CHAPTER 3: THE ELEMENTS OF AN ANTIRACIST WRITING ASSESSMENT ECOLOGY

Now, I turn to discussing the seven ecological elements that constitute antiracist classroom writing assessment ecologies, elements that can be used to critique or transform ecologies as revolutionary antiracist projects in order to do more productively the Freirean problem-posing I've already discussed. In my discussion of each ecological element, I will attempt to offer ways that it can be a focal point to design and engage in antiracist writing assessment ecologies, particularly engaging students in problematizing their existential writing assessment situations. My larger argument in this chapter is to show how thinking in terms of these seven elements can help writing teachers develop antiracist classroom writing assessment ecologies that are more critical, sustainable, and fair for everyone. There may be other elements at work in local writing assessment ecologies, but these appear to be the seven basic elements that writing teachers can consider when understanding their own assessment ecologies and turning their efforts toward antiracist purposes.

The seven elements of antiracist writing assessment ecologies may seem commonsensical to many, but not many consider them holistically and interconnected when designing, engaging in, or investigating classroom writing assessments. Furthermore, I discuss them in terms of their potential to explain or aid in antiracist assessment agendas. Because they are inherently interlocking elements, because they inter-are, because they are more than what they are, often sharing in each other's essences and transforming into each other, it easier to discuss them separately, particularly when explaining or designing antiracist classroom writing assessment ecologies. The seven interconnected and holistic elements are: power, parts, purposes, people, processes, products, and places.

Before I discuss each element separately, it is important to consider their complexity as a whole and interconnection to one another. In a recent article in which she argues that agency emerges from actions and reactions among people in the world, Marilyn Cooper (2011) uses complexity theory to explain the system of rhetoric and people, one more nuanced than the writing ecology she explained in 1986. She says that "agency is an emergent property of embodied individuals," and is "based in individuals' lived knowledge that their actions are their own" (2011, p. 421). Emergent rhetorical agency is "a response to a perturbation that is shaped by the rhetor's current goals and past

experiences," but it's also an "enactive" system-that is, individuals act without knowing exactly what they are doing or that they may be changing the system (Cooper, 2011, p. 426). Using complexity theorists, Cooper explains the way agency emerges, a process of "structural determination" very similar to Marxian determination in which changes in the system, such as persuasion, may be instigated by a person who employs rhetoric but whose specific effects on the system and the individuals who make it up are "determined by the structure of the disturbed system" (2011, p. 426). Thus large-scale or systemic changes may not directly affect individuals' behaviors, say changes in writing practices of a student in a classroom. The system is not a linear system, a one-to-one causal system. For instance, it is not always the case that when we give good feedback to a student, the student's draft gets better. Rather, Cooper argues, complexity theory says that it is a circular causal system, termed "structural coupling," in which one person's actions affects others' and those others react, adapting, which continues the chain of mutual adapting. All the elements in any writing assessment ecology work the same way. Change one, and the others change through mutual adapting.

Furthermore, reading these ecological elements as a part of a complex system is important—that is, they are more than the whole of the ecology, but this does not capture all of the complexity Cooper is suggesting. Cooper offers this definition of the way complex systems can be understood:

> Complex systems (an organism, a matter of concern) are self-organizing: order (and change) results from an ongoing process in which a multitude of agents interact frequently and in which the results of interactions feed back into the process. Emergent properties (such as agency) are not epiphenomena, nor "possessions" in any sense, but function as part of the systems in which they originate. And causation in complex systems is nonlinear: change arises not as the effect of a discrete cause, but from the dance of perturbation and response as agents interact. (2011, p.421)

Thus the complex system of an antiracist writing assessment ecology is an assemblage of dancing elements, only one of which is people in the system, that interact and mutually adapt because of the perturbations in the ecology. Consequences (or products, as I'll discuss later in this chapter) occur because of the ecology or complex system, not because of individual actions by students or a teacher or a rubric alone. They may be instigators, causing perturbations in the system, but it is the system, the ecology as a whole, that determines what possible outcomes, effects, changes, or products there will be. Thus any learning or educational benefits to students one might hope from an antiracist writing assessment ecology will be a product of the dance of perturbations and response of elements in the entire complex system.

So while I discuss each element below separately, I hope you will see the complexity in which they inter-are. In one simple sense, all elements create any one given element. People and purposes, for example, help construct the places of the ecology, just as places, power, and processes create people. Likewise, the elements below always work in concert to create a complex system that continually evolves the limits and pressures that form what it determines as outcomes or products.

ECOLOGICAL POWER

The first and perhaps most important element of any antiracist writing assessment ecology that might be considered and developed consciously is power. Power, Foucault (1977) says, is a productive force that moves through society. Thus, "discipline" is itself a technology and a "type of power," which Foucault shows in prisons, the military, and schools (1977, p. 215), each creating "docile bodies" (p. 138) in similar ways. Discipline is made up of "a whole set of instruments, techniques, procedures, levels of application, [and] targets" (Foucault, 1977, p. 215). Foucault defines four strategies constitutive of discipline and characteristic of a docile "individuality" (1977, p. 167), an individuality that moves in power's direction: one, discipline "draws up tables" by enclosing, confining, and defining bodies and "functional sites" (p. 143); two, "it prescribes movements" and activity (p. 149); three, "it imposes exercises" and movement (pp. 151-152); and four, "it arranges tactics" (p. 162), that is, "coded activities and trained aptitudes" (p. 167). It is easy to see how Foucault could be describing any writing assessment ecology. When we design a portfolio system for a writing course often what is most present in our minds as we design it is how we will control students' bodies, their actions, their movements, what they write, how portfolios are put together, how many pages or documents to include, what students should reflect upon, etc. In these material and textual ways, power is exercised through the ways we ask students to labor and submit the products of their labor to us for evaluation. However Foucault says that power is also productive and generative, exists by acting on the individual, and is a "total structure of actions brought to bear upon possible actions," thus it "incites," "induces," and "seduces" (1982, p. 220).

Foucault's description of Bentham's panopticon demonstrates how power operates through the disciplining of bodies and creating spaces that reproduce docile behavior as consent (1977, p. 200), which has clear applications to the typical writing classroom. He explains that power works in the panopticon by

Automatiz[ing] and disindividualiz[ing] power. Power has its principle not so much in a person as in a certain concerted distribution of bodies, surfaces, lights, gazes; in an arrangement whose internal mechanisms produce the relation in which individuals are caught up. The ceremonies, the rituals, the marks by which the sovereign's surplus power was manifested are useless. There is a machinery that assures dissymmetry, disequilibrium, difference. Consequently, it does not matter who exercises power. Any individual, taken almost at random, can operate the machine (1977, p. 202)

What's striking about Foucault's discussion is how power *is* the environment, which disciplines bodies in and through time and space(s). This disciplining creates visibility and invisibility, docility, and the subjectivity of prisoners themselves. In fact, in the panopticon, the power exercised through the design of the tower and facing cells, defines the inmates as "inmates," as much as it helps them self-regulate, consent to their own imprisonment. Power is consciously constructed and manipulated, used by constructing spaces and experiences that by their natures are or feel like surveillance, or a constant assessment of bodies.

Classrooms are also places in which power is constructed to discipline students and teachers. Desks in rows and facing the teacher are a physical arrangement that many have discussed as one that promotes particular power relationships that work against the kind of pedagogical environment we usually hope to encourage in writing classrooms, one that places too much focus on the teacher as speaker and students as passive listeners. It constructs an environment in which power is exercised as Freire's banking model. This power arrangement is seductive. Students are seduced into easier, passive roles as listeners, while teachers are seduced into attractive roles as knowledge givers, as "professors." This is even more true when it comes to writing assessment ecologies that figuratively face the teacher, ones that demand students "submit" themselves and their writing only to a teacher for judgment, which has its most power(ful) employment in feedback and grading practices.

