

Critical Thinking as “Rooted in the Social Principle”¹

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Introduction: A Generative Conundrum

Teaching in both the Philosophy/Critical Thinking and the Speech Communication areas of LaGuardia’s Humanities Department has allowed me to look at the relationship between thought and language from two deeply related but, at first glance, apparently quite different perspectives: One seemingly valorizes thinking as such, the other language in communication.

However, I increasingly perceive a deep interpenetration of these two perspectives and have even begun to wonder whether in establishing our academic disciplines we may have set up somewhat artificial boundaries separating that which is integral and continuous in thought and language. While it was no doubt historically necessary and, from the practical standpoint, highly useful to establish our myriad separate disciplines, issues of cross-disciplinarity appear to be emerging in several fields including science and education (Cundell 41–48; Nubiola 271–281). Perhaps the most obvious support of a thinking/language division is that there appears to be an “inner world” of intrapersonal communication and an “outer world” which includes the artifacts² produced by this inner activity and which may contribute to further critical and/or creative thinking.

In any event, I begin both my critical thinking and oral communication courses examining an ancient riddle in order to introduce what I consider to be the deep inter-penetration of language and thought. I draw an egg and a chicken on the board illustrating the famous conundrum: *Which came first, the chicken or the egg?* Whatever the responses of the students (and some of these can get me into subtle evolutionary and even theological discussions if I’m not careful), we usually reach at least a tentative agreement that we cannot in truth come to any absolutely satisfactory determination as to which came first. We finally admit that one must have a chicken to lay an egg and, conversely, that there must be an egg out of which

a chicken can hatch. In short, we conclude that there is a real generative puzzle here.

I then write *thought* and *language* below my chicken and egg drawings to suggest that these may possibly also be related in this *generative* sense: *Which came first, language or thought?* One student may suggest: “Thinking is first because the thinking *process* has to precede any particular thought or word or phrase.” But thought as such always already involves language even when one is thinking about ‘feelings’ and even as visual and other images are thrown into the semiotic mix. I sometimes reinforce this point by noting that while we can certainly experience a feeling without thought³ (imagine, say, the pain of a fleck of sand suddenly blowing into your eye before you’ve even thought of the source of that pain), yet we cannot think a single thought without language. Thinking may not be its *sole* purpose, but language is characteristically used to convey thoughts to ourselves, for example, as *reflection*, and to others in *communication*. Even possible exceptions (for example, some expletives) tend to occur within the context of some thought process or event. So my class typically concludes that thinking appears to be language’s primary purpose, that we use language principally to think about and to share our thoughts and feelings about things and events in the world. In short, thinking, if it really qualifies as such, *relies on language in an essential way*. It would appear then that if a student wants to develop her thinking abilities maximally – especially her critical thinking skills – it is of the greatest importance for her to develop as fully as possible her written and spoken language skills.

Critical Commonsense and the Social Nature of Inquiry

The disciplines and processes needed for the growth of those language competencies at the logical core of our intellectual being are developed near optimally through inquiry-based

projects involving research and writing. Such a research assignment can help a student to develop competencies in actively finding, critically evaluating, and purposefully and creatively using information.⁴ It has been my experience that such projects are deepened and socially energized when structured speaking activities are also incorporated into the project, especially near its conclusion, thus giving each student an opportunity to present an oral summary of her findings to the class and to respond to class questions of these findings in a Q&A.

Facilitating disciplined and critical reflection on cultural issues is, I believe, important in developing reasoning skills efficiently and effectively. In my experience these can be impacted to some measurable extent in the course of even a single, well-structured project, while the opportunity to verbalize findings (as well as additional oral and written reflections on the inquiry process itself⁵) enhances the learning experience. Indeed I have found that it can significantly influence the growth of student self-confidence on several intellectual and expressive levels.

It seems to me that the inquiry process is catalyzed, so to speak, when projects involve a principle at the core of Charles S. Peirce's theory of learning which he calls critical commonsense.⁶ This is a kind of thinking which, while granting ordinary common sense its due, finds areas where critical analysis and the development of a thoroughgoing *reasonableness* in relation to other people's thinking are considered essential in developing an individual's intellectual capacity or, to put it simply, for *real learning* to occur (de Tienne 37–51). This is basically the procedure of the special sciences where a developed critical method (*viz.*, experimental method) has allowed the physical sciences to progress as far as they have, the fruits of their discoveries leading to the development of such great technologies as those involved in, for example, the creation and evolution of the internet.

I begin discussion of these ideas by considering how, as a first methodological step, Peirce reflects on the fact that we hold some matters to be, as it were, quite certain that we have all

come through our life experiences to see *some* things as veritably “indubitable,” his most famous example being that every rational adult does not doubt that if he were to put his hand into a fire it would be burned (Peirce CP 5.498⁷). No one, except perhaps a very young child, would try inserting her hand into the fire in order to, say, “settle her doubts” in the matter.⁸ Peirce extends this notion to suggest that we do something like this when we reach agreement (or quasi-consensus) in such rigorously inductive procedures as those required by the sciences.

