A Praxis of Entry: First-Year Writing as *the* Critical Thinking Course

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It is common to hear college instructors, in discussing "critical thinking," shift the discussion from *defining* critical thinking to identifying "features" of it and, especially, methods for encouraging it in their students. This is perhaps wise, as definitions of critical thinking generally tend to be banal: we use terms drawn from cognitive science (problem solving, drawing upon alternative perspectives, judgement, and so on) and informal logic (drawing conclusions based upon evidence—but only "carefully weighed" evidence) in eclectic and ultimately arbitrary ways. This tentativeness in defining "critical thinking" indicates some confusion regarding the provenance and purpose of the concept. There is no real intellectual genealogy of the concept. Nor do we use the term in normal academic work: we don't refer to our colleagues' work as good examples of critical thinking; we don't, in examining the history of the disciplines, discuss, say, the dispute between logical positivism and Wittgenstein in terms of which side did better "critical thinking."

In fact, we use the term "critical thinking" only for pedagogical purposes. We want our students to be better critical thinkers, and what we mean by this is that we want them to think more like we do. Or more like we think we do. So, many instructors can easily use ultimately empty terms like "analyze" and "evaluate" in discussing what students do (or, more often, fail to do) because we assume that is what we, or perhaps those whose work we admire, are doing, and we use that as an implicit model to assess student work. All pedagogy is mimetic, but it's not at all clear that we know what we are asking students to imitate. What are we doing when we "analyze" and "evaluate"? No doubt most of us could offer by way of explanation what would essentially be synonyms of these words. Eventually, we would get around to looking at an example—an exemplary text or something of our own. This is what an analysis of a poem looks like; this is what an analysis of data acquired from the laboratory looks like. A word like "analysis" can now function normally because it is working within a discipline. Now there is a practice we can ask students to imitate.

In that case, is there something called "critical thinking" that is irreducible to all the different, disciplinary-specific uses of words like "analyze," "evidence," "conclude," and so on? Does the concept of "critical thinking" ever add anything of account to the reasoning process that leads, or fails to lead, to the creation of a new concept or the observation of a new fact? To be blunt, is "critical thinking" anything more than a branding initiative on the part of institutions of higher education—something we can tell students and their prospective employers that they will be good at (along with being "effective communicators")?

I think it can if we see critical thinking as the replication of instances of successful thinking in learning settings. After all, if we ask students to imitate a good example of a lab report or literary analysis, we are just sorting the students into those who are good at

imitating these respective modes of writing and those who aren't. We really aren't *teaching* them anything. If we really want to teach, that is, if we want to make it possible for the student for whom imitating a lab report or poetry analysis doesn't come easily to nevertheless learn how to do so, we must generalize about how the exemplary mode of thinking was carried out in the first place so as to make it replicable. We must take what might have been a prolonged, leisurely trial and error and imaginative process for someone well situated within some disciplinary space and reduce it to a series of steps that anyone could carry out. This means that teaching critical thinking depends completely upon devising assignments that take the students through these steps. But that means that critical thinking takes place not in the disciplines themselves (where practitioners would speak about the use of disciplinary-specific concepts) but in pedagogical preliminaries to entrance into the disciplines.

What makes some intellectual work, a piece of writing for instance, exemplary is that it clearly follows the rules of a discipline—that is, participants in that discipline see the work as a clarification and revision of previous efforts to follow the rules. This is what we notice when we say that a particular writer has a "project." As academics, which is to say, as those who have entered the discipline by more effectively and less obviously imitating our teachers than others, we take up a project by addressing questions framed but not yet answered by the existing practice of knowledge in the discipline. To understand the relationship between disciplinary rules and knowledge, consider Thomas Kuhn's (1996) distinction between "normal science" and "revolutionary science." In normal science, the rules of the discipline are largely tacit, and they remain so because scientists tend to acquire these rules by having imitated their teachers' practices rather than explicitly learning the rules that govern those practices. But science also has anomalies, that is, questions that are generated by following the rules of science but cannot be answered within the framework of those rules. As the anomalies accumulate, they continue to "stretch" the rules of science, which appear less and less "natural" until they are made explicit, at which point "revolutionary science" can change the rules in order to normalize the anomalies as objects of inquiry within the new framework of rules. Now, few of us may ever do revolutionary work in our respective disciplines, but even normal work, if it is to be other than utterly irrelevant, must be able to recall, at least tacitly, the revolutionary origin of the discipline within which the work is being done.