Antiracist writing assessment ecologies make explicit this power arrangement in grading practices between teacher and students as one that is also racialized through the valuing of hegemonic discourses, dominant ones that use a white racial *habitus* to form expectations and markers of success and failure. The *use* of such standards is discussed explicitly as racialized and hegemonic, then perhaps negotiated with students in order for them to understand their own relations to power embodied in the valuing of the dominant discourse of the classroom. Interrogating power in an assessment ecology is important because it sets up the rest of students' problematizing practices. Questions that might be posed to students early on about power could be: How are the expectations and standards for grading writing, determining students' progress, or evaluating students as writers used or employed? Why use those standards in the ways that the class or teacher has prescribed, have they been used before in other classrooms, why? What alternative standards and ways might be used? Who exercises the power to grade in the class, and who constructs or negotiates the expectations and standards that regulate evaluations and grading? Why do it that way? Where does the power to grade and make judgments on writing circulate in the course and by whom? How can the classroom productively and safely encourage students to understand, complicate, and challenge the white racial habitus in the dominant discourse (the course's writing expectations)? How is the white racial habitus of the dominant discourse compared to other *habitus* and discourses existing in the classroom? What reasons are there for valuing some habitus over others, and how can the class cultivate assessment practices that do not value one habitus over others?

As discussed already, the felt sense of race by students is in part a racial formation's relation to hegemonic power in society or school. Languages are a part of these relations to power. And white discourses (and their *habitus*) have been markers of power, who exercises it, who benefits from its movements, etc. But it is not the use of such discourses that exercises power in writing classrooms. It is the ways in which any discourse is evaluated or judged, making the *habitus* that informs those judgments important to investigate, more so than the drafts that are evaluated in any given moment. Antiracist writing assessment ecologies constantly probe these power relations around the judgment of writing. Who has historically been in this classroom, and who is in it now, being judged and by whom? What kinds of racial *habitus* inhabit a college classroom space in the past and now, how have they submitted to power differently, and which *habitus* are markers of power or of the ideal discourse?

Thus it is important to take note of the local racial diversity in the classroom, the elephant in the room. I know this can be tricky, as race is not a clear feature to notice about anyone, and one's self-identified racial designation does not tell us much about one's linguistic background or heritage, so taking stock in the local diversity of one's classroom might begin with students self-assessing their own language backgrounds and where those backgrounds came from. Then they might trace socially and historically how they and their families, how their churches and local neighborhoods, came to practice the language(s) they do. Finally, students can compare their own language practices and their sources to what they've experienced in writing classrooms as the expected discourse, the ideal discourse. When I do this with my students, I offer them a description of my own language background that uses a history that labels race and racism in my own language practices, and I tell it as an evolving language, one different now than it was when I was 19 years old. I focus on one or two language practices that I engaged in then, and now. For example, the practice of cursing or swearing in public as a way to be emphatic that I picked up while living in North Las Vegas (a poor and almost all-Black community), or the practice of using the double-negative for similar rhetorical reasons that was prevalent in the white working class neighborhood and schools I went to in middle school and high school. I end my narrative with questions about the way these practices' are judged by various people and in various situations, particularly when used by certain racialized bodies. This allows me to open questions about the way my discourse would be judged next to a dominant white academic discourse, revealing its relation to power.

In my language background document, which I sometimes call a literacy narrative or language narrative, I acknowledge that race isn't a biological reality, nor does it tell us essential truths about me, but it does help us talk about larger social linguistic patterns in my life, and U.S. society. It helps us talk about such patterns as Black English Vernacular (BEV), southern U.S. vernaculars, Latino/a Englishes (e.g., Spanglish), and Asian Pacific Islander Englishes (e.g., Chinglish and Hawai'ian creole). Once we do this, we can begin to understand better where we come from when we judge writing, both our own and our colleagues' drafts, which help us begin to identify and reflect upon the habitus we enact in judging texts and its relation to the dominant white racial *habitus* that often is used to judge our writing. Collecting such diverse language stories and looking for racial references in them helps us see commonality in our relations to power, in our struggles with a dominant discourse, even as those commonalities are rooted in linguistic and cultural difference. I want to be very clear at the outset of this chapter about the focus of the problematizing I'm speaking of. What antiracist writing assessment ecologies ask students to interrogate and problematize is not language as a discourse or set of practices, although this may happen to some degree. Instead as my description of the language background document above shows, antiracist writing assessment ecologies ask students to interrogate and problematize the judgment of discourses and language as they are occurring in their lives.

Often then, if not consciously identified, reflected upon, and rethought, power can reproduce conventional looking hierarchies when grading student writing, hierarchies that are racist. In antiracist writing assessment ecologies, hegemonic power, power that overdetermines (in the Freudian sense)³⁰ expectations for writing, can end up being rearticulations of a white racial *habitus* that

do not see the negotiation of classroom expectations and norms as an historical landscape of conflict, as a negotiation that doesn't have equal parties, but should. Gramsci's hegemony leaves plenty of room for power to be reconfigured through the counter-hegemonic. But in order for the counter-hegemonic to occur productively in antiracist writing assessment ecologies, power must be reconceived. While choice and actions are explicitly determined, they are not overdetermined. Fairness and more equitable outcomes and products can occur through students' explicit participation in and articulations of the ecology. Students get to be fully involved in the setting of expectations, processes, and the making of judgments and grades, which is what I hope comes out of the questions and investigations of power I've described in this section. The reconstruction of power relations in an assessment ecology is, however, first set up by their nature as explicit, negotiated relations, relations that are racialized but not racist. In short, power is explicit and negotiated with students, then exercised by them and the ecology they help create. These conditions will be made clearer through my discussions of the other elements below, which help create power.

ECOLOGICAL PARTS

The second element of antiracist writing assessment ecologies that can be examined and developed consciously is the parts. Parts refer to the artifacts, documents, and codes that regulate and embody writing, which include the judgments made by people in the ecology. In his discussion of a "critical theory of technology," Andrew Feenberg defines the literal materials of technology, which is a good way to explain the ecological parts of any antiracist writing assessment ecology. He offers two useful elements: (1) "artifacts," or the sum of all objects and processes involved; and (2) a "technical code," or networks of cultural, institutional, and personal values, rules, and decisions (Feenberg, 1991, p. 80). When we talk about writing assessment, it is the instruments, scores, grades, portfolios, essay prompts, students' and teachers' responses, or scoring rubrics that we often refer to. The parts of an antiracist writing assessment ecology are what is most visible about it, and often become a synecdoche for the entire ecology, potentially eliding the relationships those parts have to other ecological elements.

For instance, a portfolio as an ecological part of an assessment ecology can exist for a number of reasons or purposes. It can also be read in a number of ways and by a number of different people. It can be understood to represent a number of different constructs and student dispositions, behaviors, or competencies. It could be a demonstration of knowledge, of development of writing competencies in the course, or of the best work accomplished. It could function to produce the final grade, or simply inform discussions on students' writing development. Thus, the portfolio itself is just a part, a part in the ecology that has significance and meaning only when it interacts with other ecological elements, such as people, their purposes, or the products (outcomes and consequences) their decisions intend to encourage. Another way to put this is to say that like all the other ecological elements, any part of an assessment ecology, a rubric, some feedback, a paper, inter-is with the other ecological elements. Thus the part in question can only be meaningful, can only be what it is, when all the other ecological elements are as well. The easiest demonstration of this is to consider the changes in students' attitudes (people) in a course in which a portfolio (part) is graded (another part) next to the same course when the same portfolio is not graded. The presence of the grade-part changes students' attitudes, the portfolio, processes, and the entire ecology.

One important aspect of the parts that can be the focus of students problematizing in an antiracist writing assessment ecology is the biases that are inherent in those parts. While there can be many kinds of biases, I'm particularly interested in racialized biases, or biases that have historically in the U.S. and academia been associated closely to particular racial formations and their language practices. Again, Feenberg's discussion of technology can help us. Through a careful consideration of Foucault and Marcuse, Feenberg rejects the instrumentalist view of technology and claims that all technology has inherent biases toward the hegemonic, which have been articulated in Madaus' (1990, 1993, 1994) and Madaus & Horn's (2000) descriptions of testing as technology. Feenberg's "bias" draws on Marcuse, who explains that

> [t]echnology, as a mode of production, as the totality of instruments, devices and contrivances which characterize the machine age is thus at the same time a mode of organizing and perpetuating (or changing) social relationships, a manifestation of prevalent thought and behavior patterns, an instrument for control and domination. (Marcuse, 1998, p. 41)

This is strikingly similar to Gramsci's theorizing of historical bloc and hegemony, only Feenberg focuses on the instrumentality of technology, on the instruments, devices, and contrivances that make up technology. While he is making the point that technology is not simply machinery, he is revealing how the instruments, how the parts of technology are themselves loci of networks of other devices and contrivances, of biases. This means that a part in an antiracist writing assessment ecology is not bias-free and is interconnected to many other devices, contrivances, social relationships, and instruments of control. These biases are what gets explored and form the problems that students pose to themselves and their colleagues. One important set of biases I've already discussed in detail is a dominant white racial *habitus* that informs writing rubrics and expectations for writing in classrooms, even ones that ask students to help develop expectations for their writing.

