## A "Third Wave" Manifesto: Keynotes of the Sonoma Conference

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The papers in this issue of *Induiry* are a collection of keynote addresses from the 15th and 16th International Conferences on Critical Thinking and Educational Reform held at Sonoma State University in August of 1995 and 1996, respectively. As expressive of a theoretical agenda, they represent a partial distillation of a sixteen year commitment to forge a core concept of critical thinking that is historically rich, interdisciplinary, and overtly embraces "universal" intellectual criteria. Critical thinking, as understood by those in tune with the Sonoma conference tradition, has no disciplinary boundaries. Furthermore, it is understood not as a competing belief system, but a way of holding any belief system (i.e., critically or uncritically). It is a non-esoteric interest focused on insights, skills, principles, and values whose worth is demonstrable through careful reflection on common human experiences (focused on human foibles, everyday irrationality, and self-deception). It is accessible largely through the use of terms in educated, non-technical use, the critical-analytic vocabulary of educated English (or of educated French, German, etc.).

In the Sonoma tradition, critical thinking applies to specialized, intradisciplinary thought, certainly, but, more importantly, it applies to every behavior in which thinking is a guide to action and sound thinking essential for that action to be "rational." In this tradition, critical thinking is what makes it possible to transform the process of learning into the process of becoming a life-long learner committed to a rational and just way of life.

My own paper, "Critical Thinking and the State of Education Today," aims to provide the reader with a broad perspective on the state of critical thinking studies today, calling attention to the demonstrable failure of both educators in the classroom and scholars in the field to come to terms with critical thinking as a broadly-based, trans-disciplinary concept. It documents two troubling conditions: first, the fact that most university educators are both demonstrably unclear as to what critical thinking is and deceived as to whether they teach for it—while also thinking of themselves as clear in mind and effective in instruction! Second, the failure on the part of the critical thinking

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scholarly community, viewed collectively, to achieve both comprehensiveness and intellectual rigor in its work.

This second point I argue for through the discussion of three identifiable waves of research into critical thinking since the early 70's. The three waves represent, I argue, different research agendas and point to different emphases in application. The first wave is "based on a focus on the theory of logic, argumentation, and reasoning. It has become a virtual field unto itself, dominated by philosophers. First wave theorists tend to be 'informal logicians' and tend to focus only on those instances of thinking in which persuasion and argumentation are explicit. In addition, they tend to analyze 'arguments' with a minimum of background context. They tend to view reasoning and logic in a relatively narrow and technical fashion, ignoring the broad family of related uses of the word 'logic' (which one might review in any dictionary of the English Language)."

The second wave, I argue, represents "a reaction against the first. Unlike the first wave, it is not grounded in any one discipline. It represents a loose conglomeration of interested persons, producing work of mixed quality, developed from many different standpoints. ... It includes: some working on critical thinking from the standpoint of cognitive psychology, some from the standpoint of 'critical pedagogy,' some from the standpoint of feminism, some from the standpoint of particular disciplines (such as critical thinking in biology, business, or nursing), and still others from the standpoint of some element purportedly missing from first wave research agendas (such as 'emotion,' 'intuition,' 'imagination,' 'creativity,' etc.)."

The third wave, I argue, presupposes "some recognition of the problems generated by the first two waves and represents a commitment to transcend those problems (rigor without comprehensiveness, on the one hand, and comprehensiveness without rigor, on the other)."

I attribute this failure of the critical thinking scholarly community not to the fact that there is no discernible critical thinking tradition in intellectual history to build on, but rather to the intra-disciplinary, and hence largely insular, nature of most research today. Of the three waves of critical thinking research delineated in the paper, the third wave alone offers the hope of comprehensiveness combined with intellectual rigor. I argue that the third wave is nascent, and, though essential, still far from achieving the needed reconciliation and grounding of the first two waves.

Gerald Nosich's paper, "The Need For Comprehensiveness in Critical Thinking Instruction," addresses specifically the "third wave" demand for "comprehensiveness" in our conception of what critical thinking is and what it applies to. The first half of his paper treats the need for the critical thinking community to expand the notion of what we need to think critically about. The second half of his paper treats the need for the educational community to understand critical thinking as applicable "comprehensively" to every dimension of classroom instruction.

