging to the self-relating-to-society verbing mandate -- showed only a moderately positive loading on the societyings factor and a higher positive loading on the transformings factor.

This evidence of the co-occurrence of self-growings and conscientizings suggests that dialogue aimed at enabling critical thinking and constructive participation in society (i.e. praxis) may require far more deliberate attention to self-reflexivity than has traditionally been allowed in public sphere dialogues, whether pedagogical or general.

The factors reported in Table 2 became the revised predictor verbings utilized in this study. We refer to these as predictor meta-verbings. To create these revised predictors, standardized regression-based factor scores were computed for each posting moment on each of the four factors reported in Table 2. For purposes of the analyses of variances reported in the next section, each factor score-based predictor meta-verbing was dichotomized at the factor score median yielding measures with two values, mathematically 0 and 1, and conceptually

labelled for our purposes "no" and "yes". A "no" means that a posting moment fell below the median; a "yes" means it was at the median or above.

**The co-occurrence of predictor and criterion verbings.** The final step in our analyses involved using one-way analyses of variance to examine the co-occurrence between the four predictor meta-verbings and consensusing and dissensusing (the two criterion verbings). Each significance test focused on whether the percentage of posting moments coded as "yes", i.e. exhibiting a particular predictor meta-verbings, also exhibited consensusing and dissensusing. Results are shown in Figure 6 (see appendix).

One class of predictor verbings -- selfings -- were not more likely to co-occur with consensusing or dissensusing. About 52% of posting moments exhibited consensusing and 20-21% dissensusing, regardless of whether they also exhibited selfings.

Not unexpectedly, posting moments which exhibited otherings were significantly more likely to exhibit consensusing and dissensusing. Of the 610 posting moments coded as "yes" on exhibiting otherings, 87.5% exhibited consensusing and 35.4% exhibited dissensusing, significantly higher ( $p < .001$ ) than the consensusing and dissensusing percentages (23.3% and 8.7%, respectively) for the 750 posting moments which were not coded as exhibiting otherings.

The differences in the percentages of posting moments exhibiting consensusing were not significant between those also coded as exhibiting or not exhibiting societyings -- roughly 51-54%. There was, however, a significantly greater ( $p < .01$ ) likelihood of posting moments which exhibited societyings also exhibiting dissensusing: 23.7% of the 778 posting moments coded as exhibiting societyings also exhibited dissensusing compared to 16.7% of the 582 posting moments not coded as exhibiting societyings.

For the 604 posting moments coded as exhibiting transformings, results showed that that they were less likely to exhibit either consensusing ( $p < .01$ ) or dissensusing ( $p < .001$ ) than the 756 posting moments not coded as exhibiting transformings. While 47.7% of the posting moments which exhibited transformings also exhibited consensusing, 55.7% of the posting moments which were not coded as exhibiting transformings also exhibited consensusing. The comparable figures for dissensusing were 14.9% and 25.3% respectively.

Examining these data, one clear finding is overwhelmingly evident: the presence of otherings (self-relating-to-other) verbings, was most likely to relate to the presence of both consensusing and dissensusing in the online discussion groups.

This yields an important insight: Although it is not surprising that participants who consensed and dissensed simultaneously addressed those to whom they directed their comments, the reverse of this relationship suggests a potentially major limitation of online dialogues: participants generally appeared to be unable to address or talk about one another without simultaneously consensusing or dissensusing. In all, 93.9% of posting moments coded "yes" on otherings were also coded as exhibiting consensusing and/or dissensusing.

Of course, the emphasis on consensusing and dissensusing in this data set is, in one sense, not surprising. Discourse analysts have noted the dominant emphasis on agreeing and disagreeing within everyday conversational practices. In particular, Littlejohn (1992) argues that researchers have labelled this effect the "preference for agreement" (p. 99), noting that conversational partners often seek to "manage disagreement . . . so that agreement is achieved as quickly as possible" (p. 99).

However, despite this everyday emphasis on agreeing and disagreeing verbings, in this study we attempted through pedagogical intervention to invite alternative ways for participants to

relate to each other. The fact that otherings were most often accompanied by consensusing and/or dissensusing despite this intervention attempt makes the results especially telling.