Feenberg further argues that "all action within its [technology's] framework tends to reproduce that hegemony" (1991, p. 65). To explain why technology has hegemonic bias built in, Feenberg draws on Marcuse's notion of "technological rationality," which "constitutes the basis for elite control of society," by being "internal" to the "structure" of technology itself. When translated to writing assessment ecologies, bias is built into an assessment's ecological parts, its artifacts and technical codes (Feenberg, 1991, p. 69). Thus parts have ecological biases that often amount to racial biases, such as the biases of a local white racial habitus or a local SEAE. Marcuse himself uses the illustration of a highway, perhaps a technology better understood as an ecology, that directs drivers to various destinations, prescribing routes and norms of behavior through signs, cement, and laws (1998, p. 46). Marcuse explains that if one must get anywhere, one must take the highway in a car, which automatically "dissolves all actions into a sequence of semi-spontaneous reactions to prescribed mechanical norms." Everything appears "perfectly rational" and "reasonable" (Marcuse, 1998, p. 46). The technology of the highway defines what is rational, such that "individual protest and liberation appear not only as hopeless but as utterly irrational" (Marcuse, 1998, p. 48). Through parts, with their ecological biases, writing assessment ecologies construct power, as in Foucault's panopticon, but do so hegemonically because the parts come with biases that tend to be determined by the hegemonic. Yet like Marcuse's highway, people's actions and behaviors may be determined, but they aren't prescribed completely. One could take a number of routes to get to one's destination, but there are only so many routes to that destination. This is Marcuse's way of theorizing Marxian determination, and it is explained through the biases inherent in the system's parts.

Resistance, then, to an assessment ecology's rationality, to a teacher's demanding of a portfolio in a classroom or the use of a rubric to grade writing just like a California high school student resisting the demand to take the EPT or the ACT—appears utterly irrational. You want to get a grade in the class, don't you? You want a college degree, don't you? Then you take this test, or submit a portfolio in this prescribed way. The bias in the assessment ecology that the classroom creates, makes such resistance or questioning of whatever part is used (i.e., a portfolio, an essay, a series of documents, a rubric, etc.) unreasonable since the reasonable responses are dictated by the biases in the parts of the assessment ecology.

Consider, for instance, the ecological parts of a rubric, say, the construct of reflection, a typical expectation in writing classrooms for portfolios or other reflective writing that one might find on a rubric or an assignment sheet, or even in course goals or outcomes statements. Often reflection is thought of as a discourse that women perform more fluently than men (at least in popular cultural contexts), which suggests possible gender biases, and a particular kind of rationality itself built into the parts of portfolio assessment ecologies.³¹ Once enacted, the judgment on "reflection" provided to students becomes "rational." Additionally, like the cells and tower of the panopticon, one important bias in reflective parts is the way in which power is generated by and moves through them in very distinct directions, which is the nature of bias. As an artifact of power, the portfolio letter itself is a "functional site" in which the body of the student is controlled and made to obey. Write the letter in a particular way and pass the portfolio, then the student may take the next course. Fail, and she must take the present one again, or perhaps leave the university.

As the teacher, I have not forced her to do anything by failing her portfolio, yet the portfolio, as an ecological part has drawn up a site that disciplines the student, and controls her material, bodily movement in the university and possibly elsewhere. The reflection letter also disciplines her, arguably in a more explicit way, pushing her to claim a progress narrative, something many (Conway, 1994; Inoue & Richmond, in press; Scott, 2005; Weiser, 1997) mention is common in their research on portfolios. It subtly urges the student to consent through its naturalized rationality, norming students, making individual resistance or difference irrational (unnatural). Power is often exercised through the bias of parts in an ecology.

In an antiracist writing assessment ecology, however, the class would consider the construct of reflection as an explicitly racialized set of dispositions, ones that likely have biases formed from a white racial *habitus*. When judging instances of reflection in portfolios, readers would not use comparisons to a white racial *habitus* in order to determine student success, grades, or progress in the course and portfolios. Instead, the class might use labor as a marker of success, completion, or development. This doesn't mean teachers do not discuss ways to reflect that push students toward demonstrating reflective *habitus* that match a local (white racial) dominant *habitus*. It just means students aren't graded against that dominant *habitus* when they reflect in ways that do not match the dispositions in it, instead assessment is an occasion to discuss choices, audience expectations, and diverse ways of judging reflection, connecting those judgments to possible racialized *habitus* with no consequences to their grade. Assessment is an occasion to problematize existential writing assessment situations within reflective practices. This kind of problematizing centers on the biases of parts in an assessment ecology that create the valuing of reflective discourse in particular ways.

The literature on reflection offers us plenty of evidence for the assumption that most reflection in writing classrooms asked of students is of a white racial habitus. The scripts and codes of reflection as a classroom discourse and habitus that many scholars have described (Beach, 1976; Dewey, 1910; Pianko, 1979; Schon, 1987) match most if not all of the dispositions of a white racial habitus. This is evident in the research I've done on the Hmong racial formation at Fresno State (Inoue & Richmond, in press). For instance, as I mentioned earlier, the Hmong racial formation has the highest percentage of students who are designated as remedial by the EPT. Between 2007-2012, based on average EPT scores, 77% of all Hmong students taking the EPT were designated as remedial (the white population was roughly 23%). In the Early Start English program in the summer of 2013, the average rating on reflection in Hmong final portfolios was just below proficient (2.97 out of 6, with 3 the lower threshold for proficient), which seems to coincide with their EPT scores.³² However, in the final ratings of similar portfolios in Engl 5B (the second course in a two-course sequence of FYW), Hmong students averaged the highest ratings among all racial formations on the same scale in final portfolios (Inoue, 2012, p. 88).

So what happened? The construct of reflection as a discourse didn't change. The same teachers taught both the Early Start and the FYW courses. The curricula of both programs matched, using the same outcomes and language. By all accounts, both portfolios in the Early Start English and in Engl 5B measured the same thing, the same construct (reflection). What might best account for the change? Time? Instruction? Practice? Perhaps. But there are many teachers and sections, some TAs, some adjuncts, all with a variety of teaching experiences and different assignments and readings in their courses. There is one thing that is constant in both programs and curricula, one thing that dictates the nature of time, instruction, and practice: the classroom writing assessment ecology, which I'm arguing leaned toward antiracist ends.

Here's how. All teachers in the program used a grading contract and a portfolio in both the Early Start English course and the Engl 5A course, the course before Engl 5B. In my own program reviews, about 80% of all teachers continued to use grading contracts for their Engl 5B courses. Most students stay with the same teacher for 5A and 5B. Portfolios are required in all three courses. So the apparent linear progression from just below proficient (2.97) in Early Start to well within the proficient category (between 3.47-3.81) by the end of their FYW experience is associated with consistent classroom writing assessment ecologies used. Those ecologies are created by the use of two ecological parts: a grading contract, which is provided to all teachers in template form and negotiated with students; and a portfolio system, which requires only that there be a certain amount of polished writing in it and a letter of reflection.

The most obvious feature of the contract is its focus on labor, not quality, to determine course grades.³³ The contract and portfolio kept grades off of day-today and major assignments in all courses, and focused students' attention toward the labor they did each day or week, which is a feature of assessment ecologies that can be antiracist. The rubrics and assignments, the parts (the codes and documents), did not produce grades, rather they were used differently in the classroom. Writing, rubrics, feedback and other ecological parts circulated in different writing assessment ecologies, making reflection in portfolios different in nature, and learning different (arguably better).