Kuhn (1996) drew upon Wittgenstein's (1973) notion of language games, which locates knowledge within shared rules of reading, writing, and speaking. If we consider disciplines to be language games, then entering a discipline is a form of language learning. As Michael Tomasello (2005) showed, we learn language by tacitly assimilating its normal usage as unanalyzed chunks, or routinely collocated words, what David Bartholomae (2005) called "commonplaces," that take on their meaning through social interaction rather than some externalizable set of rules about the meanings of words and application of grammatical conventions. Learning the language of a discipline, including particular grammatical rules and various ways of using and combining words, can, however, proceed through the experience of anomalies, where the commonplace no longer works as expected.

If, as Robert Ennis (2013) argued, universities should have an introductory course in critical thinking, the centrality of reading and writing to the disciplines suggests that First-Year Writing, properly understood, is that course. What our assignments need to do, then, is place students before anomalies and ask them to normalize them—that is, to have students recognize the otherwise tacit rules governing their understanding and how these rules need

to be amended or revised in order to participate in a project of inquiry. In other words, the process of entering the disciplines cannot be taught *within* the disciplines—all the disciplines can teach are its particular practices. If, as I am suggesting, teaching critical thinking is ultimately teaching *disciplinarity*, then the First-Year Writing Course, properly understood as the sustained confrontation of commonplaces with anomalies, is the *only* place for a critical thinking course.

Pedagogically, this entails placing the students in some relation to texts such that their commonplaces no longer work, in which case they have to generate a new language game, or what we might call an "idiom of inquiry," out of the materials of the text, the assignment, and the space created by the students' shared work on some assignment. What we are modeling, then, is the entrance into a discipline, itself modeled on the process of learning a language, and doing so through immersion. The assumption we make is that we can teach disciplinarity rather than propose either some generic form of idealized thinking or a case-by-case introduction to specific disciplines. To learn disciplinarity includes acquiring the ability to develop strategies for noticing the specific ways questions are asked and answered in particular domains of knowledge making. When one enters a disciplinary space, one needs neither to make true/false statements nor to agree/disagree with other statements nor to express preferences (good/bad, like/dislike)—moves often exhibited by first-year writers—rather, one needs to know that all of these intellectual acts are embedded in specific, historically evolved practices, and that one must enter those practices by learning the rules of the game. We can think of that praxis of entry as critical thinking.

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Many can not come in this for nor without them
Some of which will they for them awhile
For which it is not only at an attempt
They can find that they can retouch
Not only what should be cared for
So they make this seem theirs
And only integrally shared as much as fine

Gertrude Stein, *Stanzas in Meditation*

My first-year writing courses are set up so as to stage such an engagement for the student with language and disciplinarity. For the last two years, I have had students work with Gertrude Stein's (2012) *Stanzas in Meditation*, giving them the assignment "to make the stanza grammatical." Here is the course introduction, in which I frame the articulation of language and disciplinarity for the students:

> An understandable response to a difficult text is to declare that it makes no sense; a more considered (and rewarding) response might be to get to work making some sense of it. This course is aimed at encouraging you to take the latter approach and providing you with some means of doing so. A text seems to make no sense because it is made up of words articulated in unfamiliar ways (it can't be the words themselves because, after all, looking up words in the

dictionary now takes about two seconds); in other words, the difficulty lies in the grammar of the sentence. You are probably used to thinking of grammar as an issue for writing but, in fact, it is just as significant an issue for reading. As we read, we process texts through, or translate them into, sense-making frames and grammatical constructions we have already learned and become habituated to. Words or parts of sentences that cannot be processed or translated this way tend to be set aside, while those parts of the sentence that can be processed or translated are transformed into the already known.