To see the co-occurrence of consensusing/dissensusing and othering in action, examine one of “Bulldog’s” postings, which is replete with conjoint otherings and consensusing:

. . . i also agree with "yaww" that if the Victoria's Secret magazines were trying to sell their products using models who were bigger, they would not sell [too] much. . . . I do want to praise "clubsoda" for realizing that beauty comes from within. I do agree with him/her. . . (Bulldog)

This pattern surfaced in the majority of the postings. Thus, rather than simply trying to understand other's perspectives -- which would result if otherings had occurred in the absence of consensusing/dissensusing -- participants appeared to be compelled to utilize valencing strategies when relating to others, in essence, reproducing a judgmental hegemony within these public spheres.

We suggest that this tendency be labelled as a “consensusing/dissensusing effect.”

Further, in the case of dissensusing alone, this effect -- although slightly more muted -- was enhanced by the co-presence of non-critical societyings (i.e. generalizings), as in this posting:

I am writing this in response to what clubsoda said. The thing that I am struggling with is how you think that elite culture is something that is "controlled by the rich, influential, people in our societies?" . . . . . I feel that most people can be part of elite culture. (Mojo)

Given that instructions for pedagogical discussion groups often explicitly or implicitly mandate students to debate class-related issues (see Englund, 2000), this effect is likely to be quite prevalent. After all, public sphere theory – and conventional wisdom -- suggest that postings involving these judgments are the *telos* of such spheres, providing they lead ultimately to consensus and action.

However, a second finding challenges such conventional wisdom. We found that transformings (primarily self-growings and conscientizings) had a negative relationship with consensusing/dissensusing: the presence of transformings – verbings in which participants describe a significant growth experience or an action they had taken or planned to take to change social structures -- actually accompanied a significant decrease in the co-presence of consensusing/dissensusing. This can be seen in the example of a posting by “Corban,” which is replete with self-growings and conscientizings but does not include otherings or consensusing/dissensusing:

I was able to grasp some real insight into what it takes to deal with young children struggling with discriminatory behavior. I like to think that I would always correct a child when he said something I felt was stereotyping someone else, but I guess I never thought about the fact that we need to stop the child's actions and explain clearly why those kinds of actions are wrong. . . . From now on when dealing with a kid that makes a discriminatory comment, I won't just tell them I don't approve. Instead I will go the extra mile to try and explain why I feel that the comments were inappropriate and how they can harm other people. (Corban)

Thus, Corban exhibits transformings but does not utilize otherings or consensusing/dissensusing. This finding, which marks the entire data set, challenges the view within computer-mediated communication (CMC) research and Habermasian public sphere theory that the focus of pedagogical discussions should be the generation of consensus/dissensus-oriented rational-critical debate because it is assumed this leads to self-growings and conscientizings. Additionally, this finding supports and extends previous qualitative, Sense-Making based research suggesting that self-reflexivity is an important component of critical thinking and conscientization in other contexts (see Higgins, 1994; Rajendram, 1997).

## Conclusions

The rapid diffusion of CMC technologies around the globe has suggested the need for a better metatheoretical understanding of the processes of dialogue within online contexts. We aimed to add to this understanding by examining how grounded communicative practices relate to consensusing and dissensusing within online public spheres.

Taken together, our findings suggest that when large amounts of consensus/dissensus-style discussion takes place in online dialogues, it does so somewhat at the expense of participant transformation – self-growth and conscientization. It would seem that this finding goes against the strongly asserted received belief that the *telos* of pedagogical online discussion groups ought to be to promote participant debate and consensus about issues, which then is seen as leading to learning, growing, and social action. Rather, we found that consensusing and dissensusing processes actually seemed to impede this move toward critical thinking and praxis.

The implication of this finding for the promotion of more robust dialogues among diverse groups of people in online environments is somewhat pessimistic. If participants relating to others feel compelled by illocutionary forces to utilize valencing strategies, they may, in essence, be communicating a non-willingness to suspend judgment -- perhaps a necessary first step for participants to gain a wider understanding of the range and nuances of multiple perspectives on any given issue before they can decide on a course of action. In other words, those who have firmly adopted a partisan point-of-view may be less open to additional learning or action, since they have already made up their minds.