The contract constructed labor as the main criterion for determining course grades, while their writing itself was used to help form writing practices and discussions about how to value that writing, which comes close to my description of problematizing the existential writing assessment situation of students. Thus the assessment ecologies at Fresno State tended not to be overdetermined by rubrics and other ecological parts that have a bias toward a white racial *habitus* through their grading and ranking of students. This, I argue, allowed multilingual students, such as Hmong students, to find confidence, perseverance, and other non-cognitive writing dispositions that helped them succeed and excel in reflection, a key program outcome, even though that outcome was still informed by a white racial *habitus*. I've made a more complete argument for contracts concerning the Hmong racial formation in another place (Inoue, 2012a), and the way they can change the nature of failure in writing classrooms (Inoue, 2014b), which confirm this conclusion.

What should be noted of antiracist (or any) writing assessment ecology is that the hegemonic nature of its parts' biases is self-reinforcing. This self-reinforcement offers a response to criticisms about lowering or ignoring standards in antiracist assessment ecologies, such as the one I've just described. Feenberg addresses this phenomenon by explaining that "the 'universe of discourse,' public and eventually even private speech and thought, is limited to posing and resolving technical problems" (Feenberg, 1991, p. 70) —that is, problems the system creates in order to solve them itself, problems it can solve with the same old results. Thus, hegemonic writing assessment parts present to us problems we solve with hegemonic solutions because we are given only the hegemonic. This helps us defend antiracist assessment ecologies like the one I've described above from criticisms that question its ability to keep standards. Standards are specific codes (hegemonic parts) in an assessment ecology, which I argue are always racialized to some degree because they are informed by a white racial *habitus*. When one invokes them, they assume particular racial *habitus* that are the standard, which are hegemonic. Questions about writing classrooms not keeping standards tend to be the same old hegemonic questions that assume (require) hegemonic answers, or a particular set of biases.

Thus a question like, "how can the above assessment ecology that doesn't grade students' reflective writing on quality guarantee that students will be able to meet particular writing standards?" is really a question that asks, "how can we maintain the hegemonic if we are not judging and grading it, if we aren't holding students accountable for it?" Another way to say this is: "how can we get students to reflect like white, middle class language users if we don't grade them on that standard?" I could reply to this criticism by saying that just because a teacher doesn't grade writing doesn't mean students aren't held accountable for particular standards, or better yet, are not responsible for such standards. But a better response is that this question of standards is the wrong question to ask in our increasingly diverse classrooms. In fact, its premise (that we need a standard to judge students against) is racist. When our classrooms were homogenous and white, when most students came from a particular socioeconomic strata, it might have been fair to enforce standards through writing assessments, but it's not today. In fact, it is overly limiting, binding students and the academy, holding us back. Perhaps better questions are: what are our students doing when asked to reflect? How do our students reflect in writing differently from what we initially expected? What are the biases in the reflective discourse produced in classrooms? How do those reflective ways meet (or not) the challenges we understand reflection addressing for students? In what ways do our students' reflective ways innovate our old ways of reflecting? How do our initial biases in the reflective discourse we ask for create unfairness and limit the cultural and linguistic production of the classroom?

These questions not only help reveal the hegemonic biases in the parts of our assessment ecologies, but are good ways to focus student assessment activities that lead to problematizing their writing assessment situations in the class around reflection as a practice. I realize that some will not accept conceiving of classroom writing assessment practices as explorative and descriptive of the hegemonic and other *habitus* that students bring. They will say that such ecologies do not necessarily help students become successful writers in our current world. Instead these critics may say that the writing classroom is meant to prepare students for future success in writing in either school or civic life, which isn't a completely false assumption, but it is an assumption about a dominant white racial *habitus*, as well as what direct instruction on a dominant discourse will offer students. We can and should have other biases, other discourses and *habitus*, which all can be equally productive. Furthermore, there is no guarantee that using language in particular ways in society or the academy will guarantee success to any given student, however one wishes to define it. But the definition of successful writing, or a successful writer, is a product of all antiracist writing assessment ecologies. In fact, the definition of success in writing is central to the larger ecological purpose of antiracist writing assessment ecologies. Success is explicitly investigated and defined as certain ways of judging writing or writing practices that are relate to dominant and non-dominant *habitus*.

My example of the construct of reflection shows that one way to radically change the parts of an assessment ecology is to rethink the terms by which course grades and credit are given so that reflection, both as a practice and as a racialized bias in rubrics and assignments, functions differently than to hierarchize students. In the above case, the classroom writing assessment ecologies in question used labor, not quality of writing, to determine course grades. This sufficiently changed the biases in the parts and what was done with them, like the portfolio, feedback from the teacher, or daily assignments. So there are no unbiased parts, but parts that have explicit biases that students and teacher explore and discuss together, then use to pose problems about the judgment of language (in this case, reflection as a construct). The contract and portfolio have their biases too, and they are different, depending on how they get constructed, situated, and used in classrooms. Thus in antiracist writing assessment ecologies, students become aware of the biases in the ecological parts they use, work with them more than against them, and discuss them and negotiate them with other students. Furthermore, this problematizing allows them to realize the nature of the judgment of writing as overdetermined, as hegemonic.

In one sense, what I'm arguing for in antiracist writing assessment ecologies are parts that are counter-hegemonic. The biases of a rubric that articulate local SEAE expectations for a writing assignment in a course, or a grading contract that uses labor to determine grades, can potentially be counter-hegemonic structures. For instance, a rubric could be translated or used to identify and question deviations of a local SEAE but not as error or writing done wrong. Instead, the rubric could be a way to notice and validate local non-SEAE practices, first by not penalizing students for using such subaltern discourses, and second by allowing the rubric to be a heuristic for asking questions about ways of knowing and articulating that are open-ended, not closed and narrowing. Thus differences from the dominant discourse are read as meaningful and productive.

Teachers and students may co-construct evaluation rubrics, which may articulate expectations that are not "standardized" to the larger writing assessment ecologies of the program or school, then use those rubrics to examine and critique not just their own writing but more conventional rubrics and texts that adhere to a local SEAE, or to a local white racial *habitus*. Students may respond in original or alternative ways to conventional calls for a portfolio, and engender a teacher's response that moves her to compare the portfolio next to (not against) the local SEAE or white racial *habitus*. A classroom might incorporate critical and other pedagogies that focus students and teacher interaction on negotiating the meaning of error (Horner, 1992; Horner & Lu, 1999) or articulating and using alternative and code-meshed discourses (Young, 2004, 2007; Young & Martinez, 2011). The bottom line is that ecological bias and counter-bias should work side by side in the parts of an antiracist writing assessment ecology so that power doesn't simply overdetermine what students do, or how well they do it, but allows the determination in the system to function both hegemonically and counter-hegemonically. In short, the parts of any antiracist classroom writing assessment ecology are the places where students and teacher can generate problems to writers and readers about the biases that those parts inherently have.

In order for these kinds of biases to work counter-hegemonically in the rubric, they must be reinforced superstructurally, reinforced in the ways the class explains them and justifies them to each other, in the ways they use the rubric in feedback and reflection activities, in other words, in the base of the class, in the processes and labors of students and teacher that produce writing and its assessment. Students have to understand how to read the rubric, why they are doing this kind of questioning, what it means to question in this way, and have reading and judgment practices that keep them away from making judgments that penalize or assume deviations to a local dominant discourse are error or wrong. Antiracist writing assessment ecologies do this kind of work through the parts they set up, which determine much in the classroom.

ECOLOGICAL PURPOSE

The third aspect of antiracist writing assessment ecologies to reconsider and design is purpose. Most who discuss writing assessment tend to place this first, or as a key element in any writing assessment that determines its effectiveness, products, outcomes, and even existence (CCCC, 2009; Huot, 2002; White, 1994, 2007). George Madaus explains that agents' purposes and uses for a test are defining elements of it as a technology, calling a test technology "something put together for a purpose to satisfy a pressing or immediate need, or to solve a problem" (Madaus, 1993, pp. 12-13; see also Madaus, 1990, p. 6). Teachers and WPAs always have purposes for their writing assessments, just as students have purposes or reasons for taking (or not taking) such assessments, and institutions have reasons for imposing writing assessments. In writing assessment ecologies, these various purposes may be different for different people (stake-holders) in the ecology, and usually fall into a few categories for teachers and WPAs: to check for students comprehension of material or proficiency in writ-

ing, to place students in courses, to predict future performance in college writing generally, to motivate students to do work in a class, or to provide feedback for revisions and future practices. For students, the purposes may be similar and may also include: to get a good grade in the class, to follow orders (like a good student would) or because that's what you do in school, to get feedback for revisions for future writing practices. For institutions, purposes often deal with their needs for accountability, consistency, and maintaining the institution itself: to find out how many students are remedial writers, to gain funding from various outside sources, or to produce evidence of the institution's effectiveness, value, and worth. These may not be the only possible purposes for teachers, WPAs, students, or institutions, but the point is that purposes are determined by the people and institutions involved in a writing assessment, and in fact, even within these groups of people, purposes will vary (I'll say more about people in the next section).