In the first half of his paper, Nosich argues for the need to go far beyond "arguments" in defining that to which critical thinking needs to be applied. As he puts it:

...the need to go beyond arguments became even more apparent when the Second Wave of critical thinking developed, when it became clear that critical thinking was something needed across the curriculum, and across all grade levels. In many fields we don't concentrate on arguments so much as on decisions that need to be made, or probable causes and effects, or actions that need to be taken, or on problem-solving generally. Nursing students need to learn how to think critically about medical emergencies, for example. Fourth graders need to ...think critically about problems of getting along with other children. Students in social studies need to learn how to solve problems having to do with testing hypotheses.

In fact, Nosich argues, we must understand critical thinking to be required not just with respect to problems of which we are already aware, but also to the process of anticipating problems, of figuring out how to avoid problems, of dealing, in other words, with "problems" before they become such. When we understand critical thinking in this comprehensive way, we recognize that critical thinking properly may be directed at any and every aspect of our lives and being: "The comprehensive answer being advocated here is the idea that thinking thought-out critically, in accord with high intellectual standards, is the way to deal with all aspects of our lives: professional, private, as teachers, as students, as parents, children, spouses."

Nosich argues that if thinking is pervasive in human life—and it is then the need to assess our thinking is pervasive in human life as well. As he puts it: "Through concept formation, thinking underlies all our attitudes, our actions, our opinions, and beliefs. All our experience. ...Without critical thinking, we seem to be the passive recipients of our concepts..."

Nosich cautions us against thinking of the function of critical thinking as essentially negative, and reminds us of its application to the most personal dimensions of our lives:

The question, "How comprehensive does critical thinking need to be?" is equivalent to the question, "Which of our concepts do not need to be subject to critical scrutiny?"...But the emphasis here should not be negative. The motivation for critical thinking is, once again, not just the avoidance of error or the avoidance of unreasonableness. All our concepts are subject to critical scrutiny because those concepts can be enriched and deepened by critical thinking. My relations with the people I love can be enriched by thinking critically about the way love fits in with respect for others, with not being manipulative, with the need to have independent lives, with self-esteem. Nosich argues again for comprehensiveness when he turns in the second half of his paper to the question of classroom instruction. He sketches out "three general reasons why education for critical thinking needs to be allpervasive": 1) "Non-critical teaching techniques are inadvertently anti-critical," (because whatever we are aiming at—other than critical thinking—can be taught either critically or uncritically) 2) "Thinking in the generic sense has already shaped students' concepts," (and unless they think critically through the concepts they already have, those concepts will uncritically dominate their thought) and 3) "Students need to learn to think in terms of central concepts, across the curriculum, across grade levels" (for unless students deeply absorb fundamental concepts through critical thinking, they are fated to either "forget" the concepts or mis-apply them). Nosich argues throughout the second half of his paper that all the "content" or procedures we teach our students need to be looked at from the point of view of "How will this help my students' ability to think critically through the subject matter?"

My brief summary, of course, does not do justice to the power of Nosich's mode of argumentation, which bristles with poignant cases and powerful examples. His essay is an excellent example of "third wave" thinking: comprehensive in scope while rigorous in exposition and reasoning.

Ralph Johnson's paper, "Critical Thinking and Command of Language," focuses on the need to develop command of language in developing command of thinking. In many ways, his keynote of 1996 is a follow-up of his 1995 keynote on the need for intellectual criteria and standards, for it focuses in large part on the nature and importance of clarity of thought, more specifically, clarity of concept and clarity of expression. His announced thesis is "to be a critical thinker one must possess a command of language." His focus: "What is clarity of thought and expression and how is it to be achieved?" Johnson's is a "third wave" argument since his paper is premised on the notion of universal criteria and standards in critical thinking (in this paper the universal need for clarity).

Johnson links *clarity* of concepts with *mastery* of concepts: "...I cannot think that one can expect to get very far out of the block if one is not thinking clearly, if one does not have mastery of the concepts and ideas one is using." All human reasoning is constructed out of concepts and ideas and "if the ideas, the building blocks are not clear, then it is likely that the larger units constructed from them will not be clear either." In pursuing the issue of how to achieve clarity of concepts, Johnson discusses and advocates three classic strategies: "by constructing a definition (in some cases), by explanation, by means of paradigm cases (in some cases), and by pointing to family resemblances (in some cases)." He cites Peirce and Wittgenstein as the masters of the logic of clarity of concept. In pursuing the issue of how to achieve clarity of expression, Johnson begins by linking clarity of concept with clarity of expression: "...where there is clear expression, there is typically clear thought; and where there is not clear expression, there is typically muddy, fuzzy, and unclear thought." He explains the process of achieving clarity of expression through the process of overcoming "obstacles" to clarity of expression, which he discusses in terms of six "traps":

Trap 1: "I know what I mean; I just cannot put it into words."