By developing a quantitative-qualitative, verbing-based template for analyzing microlevel communicative action occurring in online discussion groups, we have been able to identify ongoing systemic distortions – a “consensusing/dissensusing effect” -- that may be

reinforcing an hegemony that could be counter-productive to the emergence of participant growth and praxis. We have also been able to point to evidence of the co-occurrence of self-growings and conscientizings, suggesting that dialogue aimed at enabling critical thinking and constructive participation in society (i.e. praxis) may require far more deliberate attention to self-reflexivity than has traditionally been allowed in public sphere dialogues, whether pedagogical or general.

We present these findings as a first attempt to more concretely understand the nature and operation of verbing micro-processes -- the communication dynamics -- within online discussion groups. Of course, additional research is needed to replicate and expand upon these findings. Further, it should be noted that these findings are based upon processes that were observed within only one set of online discussions. Although nearly 1,400 postings were analyzed, replication within other online groups and contexts should be sought.

As these findings stand, however, we believe that some preliminary advice ought to be given to those who are responsible for the design and conduct of multicultural online dialogues. It seems to us that two key assumptions need to be challenged: (a) that the promotion of consensus/dissensus-oriented dialogue ought to be the sole *telos* of any public sphere and (b) that participants only need to engage in dialogue with others in order to learn and grow. Rather, these findings suggest that the practice of consensusing and dissensusing -- so closely linked with othering -- ought to be tempered in some fashion in order to promote the emergence of self-growth and transformation. This may require designs that privilege non-judgmental participation. Perhaps the goal of designers ought to be to facilitate the occurrence of otherings that are free from consensusing and dissensusing. Put another way, if otherings -- engagings, perspectivings, and empathyings -- are illocutionary forces locking participants into patterns of

consensusings/dissensusings to the detriment of self-growings and conscientizings, then only through their attenuation might we be able to create online environments that more closely approximate the ideal of a constraint-free public sphere that facilitates human growth, social action, and praxis.

## End Notes

(1) The study reported here is drawn from and involves some reanalysis of the senior author's doctoral dissertation (Schaefer, 2001). Junior author (Dervin) served as dissertation advisor.

(2) Content analytic procedures are reported only briefly here. Interested readers may find details in Schaefer (2001). Through grounded, iterative steps, the master coder set out to achieve 100% intracoder reliability prior to putting the coding scheme to interjudge reliability test. Coding commenced after the master codebook categories achieved stability on the eleven verbings. To test intercoder reliability, a systematic random sample of ten% of the postings (n=136) was content analyzed by two expert judges. Interjudge coding reliability was assessed using the percentage agreement index corrected for chance agreements (Krippendorff, 1980; Miles and Huberman, 1994). Acceptably high intercoding reliabilities ranging from 82.1 to 92.9% were obtained.

(3) As Rummel (1970) noted, any matrix of numbers can be factor analyzed -- even random numbers. The standard set of tests on the source correlation matrix was run. The matrix passed them all: no component correlation was higher than .70; the determinant was greater than .0001 (.4815); the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was in the very low range, but acceptable (.5762 -- all diagonals were in the mediocre or miserable range); and the Bartlett Test of Sphericity was significant at the  $p < .001$  level. (Morgan and Griego, 1998). Factor analysis procedures are presented briefly in this paper. Interested readers will find details in Schaefer (2001).