Everyone has some evolving sense of why they are involved in a classroom writing assessment ecology, even if they may feel coerced into it. And that's important to keep in mind. Not everyone, including teachers, are always crazy about being involved in an assessment ecology, so their purposes for the ecology are shaded by these feelings. Furthermore, many of these feelings and purposes come from society, the school, personal histories, and from cultural, racial, or other social formations' practices stemming from the local diversity in a school. The hegemonic, then, is a strong force in producing the needs and purposes for classroom writing assessment ecologies. While I'll say more below about the shaping effects of people (stakeholders) on classroom writing assessment ecologies, here I would like to focus on the larger purposes that shape antiracist writing assessment ecologies, which influence students' evolving purposes.

As you might expect, antiracist writing assessment ecologies have explicit purposes that students and teachers negotiate. This negotiation helps share power, albeit still unevenly, with students by providing them with the opportunity to discuss and articulate the larger purposes of the assessment ecology, affecting all assessment activities in the course. Thus, I am not talking about the purposes for writing particular drafts or assignments, nor the purposes for an individual assessment activity of a draft. The purposes for an antiracist writing assessment ecology address the larger problem that the ecology means to confront, in the present case, racism in the assessment of writing in the class. More generally, we might call this larger purpose fairness. A student's purpose for participating in an assessment ecology may be to get a grade, but the expressed purpose of the ecology itself is to problematize the student's existential writing assessment situation.

To address the gaps between purposes of students and the ecology, it should be noted that all ecological purposes change or evolve. For instance, consider the purposes for Lake Mead, the human-made reservoir outside of Las Vegas. There is Hoover Dam that provides hydroelectric power and water to mostly California, but it also is the "Lake Mead National Recreation Area," where millions of tourists and visitors come every year to see the dam and use the lake. The purposes are multiple and the area, the terrain, was designed over time to accommodate multiple purposes that serve local communities, tourists, and the cost of its own maintenance. However, much of the terrain was already there before humans came along and built the dam, made roads, etc. In fact, the dam was built by Roosevelt's Works Progress Administration (renamed Work Projects Administration in 1939). The dam's initial purpose was to employ people during the Great Depression. We responded to the environment and our own economic needs, as much as made the Hoover Dam environment, which later served energy and recreational needs. One lesson we learn from this is that all ecologies have purposes that shape them, then those purposes evolve, which continue to shape the ecology. The act of making or shaping usually dictates an environment's purposes, such as a classroom or a course website, but once it is made, other purposes can be placed onto or evolve out of the ecology that forms there. Writing assessment ecologies are no different.

Antiracist writing assessment ecologies take advantage of the evolution of purposes by taking time out to consider, reflect, and articulate the evolving individual purposes within the ecology. This helps classrooms determine effects on the larger purpose of the ecology, which may also evolve. Thus not only do students negotiate and articulate the larger purpose of the ecology, but they pay attention to the way their own personal purposes for their assessment work evolve. They learn to look at their own judging practices and see important problems that help them understand the way language is or can be valued, which evolves their purposes if they are given the chance to reflect upon those problems as ones that pose alternative purposes for their labor.

Let's say a teacher has assigned writing to her students. If you assign writing, you have to collect it and evaluate it, grade it. That's what teachers do with writing. It's almost a knee-jerk reaction on the part of teachers, and even students come to expect that anything assigned will be graded or have "credit" attached to it, meaning it is "submitted" to the teacher. Peter Elbow (1993) discusses this phenomenon at length and offers several ways out of the conundrum, all of which take grading, ranking, and evaluating out of the assessment activities, leaving only description, response, and dialogue, modes of judgment that resist hierarchizing students' written performances. Most students feel that if an assignment is not graded, it's just busywork, not worth doing, which is counter to the impulse that produced the writing assignment (writing for writing's sake, or writing for some other purpose). The catch is, students are correct. When grades

are present and calculated by points and percentages, an assignment that isn't graded is busywork. It is work that keeps them busy until they do something that is graded. Grades become the purpose, not the labor involved in producing the things that get grades.

But what if there were an explicit, larger purpose, one discussed and negotiated with students, one that may evolve as students' figure things out over time. If the larger purpose of the assessment ecology is to help students problematize their existential writing assessment situations, then assessment processes and practices in the ecology should have related purposes, ones that provide ways to develop that problematizing. The *content* of these purposes, as I've said, is to help students see the hegemonic in our language practices and standards—to become critically conscious of the ways their writing practices are valued—then make writerly decisions from this knowledge, while the *method* of this antiracist purpose might be to engage in assessing as an act that is itself edifying by the mere doing of it over and over.

How does this assessment-for-assessment's-sake method lead to problematizing? Because if we are to problematize our existential writing assessment situations, we must read and judge writing (our own and others') in self-conscious ways. This takes practice and repetition to do it self-consciously, and to see the patterns that begin to emerge. Assessment is then articulated as method, as labor, as processes with content and goals. This method is essentially assessment for assessment's sake, since it is through the labor of assessment that students learn the lessons of the hegemonic, lessons about white racial habitus, lessons about their own critical awareness of how their language practices and *habitus* are valued and judged. You cannot become critically aware of how you value and how others value your languaging without problematizing those language practices, making judgments about them over and over, then discussing such judgments over and over-without repeatedly engaging in assessing as method for its own sake. The purpose of all assessment has to begin as labor worth doing because it is good to do it, because it is the labor of problematizing, because it is the process that gives students more power in the ecology and over their own languaging.

However if ecological purposes evolve, then we must be prepared for the changes in our classrooms. For example, the EPT was originally designed then instituted in 1977 by CSU English faculty (most notably Ed White) and ETS to determine English writing competency in order for CSU campuses to determine writing course placements. And because each campus has always had different courses and requirements, the EPT couldn't simply provide a placement. It had to provide a score that would then be translated to a placement. Because the EPT uses a timed writing component—real student writing—it was argued that

it was more valid for making placement decisions than the old tests that were only multiple choice tests. The new EPT assessment ecology's purposes were more in line with what students did in the classes in which those scores helped place them (White, 2001, p. 309). Over the next twenty years, the cut-scores for remedial status determined by the EPT became reified, although the actual numbers changed. The EPT assessment ecology no longer was thought of as just a way to place students in writing courses, but as a way to find out who was remedial and who not.

This came from institutions making sense of and using the data that the EPT produced in response to periodic literacy crises that cropped up cyclically, as many have discussed (Fox, 1999; Hull & Rose, 1989; Soliday, 2002). Defining remediation was not the EPT's primary purpose when originally designed. It was a placement test. The cut-scores used have changed, so they too are artificial. A few years ago, the CSU Chancellor's Office required all incoming students who scored below the cut-score that designated them as remedial to take an Early Start English course in the summer before their first fall semester. If they didn't take the summer course or didn't pass it, they could not be admitted into the university. By default, this makes the EPT an entrance exam, a new and very different purpose than determining competency so that individual campuses can then decide course placements. Not only did a new purpose evolve for the EPT ecology, but that purpose changed the ecology, and changed the ecologies of writing classrooms, since it designated new places to which students must go (e.g., Early Start courses in the summers), and other uneven consequences (e.g., added costs to some students, mostly students of color and multilingual students). Because of these evolving purposes for the EPT ecology, racist effects occur, most notably the higher cost of education for students of color and multilingual students.