- Trap 2: "I know what I mean and that's all that counts; because what it means to me and what it means to you are different anyway."
- Trap 3: "Well, it's all just semantics anyway."

Trap 4: "Language determines what we think."

Trap 5: "Sounds good to me."

Trap 6: "Have you operationalized your parameters into a functional matrix?"

Johnson's paper reminds us of the non-esoteric nature of critical thinking, of its basis in long-established insights into how human thinking can be flawed and of the difficulty of achieving the intellectual discipline essential to thoughtful living based on those insights. It is reminiscent of Francis Bacon's analysis of the "Idols of the market place" (the way we misuse words). The discipline of thinking well about the events of everyday life, the practice of being habitually clear, precise, accurate, relevant, and logical, is not a discipline we are close to practicing. Ralph Johnson's paper reminds us of that fact.

In Linda Elder's paper, "Critical Thinking and Emotional Intelligence," the affective dimension of mind is dealt with directly, and in such a way as to theoretically integrate emotions and desires with the cognitive dimension. This paper not only lays the basis for an integrated theory of the mind, from an intellectual point of view, but also includes a critique of the popular book, *Emotional Intelligence*, by Daniel Goleman. Elder's is a "third wave" argument, first, because it integrates the cognitive and the affective, second, because it is premised on a comprehensive view of critical thinking, and third, because she presupposes universal standards and criteria. What is more, by arguing that command of thinking requires general command of "mind" (including emotions and desires), Elder clearly centers the main goal of critical thinking on the broad goal of becoming a rational person and living a rational life. Her underpinnings are reflective of Socrates' admonition that "the unreflective life is not worth living."

In her paper Linda Elder challenges the common public stereotypes of the relationships of reason and emotion, namely [in her words]:

- that our emotions and reason are often in conflict with each other,
- that emotion and reason function independently of each other,

• that it is possible to be an emotional person (and hence do little reasoning),

• that it is possible to be a rational person (and hence experience little emotion),

• that rational persons are cold, mechanical, and lack such desirable traits as compassion and sympathy,

• that emotional persons are lively, energetic, and colorful (though they are poor reasoners or do not follow their reasoning when making decisions),

• [that one]... must give up the possibility of a rich emotional life if one decides to become a rational person,

• [that one]...must give up rationality if one is to live life as a passionate, highly motivated person would.

Elder argues that these misconceived stereotypes "lead us away from realizing that there is thinking that underlies our emotions and emotions that drive our thinking. They lead us to think of thought and emotion as if they were oil and water, rather than inseparable constituents of human cognition. They lead us to think that there is nothing we can do to control our emotional life, when in fact there is much we can do." She argues that Goleman inadvertently re-enforces these stereotypes in developing his popular theory.

The key questions in Elder's paper are: "Does it make sense to speak of emotions as being intelligent or not? If so, is there such a thing as "emotional intelligence?" And if so, how does it relate to critical thinking?"

Elder argues that it "does make sense to speak of emotions as being, in some given context or other, "intelligent" or not, and, consequently, that it does make sense to speak of emotional intelligence." However, she also argues "that the way in which the concept of emotional intelligence is now being popularized—by psychologist Daniel Goleman in his book *Emotional Intelligence*—is flawed."

Despite her critique of Goleman she defends the viability of the concept of emotional intelligence, understood as such:

...emotional intelligence can reasonably be conceived as a measure of the degree to which a person successfully (or unsuccessfully) applies sound judgment and reasoning to situations in the process of determining an emotional or feeling response to those situations. It would entail, then, the bringing of (cognitive) intelligence to bear upon emotions. It would

encompass both positive and negative emotions. It would be a measure of the extent to which our affective responses were "rationally" based. A person with a high degree of emotional intelligence would be one who responded to situations with feeling states that "made good sense," given what was going on in those situations. Appropriately generated feeling states would serve as a motivation to pursue reasonable behavior or action. Emerging naturally out of "rational" emotions would be "rational" desires and "rational" behavior.