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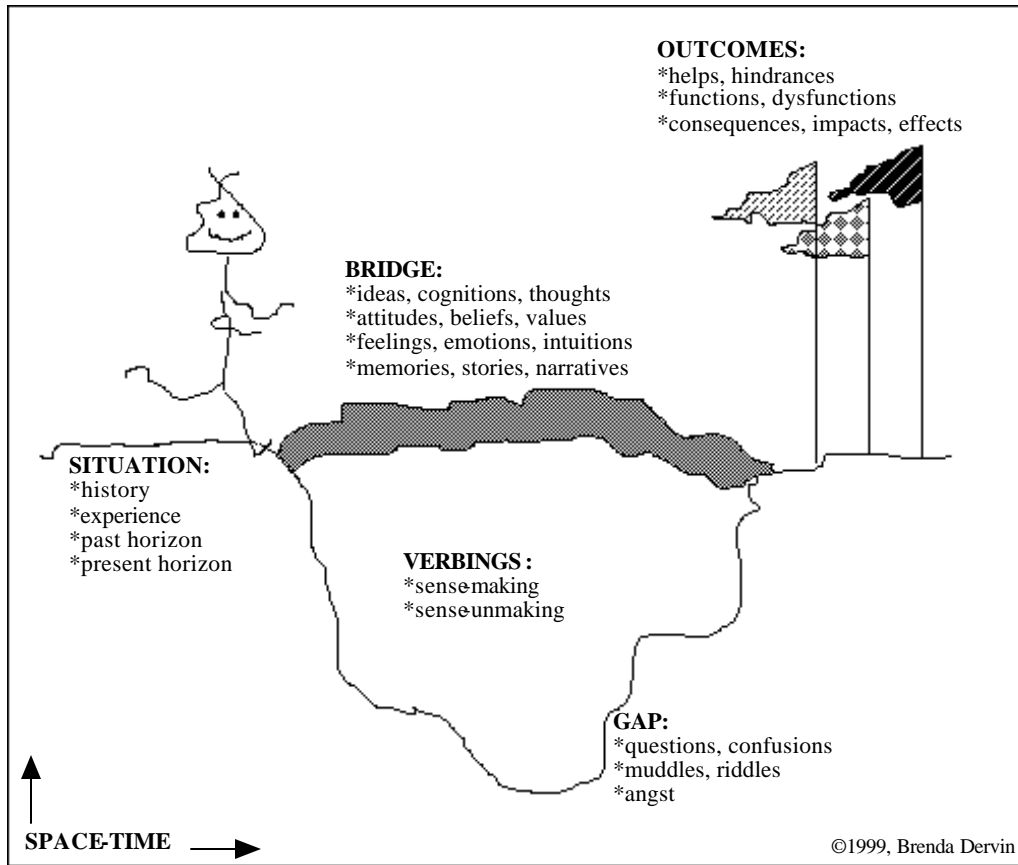
## Appendix

**Table 1:**  
**A comparison of the average # of posting moments per participant compared across demographic sub-groups: gender, race, age, and family socio-economic status**

	% of participants	% of postings (n=1,359)	Average # posting moments per participant	F-test
<b>GENDER (n=124)</b>				
Female (n=68)	54.8%	58.5%	11.7	n.s.
Male (n=56)	45.2%	41.5%	10.1	
<b>SELF-IDENTIFIED RACE (n=119)</b>				
Caucasian (n=95)	79.8%	78.8%	11.3	n.s.
Other (n=24)	20.2%	19.7%	11.2	
<b>AGE (n=117)</b>				
20s (n=113)	96.6%	92.7%	11.2	n.s.
30s-plus (n=4)	3.4%	4.7%	16.0	
<b>FAMILY SOCIO-ECONOMIC STATUS (n=117)</b>				
Blue collar (n=16)	13.7%	12.1%	10.3	n.s.
White collar (n=28)	23.9%	20.5%	10.0	
Middle management (n=38)	32.5%	32.6%	11.7	
Professional (n=35)	29.9%	32.3%	12.5	
*Participant n was 124. The ns vary here from 117 to 124 due to non-responses. As a result, some participant category percentage totals do not equal 100%.				

**Table 2:**  
**Factor analysis of the nine predictor verb-ing micro-practices**  
**showing factor loadings above .30000**

	<b>FACTOR 1</b> <b>Otherings</b>	<b>FACTOR 2</b> <b>Societyings</b>	<b>FACTOR 3</b> <b>Selfings</b>	<b>FACTOR 4</b> <b>Transformings</b>
<b>SELF-TO-SELF</b>				
Emotings			<b>.80853</b>	
Situatings		.35497	<b>.58643</b>	
Self-growings		-.36552		<b>.73506</b>
<b>SELF-TO-OTHER</b>				
Perspectivings	<b>.84244</b>			
Engagings	<b>.80939</b>			
Empathyings	<b>.50680</b>		.36090	
<b>SELF-TO-SOCIETY</b>				
Reflectings		<b>.78212</b>		
Generalizings		<b>.74072</b>		
Conscientizings		.44635		<b>.62676</b>