In antiracist writing assessment ecologies, the larger, explicit purpose is to engage students in problematizing their existential writing assessment situations, which means the focus of most activities is on the labor of writing assessment, the labor of judging writing and understanding that judgment as connected to larger discursive fields, dispositions, biases, and values, or *habitus*, some of which are hegemonic and some not. This purpose should be negotiated with students, and discussed with them periodically, so that the purpose of all assessment in the ecology is clearly understood and articulated by students, and so that the ecological purpose has a chance to evolve as students learn more and understand more about the nature of judgment. Because many students may find it difficult to understand this larger antiracist ecological purpose, or use it to guide their assessment labors, a focus on method seems most prudent. With gentle guidance, asking students to assess for assessment's sake can lead to posing the kinds of problems that work best in an antiracist writing assessment ecology.

ECOLOGICAL PEOPLE

While Madaus doesn't say it, assumed in his "purpose" and "problem" that constitute a testing technology (1990, p. 6; 1993, pp. 12-13) is *whose* purpose and *whose* problem. People, social pressures, and institutions define the purposes of writing assessment ecologies. And so, people is the fourth ecological element in an antiracist writing assessment ecology that might be designed or considered. When I say designed, I don't mean that a teacher or program should try to engineer who enters writing classrooms, particularly by markers of local diversity, such as by racial formation. What I mean is that students in any classroom will constitute an element of the assessment ecology that is quite diverse racially, culturally, and otherwise, therefore this element of the ecology will require some discussion and articulation to understand its relation to the ecology by the teacher and students.

People always inhabit spaces and places on any terrain. They often change that very terrain. It may be obvious to say that people live and work in ecologies. Sometimes those people move or migrate to particular places, and some have long histories in a particular place. The local diversities that make up the students and teachers of a writing assessment ecology have their own purposes for the environment and may even design the assessment ecology itself. These same people, such as students, could also be the ones being assessed, while others in the ecology may have some other stake in the ecology or its consequences. When discussing the similar ways writing and ecological systems function, Cooper (1986) cites Lewontin, Rose, & Kamin's (1984) critique of sociobiology, which explains how ecological systems and the people in them work together:

> all organisms—but especially human beings—are not simply the results but are also the causes of their own environments While it may be true that at some instant the environment poses a problem or challenge to the organism, in the process of response to that challenge the organism alters the terms of its relation to the outer world and recreates the relevant aspects of that world. The relation between organism and environment is not simply one of interaction of internal and external factors, but of a dialectical development of organism and milieu in response to each other. (p. 275; as quoted in Cooper, 1986, p. 68)

So according to the way sociobiological ecological systems work, people (organisms) are simultaneously the result and causes of their environments. These two ecological elements, people and places, form a kind of Marxian dialectic, and are closely interconnected.

We should be careful with such a proposition. When we consider the local diversities in any community and writing assessment ecology, saying that people and their environments dialectically cause and are the result of each other could be misleading. In fact, it could be a version of blaming the victim, or blaming African-Americans or Hmong students in Fresno for inhabiting the remedial location in the EPT ecology or remedial classrooms. Is it true that African-Americans and Hmong are remedial because they are not prepared to write in college, or is it true that the designation of remedial, among other elements in the system, such as the bias toward a white racial habitus in the EPT, constructed such racial formations as remedial? There's too much research that reveals remediation as an historically complex construction (Fox, 1999; Horner & Lu, 1999; Hull & Rose, 1989; Soliday, 2002; Stanley, 2009), produced by larger institutional and other forces that explain it as more than simply referring to the illiterate or semiliterate in our midst. Regardless, my point is that a variety of people move, interact, and change the landscape of a writing assessment ecology, each person may have a different relation to the environment (place) than his peers. Not everyone controls the same degree of power in the ecology. Antiracist writing assessment ecologies attempt to take these multiple relations into account.

It should be clear, then, that I am not saying that people are their environments, nor am I saying that people who reside or congregate in particular places and spaces in an environment are "naturally" supposed to be there, want to be there, or belong there. But I am saying that people who inhabit places in a writing assessment ecology tend to be influenced by those locations, and those locations, because particular people inhabit them, are influenced by those people. The phenomenon of particular racial formations inhabiting particular places in most conventional writing assessment ecologies-white, middle class students in areas of success, African-Americans and Latinos/as in areas of failure-should be expected (but critiqued and resisted) since, as Charles Mills (1997) convincingly argues at the societal level, the racial contract of Western society norms and races spaces (discussed below), and thus norms and races bodies as well (pp. 53, 61). Understanding this phenomenon can be the beginning of discussions with students about them as an element in an antiracist writing assessment ecology. To do this, one can use simple grade distributions from classes in the writing program (not the course), disaggregated by racial formation (among other locally important dimensions of diversity), to begin discussing the relations each racial formation seems to have to the assessment ecologies in the program. What

might cause such differences (if there are any)? How might the present class' antiracist assessment ecology take these data into consideration?

But students also need some theory, even if translated by the teacher to help them make sense of the numbers and material conditions in classrooms that they might bring up. I find Charles Mills (1997) account of the racial contract to be easy and helpful. Mills explains that in Western society the aesthetic and somatic norm is the white male body, which gets continually rearticulated over time (1997, p. 72), something the hegemonic and Omi and Winant's racial formation theory (1994; 2015) have helped us see. He demonstrates this historically, particularly through the social contract theory of Hobbes, Locke, Rousseau, and Kant that dictate civil and savage societies, reasonable people and "wild beasts." Mills argues that people are raced through white norming processes of history, which are underwritten by social contract theory that regulated the minds and social conflicts of Western societies. Mills' argument agrees with others who have written accounts of how race was historically constructed, justified, and maintained for particular social hierarchical purposes (Baker, 1998; Goldberg, 1993, Takaki, 2000). This idea of norming and racing bodies also agrees with accounts of the construction of white populations and whiteness in the U.S. through particular groups' conflicts and self-articulations of whiteness, most notably the Irish (Ignatiev, 1995; Lipsitz, 1998; Painter, 2010; Roediger, 1991).

Thus the ecological parts of antiracist writing assessment ecologies often compose one node in the system that function as a self-conscious site of norming and racing (usually to a white racial *habitus*) the people of that ecology, while in conventional assessment ecologies this norming occurs with little attention paid to it, as Matsuda's (2006) myth of linguistic homogeneity, and Horner and Trimbur's (2002) unidirectional monolingualism each suggest. In antiracist writing assessment ecologies, this norming of people is made a topic of ongoing discussion, since it influences students' judging practices and abilities to problematize.

The point that all bodies are normed to the white male body and raced in particular ways complicates the way one can understand people as an ecological element in an antiracist writing assessment ecology. The obvious observation that all people inserted into an ecology will be raced differently and normed against the white male body hardly needs arguing. Thus all people will not have the same relations to the other ecological elements in the ecology, nor have the same relations to power, but they should. Therefore, the consequences of the ecology will be uneven.

This means the ecological element of people should be discussed by students as an element that creates that assessment ecology in the classroom. They might discuss the ways labor (processes) and judgments (parts) are generated in diverse ways because of who is in the classroom. These discussions do not attempt to form consensus over how to judge or translate things, but understand the diversity of ways of judging that may happen and why. Giving students the ability to articulate and figure out how to handle uneven power relations that stem from gender, race, language practices, or other dimensions of diversity is key to avoiding stereotyping and other assumptions that can harm or misrepresent students. It's not important that students identify themselves racially when discussing their own relations to, say, a rubric used, or a process put forward as the method for producing assessment labor, instead such reflection on people could begin with students' individual responses to such ecological elements that move them to do a tiny bit of research that informs and deepens their response.

One reflection activity that asks students to consider their various positions as ecological people with different relations to power and parts in the assessment ecology might ask for an individual response in class, say in a five minute writing prompt. The prompt might ask them to look at their rubric, the expectations for the writing assignment ahead, perhaps one they've helped create, and consider: (1) what their individual labor will look like if they are to meet those expectations; and (2) what problems they foresee in that labor and in producing the ideal draft they believe the rubric asks for. The class might then share these responses and discuss the sources of their expectations, translations of the rubric, and assumptions about labor and its written products or outcomes.