Elder argues "that critical thinking provides the crucial link between intelligence and emotions in the 'emotionally intelligent' person," and that one cannot be a critical thinker except to the degree that one is in charge of his or her emotions, passions, and desires.

In moving From Linda Elder's paper to Bill Dorman's we move from the inner world of the passionate thinker to the outer world of social phenomena: from the world of personal self-direction to that of media manipulation and political deception. Dorman's paper, "Mass Media and Critical Thinking: Reasoning for a Second-hand World," is a paradigm case of, as well as a model argument for, the application of critical thinking to the media. Dorman emphasizes that we know less about the mass media and how it functions to create "second-hand worlds" than we think we do. Critical thinking applied to media constructs has become increasingly more important, Dorman argues, because "more so than ever we are dependent on the meanings given us by others—rather than through direct experience." He argues that we are increasingly allowing the media to "produce a sense of who we are, and who we come to feel we ought to be," and significantly shape "how we think." Dorman's paper represents a "third wave" argument, first, because he presupposes a comprehensive application of critical thinking to problems of everyday life, second, because he presupposes universal intellectual criteria and standards, and third, because he conceptualizes the general power of critical thinking as enabling us to both analyze and take command of the logic of a domain of our lives (in this case, the logic of media communication).

At the same time that critical thinking becomes more important to media analysis, Dorman argues, it is also becoming more obfuscated by Second Wave thinking, and often "taken to mean little more than adopting an adversarial stance to an ideological position to which the writer or teacher happens not to subscribe." Almost never defined, critical thinking "is used as if its meaning were self-evident to all right-thinking people, which is to say those who agree with the writer's orientation."

To think critically about the media, Dorman argues, we must be able to step back from media constructions and recognize their power to define the world and our relationship to it. We must step back far enough to recognize the media's tendency to undermine "our ability to make distinctions" between "what is important and what is not, what deserves our concern and what is more deserving of our contempt, what is truly dangerous and what is merely discomforting, what sector of society has a moral claim on public resources and which interests should go begging, what is a national enemy and who is an ally, and so on."

Part of Dorman's paper consists of a series of powerful examples to support his claim that the media is undermining our capacity to put the events of the world into a reasonable perspective, undermining our capacity to judge—independent of media influence—what is important and what trivial. He walks us through the topsy-turvy world of media judgments about the importance or unimportance of Pentagon fraud, the plight of the homeless, Hillary's conversations, OJ Simpson, tragedy in Rwanda and Bosnia, Theodore Kozinski, etc...

Another, and perhaps more important part of the paper, is Dorman's analysis of the logic of the news, which, as he sees it, consists in the instantiation of the following premises: 1) that "the world is a certain and simple place to live" in which "there are good guys and bad,...this alternative or that one, a right way to do things and a wrong way"; 2) that "established authority, conventional wisdom, and existing social arrangements" are largely to be taken for granted; 3) "that emotion and imagery take precedence over reason"; and 4) that "infotainment" and "junk news" can safely be blended with other news items without harm. In this distorted logic, journalists themselves are taken for political and social authorities and often interview each other as if their expressed views on events of the day were themselves events of the day.

In Dorman's view, critical thinking plays out its essential function not simply in the academic world of intra-disciplinary thinking, not just in the inner world of our private thoughts, feelings, and desires, but also in the outer world of power politics, big business, and big money—where individual persons are just so many pliable psyches to be manipulated, shaped, and reproduced.

In Yehudi Webster's paper, "Thinking Critically About Identities," we are reminded of two key points: 1) how much our thinking is subconsciously controlled by our deeply conditioned conception of who we are and 2) how destructive that identification can be. This paper represents a "third wave" argument, first, because it presupposes our capacity as thinkers to figure out and take command of the logic of important domains of our lives (in this case, the manner in which we form, and can potentially take command of, our identities); second, because Webster presupposes universal criteria and standards for critical thinking; and, third, because critical thinking is treated as applicable, comprehensively, to all dimensions of human life and behavior. Webster, in effect, is arguing for the need of all who consider themselves critical thinkers to turn part of their critical-analytic abilities and attention to the way in which social setting, social conditioning, and social relationships represent forces that shape our thinking and hence forces that we must come to terms with—-if we would play a significant role in our own selfdefinition as persons and thinkers. The comprehensiveness of this thesis is, of course, very much in tune with the agenda of the third wave.