Indeed, one thing I have learned from many years of reading student writing is that when student readers produce reductive readings of texts it is because they focus on the more familiar elements of the text at the expense of the unfamiliar ones. In so doing, they take some of the words in the sentence, as many as possible, and place them in the kinds of sentences they are used to reading and writing. If you read in this way, even if you have a dictionary definition of every word in the sentence you have read, you are practicing reading as *chunking*, that is, fitting new material into prepared templates. Academic writing, meanwhile, involves "de-chunking," that is, generating new ways of articulating textual materials. Since academic reading and writing depends upon directing your attention to that which doesn't fit your familiar templates, this distinction between two different modes of processing text is absolutely central for learning to conduct inquiry and research. This course is designed to help you train your attention as a reader and writer to notice and invent different ways of reading a text—it is designed to teach you how to de-chunk. The project of the course, to "make grammatical" a stanza from the American writer Gertrude Stein's *Stanzas in Meditation*, will keep us focused throughout the semester on the dense network of relations between grammar and meaning, and grammar and inquiry. Each of you will approach this problem on your own, while the research component of the class will entail your commenting on and learning from each other's efforts. Doing research, at its most basic, means being able to adopt at least two ways of seeing the "same" thing and explore the consequences of seeing it one way or the other. This course will have you practice that basic research move many times, and in many ways.

The assignment involves a series of steps that direct students' attention to the text in ways that are perhaps more fundamental and productive than a question about students' "beliefs and biases," which one might find in textbook accounts of critical thinking and reading. If students are engaging a text, then that question doesn't arise, other than implicitly, insofar as their beliefs and biases are evident in the commonplaces reproduced through their readings. Rather than focusing on student's beliefs and biases, we can look at the relation between the student's reading practices and a text that resists those practices. In this case, my approach is somewhat more radical, insofar as, rather than generating discrepancies between familiarizing readings and the unfamiliar text, the assignment removes all possibility of a familiarizing, or commonplace, reading, thereby placing students in direct confrontation with anomalies in the text.

To make the stanza grammatically correct, students are allowed to add any punctuation they wish, while being forbidden to remove the punctuation already there (which is, at most, only a few periods). Once they have "sentences," that is, series of words ending with periods, they are to account for what is grammatical and what is not grammatical in each sentence. (My own criterion for selecting a text, such as Stein's, to use here is that it has substantial patches that can be read as grammatical on conventional terms, along with significant patches that cannot.) I provide them with a set of grammatical resources and allow them to find others as needed. It might take up to several weeks for students to familiarize themselves with the basic subject-predicate relationship constitutive of the declarative sentence and with the understanding that every word in the sentence must have a demonstrable grammatical relation to another word. (I have been forbidding imperatives and interrogatives, as they provide too many "loopholes" through which students can avoid grammatical complexity, but I might allow them in future iterations if I can make restrictions regarding their use sufficiently rigorous.) Much of their work ends up being similar to what a traditional grammar class would have provided them with, which is to say something akin to sentence diagramming. This itself would be a useful intellectual exercise, but it reaches its limits in the ungrammaticality in many of the sentences the students compose. It's also easier to explain what a word's grammatical place in a sentence is than to explain why it doesn't have a grammatical place. To do the latter, one must test out possibilities, which requires a kind of inquiry into the range of possible uses of words. Would a particular word work as an adjective? Well, perhaps, and in fact the dictionary shows a rare use of the word in that form—but, then, another word would have to function as a noun, which means we'd have to see another word as . . . They have to keep moving back and forth between the words in "Stein's sentences" and between those words and the external resources they are making use of. The rule of the game is to leave as few words as possible outside of the grammatical structure of the sentence and to explain why each word is in or out. (As you can perhaps imagine, we don't get through more than 40 lines of the stanza in the semester.)

Now, this already entails considerable critical thinking—their commonplaces and the ways they have of talking about texts have all been rendered inoperative. At the same time, they are given the resources with which to construct a critical discourse of their own, enabling them to convert the anomalies of the text into objects of inquiry that can be explained grammatically. Moreover, for the outstanding anomalies—those words that cannot fit grammatically into the sentence—the student is to amend his or her reading in order to explain how these words *could* function grammatically in the sentence. In other words, students are instructed to continue to normalize the anomalies in the text by recognizing them as idioms, the kinds of variant usage that distinguish a discipline.