As homework, the teacher might offer a short list of resources, each about three to five pages in length, excerpts from academic discussions on whiteness and language diversity, ones that can encourage discussions about judgment of diverse language and diverse racial *habitus*. Students would choose one that most interests them and helps them either rethink their initial response to the rubric or consider more deeply their expectations, translations, or assumptions about judging drafts with it. They would go home and do more prompted reflecting after reading their chosen text. Here are a few sources I've mentioned already that could be excerpted:

White Discourses

- Barnett, T. (2000). Reading "Whiteness" in English studies
- Delgado, R., & Stefancic, J. (Eds.). (1997). *Critical white studies: Looking behind the mirror*
- Faigley, L. (1992). Fragments of Rationality: Postmodernity and the Subject of Composition
- Frankenberg, R. (1993). White Women, Race Matters: The Social Construction of Whiteness
- Morrison, T. (1992). Playing in the Dark: Whiteness and the Literary

Imagination

• Myser, C. (2003). Differences from Somewhere: The Normativity of Whiteness in Bioethics in the United States

African-American and Latino/a Discourses

- Ball, A. F., & Lardner, T. (2005). African American Literacy Unleashed: Vernacular English and the Composition Classroom
- Fowler, J., & Ochsner, R. (2012). Evaluating Essays across Institutional Boundaries: Teacher Attitudes toward Dialect, Race, and Writing
- Young, V. A. (2007). Your Average Nigga: Performing Race, Literacy, and Masculinity

Asian-American Discourses

- Inoue, A. B. & Richmond, T. (in press). *Theorizing the Reflection Practices of Female Hmong College Students: Is "Reflection" A Racialized Discourse?*
- Lee, R. (1999). Orientals: Asian Americans in Popular Culture

Linguistic Diversity and Racism

- Greenfield, L. (2011). The "Standard English" Fairy Tale: A Rhetorical Analysis of Racist Pedagogies and Commonplace Assumptions about Language Diversity
- Lippi-Green, R. (1997). English with an Accent: Language, Ideology, and Discrimination in the United States
- Villanueva, V. (2006). Blind: Talking about the New Racism

The lists above are not meant to be exhaustive, only illustrative. They illustrate the kinds of discussions that might help students consider their responses to the rubric and the accompanying labor that the rubric assumes for them as practices and as *habitus* that are connected to larger social and racialized structures in their lives. Subsequent discussions about these reflections might focus on the relations that each student has to the rubric, and what it may mean in terms of that student's judgments of writing in the future. The focus would be on understanding how the student comes to make particular kinds of judgments and do particular kinds of labor (i.e., the sources of their labor practices). These discussions would only be the start of ongoing discussions about students' *habitus*, continuing once they begin engaging in assessing each other's drafts. Furthermore, it should be clear that as Kerschbaum (2014) argues, difference is complex and evolves through interactions (pp. 6, 69). So the reflective labor I'm suggesting above focuses less on static notions of racial *habitus* and more on dynamic, evolving racial *habitus* in the classroom.

It could be productive, for instance, in a classroom with white, Hmong and

Latino/a students to read Myser's (2003) discussion of whiteness as a discourse in bioethics. Myser associates whiteness to a "hyperindividualism," to a persona who is detached, objective, and demonstrates abstract reasoning (2003, p. 6). She includes a table (2003, pp. 6-7) identifying non-cognitive and cognitive dispositions of whiteness that characterize this discourse. The table could be used by students to help them think about the sources of their own assumptions about their labor and what that labor is assumed to produce in writing. Furthermore, this new information may offer students ways to deepen their understandings of the problems they originally reflected upon in class. The teacher might lead discussions in critiquing her own assignment instructions and expectations, given these white dispositions (one articulation of a white racial *habitus*). How might seeing whiteness in the assignment expectations help students and the teacher problematize the judgments of writing implied by-determined in-the writing assignment at hand? In what ways might students write with or against the white racial habitus inherent in the assignment? How will students' dispositions, their habitus, harmonize and conflict with the white racial habitus of the assignment?

At this point, I think it important to heed Mills' own words concerning the effects of the racial contract on people, which includes those in writing assessment ecologies, no matter how those ecologies are designed, who deploys them, or for what purposes:

the norming of the individual also involves a specific norming of the *body*, an aesthetic norming. Judgments of moral worth are obviously conceptually distinct from judgments of aesthetic worth, but there is a psychological tendency to conflate the two, as illustrated by conventions of children's (and some adults') fairy tales, with their cast of handsome heroes, beautiful heroines, and ugly villains George Mosse points out that the Enlightenment involved "the establishment of a stereotype of human beauty fashioned after classical models as the measure of all human worth Beauty and ugliness became as much principles of human classification as material factors of measurement, climate, and the environment." The Racial Contract makes the white body the somatic norm, so that in early racist theories one finds not only moral but aesthetic judgments, with beautiful and fair races pitted against ugly and dark races. (1997, p. 62)

Thus the norming of bodies is often ambiguously confused with the aesthetic and moral. What this means for writing assessment ecologies is hinted at in Mills' own words. The norming and racing of bodies influences people's judgments of aesthetic and moral worth. Aesthetic and moral worth, often linked to nationalist values, certainly have a tradition in our writing pedagogies and histories of judgments on student writing, which some have discussed as taste and expectations (Faigley, 1992; Miller, 1991; Watkins, 2009). Thus when we discuss people as an ecological element, it is important to remember that all people are not socially or linguistically constructed equal, nor do they have equal relations to other elements in the ecology. It's not a fair situation, but it is one the ecology is explicitly trying to make fair. Just as important, what Mills reveals through the focus on the norming and racing of bodies as a function of and influence on the various human judgments made in the world is that writing assessment ecologies are themselves ecologies of norming and racing. This is why all writing assessment ecologies are racial projects of some kind.

Antiracist writing assessment ecologies will be resisted by some students. This should be expected. For instance, at Fresno State, often white, middle class students in my writing classes had more problems than students of color with our use of a grading contract, while Latinos/as and Hmong students had fewer resistances to the contract. They generally found it fair and reasonable.

Spidell and Thelin's (2006) study on student resistance to grading contracts confirms the white, middle class resistance I've experienced, which they do not link to race, but I explain elsewhere can be seen as a white resistance (2012b). Spidell and Thelin assume an unspoken, silent, white student norm in their conclusions (Inoue, 2012b, p. 131). They say students find the contract too much work and possibly unfair. They find that (white) students are still too attached to conventional grading systems. In another place (Inoue, 2012a), I've discussed the difference in responses to contracts by various local diversities at Fresno State. The point I'm making here is that many white students would reasonably have difficulty with a writing assessment ecology that seems at its face to not reward them for the normed discourse (a white racial habitus) that many of them have been rewarded for in past writing assessment ecologies. Since they are not the aesthetic or somatic norm in this new ecology, and they've always been the norm, everything seems unfair, which is what their Hmong and Latino/a colleagues have felt all along. White, middle class students would, of course, yearn for conventional grading systems that produce grades on papers, since higher grades have always had a direct, positive relationship to their uses of a local SEAE and their own instantiation of a white racial *habitus* in their writing. They no longer exist in the ecology in a privileged position. These resistances, as we'll see in a few cases in Chapter 4 in my own classroom, are soothed through continual reflection on people as an element in the assessment ecology.

Reflection on people, or more precisely on *habitus*, offer ways to understand student judging practices, values, and biases, as well as dominant ones experi-

enced by students through past teacher evaluations. In her socio-historical discussion of technology, Ruth Cowan (1997) can help us consider the role people play in forming or enacting *habitus* that affect the valuing of writing in an ecology. Cowan explains that in order for a technology, like a cup, to be meaningful, it requires people to make, use, manipulate, and change it (e.g., I drink out of a cup, or I may put pencils in it and use it as a pencil holder, etc.). This has an interesting by-product for Cowan: people's ideas about a technology, how we conceive of, value, and use it, are always in "relation to something else," often an abstract value or concept. For instance, the social and historical outcomes of a cup, car, or cell phone are shaped by the ways in which people conceive of each technology's relation to, say, social status, skill, progress, function, gender roles, God, or politics (Cowan, 1997, p. 204). Thus the abstractions people use to make meaningful a device binds them to that device.