Webster argues that how we define ourselves exercises a powerful influence over how we behave: "...if I were to designate myself as a pacifist, I would experience an obligation to respond nonviolently in conflict situations..." Yet, he continues, "the issue of identity is sorely absent from discussions of strategies for infusing critical thinking into educational experiences." He points out that in some way we are in an age of identity accentuation and definition, feminists accentuating gender-based identity, minorities accentuating race-based identities, and cultural groups accentuating cultural and ethnicbased identities. Webster argues that we must, as critical thinkers, recognize that our most basic identity is what unifies us as a species rather than those competing identities which narrow and divide us (and hence limit the comprehensiveness and quality of our thinking).

For example, consider the recent emphasis on multicultural education. Webster writes, "What is missing from multicultural education advocacy is a suggestion that these identities be subjected to a critical thinking scrutiny. ...Through this scrutiny, it would be discovered that identities, such as women, men, blacks, and whites are traceable to social theories..." Webster argues that there "is a deep structure to identities. They mirror dominant social theories." As critical thinkers we must directly confront the "identities" which we have uncritically allowed to define (and limit) us.

Powerful forces discourage us from this important exercise of critical thinking because "official and academic institutions propagate gender, racial, and ethnic definitions of situations, which are then cited as empirical bases for further research, policies, and propagation."

What follows in Webster's paper is a searching critique of gender, racial, and ethnically-based identities and an argument for the necessity of critical thinking courses taking up this problem systematically. More broadly understood, Webster's paper is an argument for the total re-thinking of education across the board, for clearly the depth and breadth of thinking required to do an adequate critical analysis of matters of identity cannot be encompassed in any one course, nor even in any small set of courses. People are apt to raise searching questions of identity only if they are apt to think reflectively and deeply across many dimensions of their lives. Webster concludes his paper with the admonition: "Gender, racial, ethnic, and class identifications become partisan states locked in unending intellectual and political enmity. The critical thinking alternative is to promote reasoning as a unifying human praxis in order to resolve the problems facing the species." Yet I cannot help remembering here the sorry state of instruction for critical thinking in colleges and universities demonstrated in our study for the California legislature. We are far, very far, from the reality of instructional systems which so, in fact, foster critical thinking.

## Conclusion

Viewed as a whole, then, these collected keynotes represent a manifesto of third wave thinking and a challenge to the critical thinking scholarly community to engage third wave issues directly. To the first wave of informal logicians goes the challenge to address its own narrowness. To the second wave of feminists, critical theorists, and intra-disciplinary scholars, goes the challenge to address its general lack of recognition of universal intellectual criteria and standards. To the critical thinking scholarly community as a whole, goes the two-fold challenge: 1) to re-define and re-commit itself to a comprehensive concept of critical thinking reflecting intellectual history and to so foster the concept so that its learning is obvious to students. And 2) to recognize the present deep-seated fragmentation of the academic community, its lack of common perspective, and its consequent failure to graduate citizens who routinely think critically about the nature and affairs of their lives.

Only with a broadly-based concept of critical thinking, can we approach the intellectual community with the intellectual tools and academic criteria to forge the foundation for a classic liberal education—re-thought to take into account the newest challenges to freedom and rationality in a world of accelerating change, intensifying complexity, and multi-faceted interdependence. We face many problems in the process of seeking to engender a broadly-based, shared program for the critical thinking scholarly community, let alone the scholarly community generally. We are far from true intellectual community at any level of academic life.

Most scholars are more committed to their own narrow "discipline," and hence to performing for other scholars in that discipline, than they are in helping build the foundations of critical thinking studies across disciplinary boundaries and educational levels. Critical thinking as a *de facto* scholastic reality is still a scattered array of intellectual tools and insights, with no commonly recognized comprehensive theoretical foundations. As such, of course, it provides no backbone to education, no way to counter the growing fragmentation both inside and outside of academia, no way to provide an antidote to what increasingly seems like a diversifying cacophony of languages, programs, and perspectives. The "*unum*" of the *university* is very close to becoming entirely lost in the increasingly fragmented "*pluribus*." This is not intellectually necessary. There is a historically traceable history to critical thinking. Comprehensively conceived and grounded in universal intellectual standards, it can serve as the core of education's core. It is possible to design instruction at any level and in any subject so that it conduces to students becoming life-long learners who continually aspire to use critical thinking to bring a higher level of integrity and quality to every dimension of their life and practice. This is the ultimate goal of the Sonoma conference tradition. This is the ultimate agenda of the "third wave."