The starting point for this reading is their account of why the word doesn't function grammatically in the sentence—if the word is ungrammatical, then that is because the word functions as a part of speech that the sentence cannot accommodate in that place. (It's an adjective, but there is no noun for it to modify, for example. Of course, many words can function as several parts of speech, but in that case, the word can't function in any of those ways in this sentence.) If one can determine which part of speech doesn't fit at that juncture in the sentence, one can also determine which part of speech would fit—so, the word can't be an adjective because there is no noun, but it can be an adverb because it's next to an adjective (of course, not just any adverb can modify just any adjective).

The student's task, then, is to read that word *as* the kind of word or part of speech it would have to be in order to function grammatically in the sentence. I have discovered that this is one of the most difficult things you can ask a student to do. Asking them to imagine their own bodies as composed of molecules and those molecules as composed of physical particles subject to the uncertainty law of quantum physics is nothing compared to asking them to imagine "which" as an adjective (outside of the very few cases where it actually does function adjectivally). We develop additional steps for doing this work. Look up all the definitions of that word in the dictionary. Which best lends itself to this non-normative use of the word? Can we think of an analogous "wrenching" of words from their normal uses? (Might slang come in handy here?) The student can be asked to try and generate examples of that anomalous use of the word (what would "a which action" be, for example—what would constitute the "whichness" of the action?). The gravitational pull of words (especially the extremely common words out of which Stein's stanzas are mostly composed) and students' inhibitions with regard to using words in unsanctioned ways are so powerful that this reading against the grain of words whose meaning is virtually engraved for the students is a significant intellectual accomplishment.

Here is a passage, written by a student, Zoe, that represents the kind of work encouraged by the assignment:

> The sentence "So, they make this seem theirs and only integrally shared as much as fine" is grammatically incorrect. Using the grammar tests again, you are able to make a tag sentence: "So they make this seem theirs and only integrally shared as much as fine, don't they?" Although, you are not able to embed "I believe that . . .": "I believe that so they make this seem theirs and only integrally shared as much as fine." With this being said, if you remove the word "so" and embed "I believe that . . ." it reads: "I believe that they make this seem theirs and only integrally shared as much as fine," which is grammatically correct. When dissecting the sentence, we can see that most of this sentence is grammatically correct. The word "so" starts off the sentence being used as an adverb meaning "thus" and is followed by the subject "they" and the predicate "make". I placed a comma after the word "so" to make it a grammatically correct introductory word. Following the subject and predicate, the verb "make" is complementing the phrase "this seem theirs". The word "make" forces the reader to question what it is talking about, or in this case modifying. For example, "so they make . . .", what are they making? They are making "this", and what are they making this do? They are making this seem theirs, or in the case of the sentence "they make this seem theirs". The next part of the sentence, "and only integrally shared" is grammatically correct if each word is used in a specific way. The word "and" is fine because it is a conjunction joining the previous part of the sentence to the following part. The word "only" is an adverb which is followed by the adjective "integrally". This is grammatically correct because "only" is modifying "integrally" and "integrally" is describing "shared". So, "integrally" would be a way of being shared, things could be shared in an "integral" way. To be "integrally shared" means to have composed parts that are being shared. The last part of the sentence "as much as fine" is where the sentence becomes ungrammatical. The

phrase "as much as" is a commonly used phrase and is grammatically correct because "as" is an adverb that is modifying the adjective "much" and if the "as" after is also an adverb then it technically could modify the adverb "fine," but it doesn't fit grammatically because a noun would have to follow the second "as" for it to be grammatically correct. In the phrase "as much as" the second "as" is an adverb but with the word "fine" the second "as" would have to be a preposition for this to be grammatically correct. With this being said, the only form of "fine" as a noun is referring to a fine that must be paid, which would make the entire sentence grammatically correct.