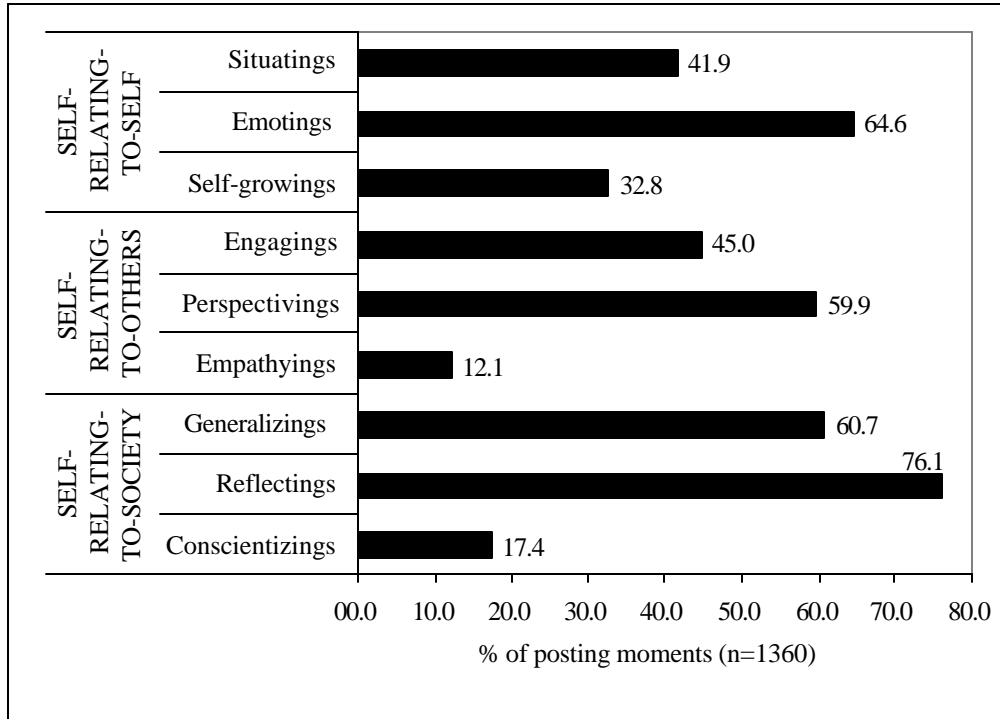
**Figure 1**  
**Sense-Making Methodology's central metaphor**  
(Used with permission, Dervin & Frenette, 2000)

<b>SELF-RELATING-TO- SELF</b>		
Situatings	Verbings in which the participants made comments specifically anchored to time-space specific, personal, lived experiences.	<i>...when I was six years old, I was terrified of my Phillipinio doctor who had a very strong accent. (Jenny)</i>
Emotings	Verbings in which participants referred to self-emotions or actually used emotional terms, expressive characters, emoticons, and the like (e.g., use of ALL CAPS).	<i>Well, I CARE and I'm in college!!!! (Joy)</i>
Self-growings	Verbings in which participants referred to self-learnings, awarenessings, or realizations related to their own life project.	<i>I learned a special skill just by taking this class is to listen to every ones views and you can then make your own. ...IT helps me to be a better person all around (Summer)</i>
<b>SELF-RELATING-TO- OTHERS</b>		
Engagings	Verbings in which participants directly addressed or discussed other participants/postings in the discussions.	<i>I want to offer praise to [Ariel] (Oscar)</i>
Perspectivings	Verbings in which participants referred to the perspectives, words, or viewpoints of other participants.	<i>She [other participant] was very honest and upfront that she is new with racial diversity (Corban)</i>
Empathyings	Verbings in which participants referred to the emotions of others or described the emotional terms, expressive characters, or emoticons used by other participants.	<i>I understand now how confused and hurt you were.... (Pegleg)</i>
<b>SELF-RELATING-TO-SOCIETY</b>		
Generalizings	Verbings in which participants made stereotyped, essentialized remarks about society or groups of people. In particular, these postings lacked critique of social structures, suggested homogeneity rather than diversity, and included factizings or labelings of groups.	<i>This helps me see that all people are inherently good (Ogea)</i>
Reflectings	Verbings in which participants offered social critique -- comments connecting self to societal conditions and structures. Such comments often focused on the participant's relation to these structures.	<i>I have to be concious [sic] of the struggles that minority groups still face today just because of the disadvantage point they were placed in so long ago (Susan)</i>
Conscientizings	Verbings in which participants referred to actions they have taken or would take to change a critiqued social structure.	<i>I went to Take Back the Night tonight....and wow I am glad I did .. It was awesome marching with hundreds of diverse women who have one thing in common,...all against violence against women, children, and men..... (scattered)</i>