Yet, while it is certainly possible for scientists to arrive at consensus in relation to such controlled experiments in a given field, the question for classroom discussion is: How are *we* to reach agreement in less controlled contexts such as those involving decisions to be made by a group of students working as a team on a research project, for example our Symposium Project (see below)? Peirce holds that it is reasonable to imagine that we can indeed reach agreement to some extent when we are able to “look together” at the same data, etc. by employing the equivalent of a *diagram of the relationships of the component parts*, discussing what we can more or less *objectively* see there together.⁹ One increasingly familiar approach to this is the use of concept maps, for example, the mind maps at the head of each of the chapters of our primary textbook (Chaffee 2, *passim*). Throughout the course the class explores concept mapping in homework and in-class assignments culminating in their use in a final project which I'll now discuss.

The Symposium Project

It has seemed important for me to explore approaches which tend towards this ethic of critical commonsense in practice, for example, by considering issue-oriented topics taken up as group projects. In my critical thinking classes I assign a Symposium Project to facilitate this kind of learning. Assuming students have engaged in a sufficient amount of critical collaborative learning involving, especially, analysis-synthesis and group problem solving, some-

what after midterm I introduce them to the concept of critical inquiry as expressing the *social nature* of research (and this involves, not incidentally, the need to triangulate sources – our first collaborators being the authors of the sources themselves).

Each symposium involves (a) a panel discussion on a significant social issue presented before the entire class by a small group of students; preceded by (b) brief comments by each of the panelists summarizing the findings of the paper she or he has researched, written, and submitted to me; and concluding, following the panel discussion itself, with (c) comments and questions from the class. The project requires not only individual *critical thinking* in researching and writing the paper, but also *critical commonsense* as the panelists work together towards creating their own symposium. For example, they discuss how they are going to tie their various separate research topics together, the speaking order for the day of the symposium, the best kinds of questions to stimulate a vital panel discussion when it occurs, etc. Many of these issues are analyzed with the help of individual and group concept maps.

In class we begin to connect this work to broader cultural concerns, for example, that in our tumultuous era the very hope of enjoying a reasonably satisfying and successful life together on this planet may require much more critical thinking and critical commonsense being exercised by many more people. As we “look together” at the facts regarding such

pressing ecological concerns as global warming, among others, the challenge is for students to begin to see that critical commonsense is involved in being responsible citizens. In this way we may hope to create together the conditions bringing about positive change in our communities and, perhaps, in society more generally. This can only occur as more fully developed critical thinking is exercised wherever it seems important for any one of us to do so, for example, whenever an individual is called upon to responsibly do her part in support of a group project in a class at LaGuardia or, beyond the borders of academic life, in a community of which she is a member.

As my students strive to meet the challenge of developing critical commonsense in the classroom, they seem to become in the process more reasonable and less dogmatic in their discussions with each other. This suggests to me that the expression of critical commonsense is both a means and a sign of their exercising critical thinking in ways leading to improved communication. Naturally I hope they will extrapolate this kind of behavior into their lives far beyond the classroom. In truth I would like to imagine that when critical commonsense is valued it has the potential of benefiting not only individuals but also their communities, perhaps even society as a whole. This can happen because, as Peirce observed, not only language but reason itself is “rooted in the social principle” (Peirce CP 2.654).

NOTES

1. The phrase is Charles S. Peirce’s, American logician and scientist, the founder of philosophical pragmatism which in its classical form is best represented by him, William James, and John Dewey, and in our own time is *misrepresented* by the “vulgar pragmatism” of Richard Rorty (Haack 182–202).
2. For simplicity’s sake I refrain from introducing visual thinking into this discussion except to note that in the semiotic division of signs into icons, indexes, and symbols, a visual image can be any one of these (Sebeok 1–7).
3. Feelings in themselves are not essentially “rational” – that is, they don’t require thought as such (although they certainly may be effected by thought and/or effect it).

4. These information literacy skills are emphasized by both the ALA and AASL (Stripling, *passim*). There is a growing awareness of the importance of such literacies not only in college but also for life-long learning. To address some of these issues Charles Keyes, Edna Boris, Michele Piso and I are developing the Building Information Literacy in the Disciplines (BILD) seminar series within the LaGuardia's *Center for Teaching and Learning*.
5. This "thinking about thinking" constitutes almost a definition of critical thinking (Chaffee1, *passim*).
6. For a general discussion of the topic see my paper, "Trikonc Analysis-Synthesis and Critical Commonsense on the Web" (Richmond 158–161).
7. CP refers to the *Collected Papers* of Peirce. The number before the dot is the volume number followed by the paragraph within that volume. For example, CP 2.232 refers to volume 2, paragraph 232.
8. As learning may be through experience or reasoning – that is, be external or internal – this example is not sufficiently representative of all the kinds of indubitable ideas we might and indeed do have.
9. Peirce holds that *all* thinking – so, for example, even reading this sentence – involves a kind of diagram observation.

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