The sentence is quoted, and a judgment is made regarding its grammaticality (a judgment that gets qualified, if not reversed, by the end of the analysis). Zoe first uses a holistic grammar test I provided the students. It asks them to test the sentence by appending a tag question to the end and placing "I believe that" before the sentence. This test positions students in relation to the text in a way that relies on their grammatical intuitions, which are decreasingly reliable as the sentence increases in unfamiliarity. She then goes methodically word by word, keeping in mind the centrality of the subject-predicate relation constitutive of the sentence. She uses technical grammatical terms, but students who relied solely on those terms found themselves limited when it came to deciding which words to group together as grammatical units. Zoe, in fact, began the semester relying more upon the kind of work she does here with the word "make," which she deals with more intuitively by treating the sentence as an answer to a series of questions—if one sees the word "make," one can assume *someone* is making *something*. If one is able to distance oneself from the "naturalness" of language use sufficiently to examine the sentence in this way, it will likely be easier later on to determine the grammatical terms for the *someone* and *something*. If one doesn't gain that distance, it's likely one will have to work differently, by mapping out the grammatical possibilities of each word and then piecing the sentence together in a kind of combinatorial manner—perhaps the grammatical intuition will "kick in" at that point. Either way, the relation between tacit and explicit knowing itself has to be made more explicit.

It seems to me that part of Zoe's original judgment regarding the incorrectness of the sentence involved the "awkwardness" of "only integrally shared." If one follows the parts of speech, as Zoe does, it works; but it's not clear what it would mean to "share" something in an "integral" way—the grammar seems in tension with the meaning, which casts doubt on the grammar (if it doesn't "make sense," students are inclined to say it's grammatically incorrect). Part of the discipline of the assignment is for students to separate out these elements of language and to look just at the grammar, disregarding meaning (a practice that reaches its limits in some cases where the distinction can't be made completely clear). Zoe reconciles the discrepancy between grammar and meaning by looking up the word "integral" and satisfying herself that it could be understood as a way in which things might be shared. The entire weight of her original judgment bears, finally, on the word "fine." It takes a very careful, word-by-word and idiomatic analysis of "as much as" to get to that point, which again leads us to an interesting intersection between meaning and grammar. It should first be noted that the problem here is of Zoe's own making, insofar as "fine" can, in fact, be an adjective—perhaps Zoe only looked up the word when it got to the point where she might have to attempt to read it as an idiom (it may also be that there is no noun for "fine" to modify, and when "fine" is used by itself, it is usually an adverb—"How do you feel?—Fine"). At any

rate, the assumption that the word "fine" is an adverb and therefore can't be compared to "shared" seems to derive from there being nothing in the sentence indicating the other, fairly common use of "fine" as "payment as a form of penalty." It's a question, that is, of the statistical distribution in the use of words, of the expectations of the user—we are far more likely to say that something is "as fine as" something else than to say that "a fine" is "as much as" something other than a fine. It is only the constraint of the assignment, to make the sentence grammatical, that leads Zoe to "scan" the semantic possibilities of "fine" more widely—and hence to arrive at the conclusion that the sentence is, at last, grammatical. (Is it, though? Can "fine" as a noun be used here without a determiner? Can something be "fine" [as payment for a penalty] as much as it is "shared"? Would we have to read "shared" anomalously as a noun? It should be kept in mind that even the most exemplary analyses carried out by students leave open these kinds of question at the margins—which makes this an extremely open-ended mode of inquiry.)

The broader purpose of this way of working with a text is to sensitize students to the centrality of the articulation of grammar and semantics to the generation of new concepts that mark a discipline. One might say that the origin of Western conceptual thought involved Plato taking an adjective, "good," and turning it into a noun by placing a determiner in front of it: "the Good." All conceptualization requires, at least to some degree, some kind of wrenching of words from their normal collocations and idioms and warping them so as to make them work in new ones. We can, then, tie the problem of disciplinarity to the problem of reading comprehensively. In both cases, one must be able to imagine ways of shaking words loose from their customary settings (customary, at least, for that particular language user) and setting them to work in new ways. "What would it mean to speak of _____ as _____?" is the general form taken by this intellectual move. ("Well, we'd have to see____ as _____.") If we position students in relation to textual anomalies, we help them open up ways of posing this kind of question.

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