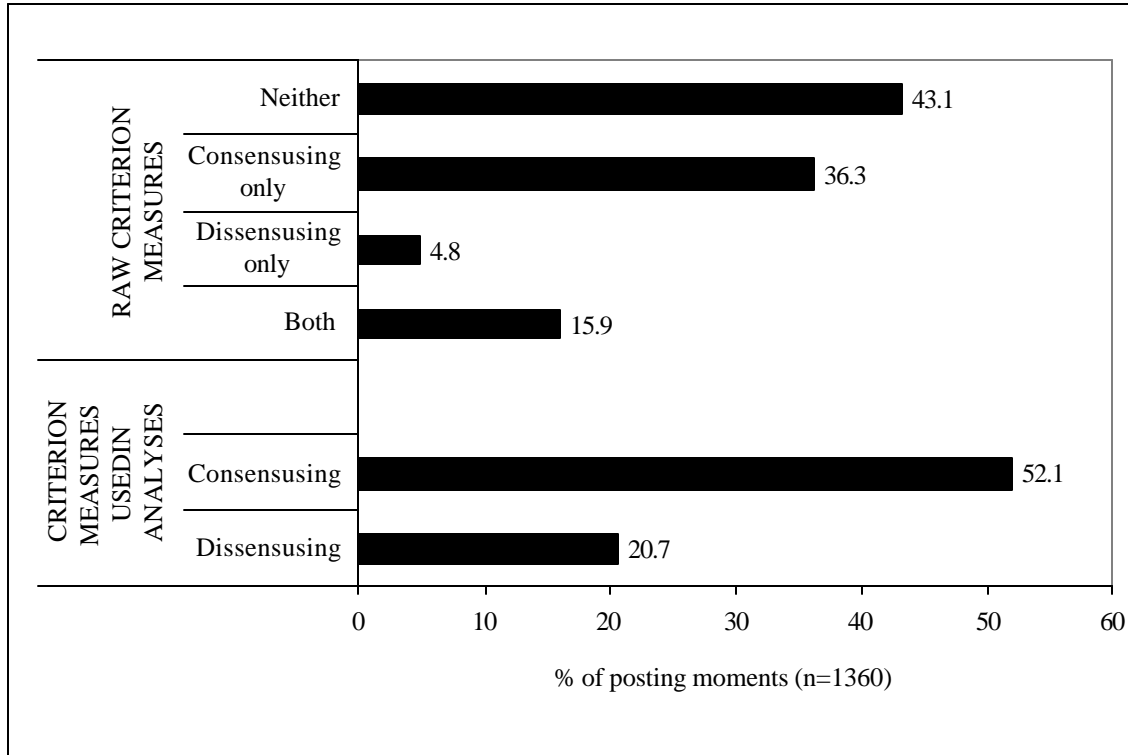
**Figure 2:**  
**The nine predictor verbing micro-practices with definitions and illustrative quotes**

CRITERIONS		
Consensusings	Verbings in which participants stated agreeings or accordings with the observations, perspectives, or discussions of other participants.	<i>I would have to agree with [jnj] very much on looking into someone's soul when looking at art (Larry Q)</i>
Dissensusings	Verbings in which participants stated disagreeings or discordings with the observations, perspectives, or discussions of other participants.	<i>In response to Sunshine, I think that you may have generalized a bit. . . I have other opinions (Sammy1)</i>

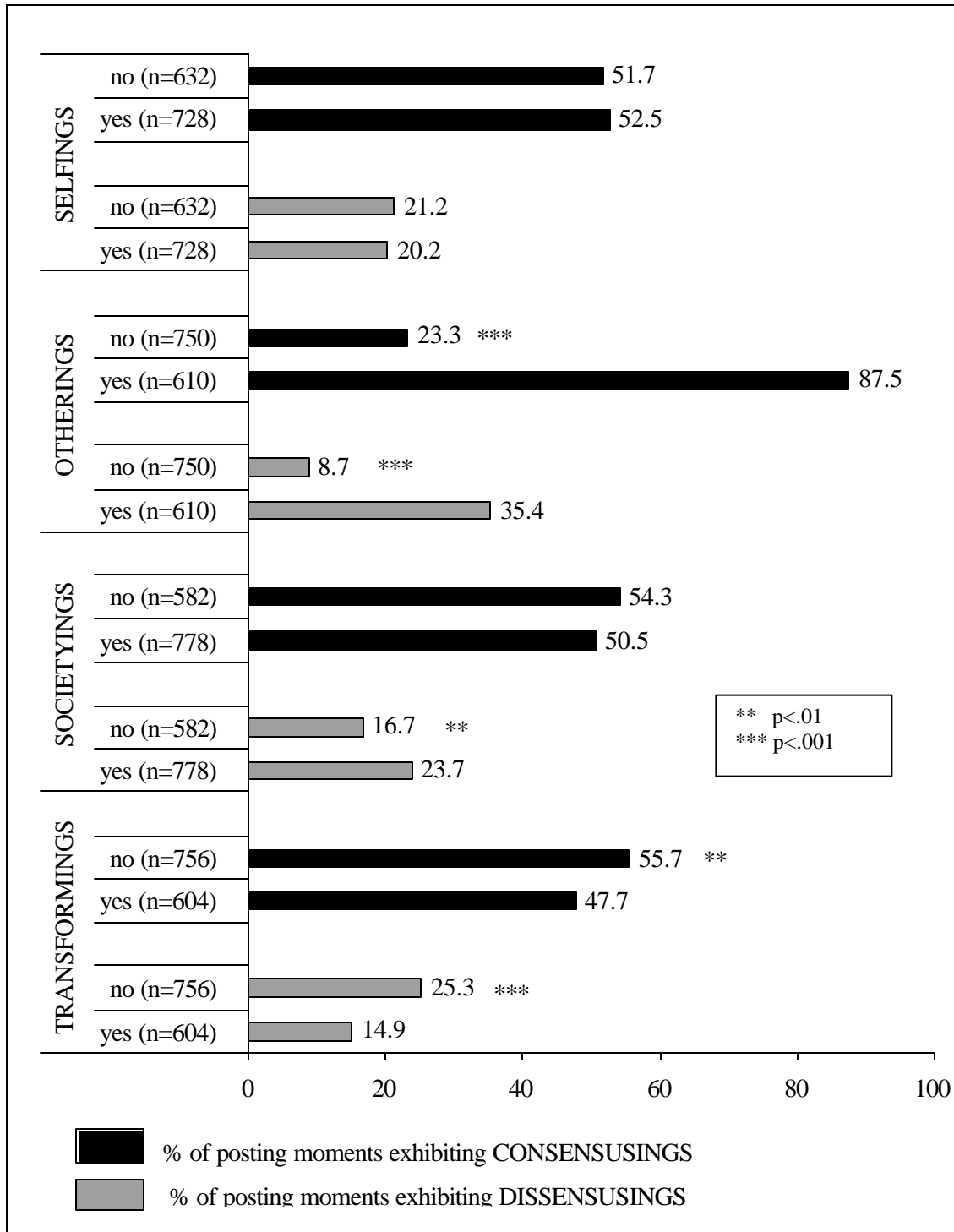
**Figure 3:**  
**The two criterion verbing micro-practices with definitions and illustrative quotes**



**Figure 4:**  
**Percentage of posting moments exhibiting each of the nine predictor verbings micro-practices.**



**Figure 5:**  
**Percentage of posting moments coded as exhibiting the consensusing and dissensusing verbing micro-practices -- the criterion measures in this study.**



**Figure 6:**  
**Results of one-way analyses of variance testing the differences in the percentages of posting moments exhibiting consensusing and dissensusing verbing micro-practices as predicted by the presence and absence of each of the four predictor meta-verbings.**