If there's one lesson we learn from many of the U.S. histories of composition studies and the teaching and testing of English (Crowley, 1998; Miller, 1991; Ohmann, 1996), it is that various writing assessment ecologies have been developed as responses to people's relations to abstractions like "taste" and "bourgeois reason" (Crowley, 1998, pp. 41-44, 57; 76; Faigley, 1989, 1992; Miller, 1991, p. 54), and merit and progress (Ohmann, 1996, p. 130). People's responses that are linked to abstractions like these produce ecological purposes, which are often simultaneously hegemonic in nature because the values tend to be hegemonic. These abstract values are articulated and used by people, as well as bound to them. This is not to say that all African-American students will engage in some kind of Black English Vernacular (BEV) and associated habitus, nor would we say the same about white students and the dominant white discourse, or Latinos/as and stereotypical Latino/a habitus, but an antiracist assessment ecology would encourage such discussions and the noticing of such patterns historically. It would consider how such discourses and *habitus* have been valued in writing classrooms, in drafts, without linking such patterns to individuals in the class a priori (or as essential to students who may seem to fit into racial formations that match those *habitus*). The important thing is to reveal just how important the racialized body has been to the valuing of discourse and its success in assessment ecologies.

Additionally, one might discover local values that can affect how various people behave and interact in the assessment ecology of the classroom, what purposes they may wish to evolve, etc. For example, Hmong have particular historical associations, narratives, and stories about language and "The Book" that symbolize freedom, escape from prosecution, and a king who will bring back their book and free the Hmong people from oppression and return them to their homelands (Duffy, 2007, p. 40). Language holds a sacred place in the minds and

hearts of many Hmong. A Hmong faculty colleague, Kao-Ly Yang, who teaches Hmong and French at Fresno State, explained to me at a WAC workshop that many Hmong think of language, particularly written language, as sacred, so being concise is best—no wasting of words—and revising text can be seen as disrespectful or irreverent. People in writing assessment ecologies bring their own abstractions and values that can shape their purposes in the environment, their responses to it, and create various, uneven consequences.

Still some teachers may feel uncomfortable paying such obvious and explicit attention to students in their classrooms as racialized subjects that may judge writing differently because of such racialization. Others have articulated ways to talk with students about dominant discourses, what I'm calling a white racial *habitus*, without linking it to whiteness or the white body. To address such concerns, I now turn to Ed White's popular rendering of stakeholders in classroom writing assessment, the closest term to people who are racialized in antiracist writing assessment ecologies.

Ed White (1996) offers a conventional and useful way to see the various kinds of people involved in a writing assessment ecology, using the familiar assessment term, stakeholders, which I'll critique in a friendly way in order to show why we must focus more attention on the relations made with local diversities that inhabit writing assessment ecologies (why the term should be people, not stakeholders). White organizes his discussion around the wants or purposes that help construct each group of people, connecting the various (and sometimes competing) purposes for a writing assessment ecology with the people, or stakeholders, involved. He identifies four groups of stakeholders: (1) teachers, (2) researchers and theorists, (3) testing firms and governing bodies, and (4) students, identifying particularly students of color and other marginalized groups. White explains that teachers tend to experience two kinds of purposes for writing assessment: "evaluation as an administrative sorting device, to make institutions more efficient, more accountable, and more objective; and evaluation as a personalized teaching device, to help students learn more effectively" (1996, p. 12). This causes, he explains, a tension or conflict in teachers. Teachers realize both the problems with testing and grading students, yet also find it necessary in their classrooms to evaluate, even grade, their students' writing (1996, p. 13). The bottom line is teachers want writing assessment to do at least four things: "suppor[t] their work" in the classroom, "recognize[e] the complexity of writing" and how it is taught, respect teachers as professionals and students as individuals, and not be misused in ways that cause damaging or misleading information about the classroom, students, or program (White, 1996, p. 14).

This is an accurate account of teachers, I think, if we assume that all teachers teach in similar environments, work with homogenous students, and are them-

selves homogenous in their racial, ethnic, and even disciplinary backgrounds. While I doubt that the local diversities of teachers at Fresno State and those at Pennsylvania State University, for example, would disagree with a statement like, "recognize the complexity of writing" in their classrooms and students, I do think that a purpose like that (or any of the one's White lists) change dramatically when particular racialized teachers step into particular classrooms of racialized students.

"Recognition" and "complexity" will mean very different things, and where such values come from matter since some people, by luck or birth, have had more access to the habitus that produce them in the ways expected in school. A teacher's purposes could be in part to establish her as an authority in the classroom, or as a coach and guide, or as mentor who questions, pushes, and instigates deeper thinking and more research, or as a past professional working in a particular field. Thus at a general level, White's teacher purposes surely work, but at the level of actual, living teachers, each of these things mean something quite different. As a new teacher, I recall feeling enormous pressure to be "hard on my students," to demand a lot of effort and high quality from them. So much so, that my first term's course evaluations were the lowest in the writing program. This ecological purpose of mine, a version of White's second one, came from my tacit and lived experience as the only person of color in any English classroom at that university. I knew how students would see me and what kinds of assumptions they'd make just from my name printed on their schedules. My response was to reshape the purposes of the writing assessment ecology to ones that demonstrated me as authoritative and knowledgeable, which I thought meant I had to be rigorous and have overly demanding standards. My purpose, in part, was to demonstrate that I belonged in front of them as their teacher. These were values cultivated from my racialized experiences with writing assessment in school.

The next group of people, researchers and theorists, says White, tend to ask questions that cause teachers to feel uneasy by interrogating current practices, not necessarily upholding them or supporting them (1996, p. 15). While I'd argue against White's contention that researchers and theorists are concerned more about critiquing current practices, more about measures and theories, and less about students (1996, p. 15), it is important to see that researchers and theorists do have other primary interests and purposes for writing assessments, which White reveals. For theorists and researchers, the immediate purposes for the work at hand is not to teach students, but usually to support such efforts. However, theorists do not critique current practices because they are there or because they can. They do it because they assume that the act of critiquing will help develop better or more careful writing assessment practices, thus better pedagogies and fairer practices for students' benefit. This focus on students' benefit can be heard in what White identifies as the four things that researchers and theorists generally want writing assessment to do, even if he denies this underlying purpose: "suppor[t] the gathering of reliable data," "recognize[e] the complexity of writing and of teaching writing," "not privilege existing practice but ... explor[e] a variety of potential practices," and "produc[e] new knowledge and theories" (1996, p. 17).

I won't belabor this point, since I've made it in another place in a slightly different way (Inoue, 2012b), but White misses an important problem within the discipline of writing assessment (although to be fair, this isn't his goal in the chapter). The problem is that there are no people of color doing research or scholarship on writing assessment, except for myself. It is mostly white men, with a few white women. There are one or two scholars of color like Arnetha Ball who have done some important work in the field, but they tend to be scholars who do other work first. For instance, I would characterize Ball as one who primarily does work in literacy studies, learning environments, and research on impact on students and secondary educational settings. The lack of any scholars of color doing sustained work in college writing assessment is a big problem, particularly since composition studies and the academy tend to acknowledge the need and importance of having diverse voices and people on problems and in disciplines. Would White's purposes change if we had some African-American, or Latino/a scholars working on writing assessment theory? Would the "potential practices" "explored" by White's researchers look different than they do now, if scholars of color were involved in that work? This isn't White's fault, of course, and I do not blame any current scholars in the field for the lack of writing assessment scholars of color, but I think we do have an ethical responsibility to encourage and bring new scholars and researchers into the field, and part of this responsibility is paying attention to who those people are, what cultural and educational experiences they have, and how they may help make the field more racially diverse.

Testing firms and governmental bodies make up White's third group, and are mostly involved in writing assessment ecologies to make money or to find out "how many students failed a particular test and who should be blamed" (1996, p. 19). According to White, these stakeholders want writing assessment that: "produces scores quickly and cheaply," "reduces the complexity of writing" and teaching that "impl[ies] complex measurement," "weighs heavily surface features" and a local SEAE, "sort[s] ... students according to existing social patterns," and leans on "statistical explanations, of sufficient complexity to invite misuse of scores" (1996, p. 20). While framed mostly in the negative and implying possible nefarious motivations, White's expressed purposes likely would be framed differently by actual testing firms and governmental bodies. And while I agree with White that surface features of a local SEAE likely do not tell us enough about the writing competencies of locally diverse students, yet when used tend to sort students according to racial and class-based patterns, or rather against linguistic dispositions characteristic of a white racial *habitus*; and those complex statistical analyses invite misuse of scores in writing assessments; testing firms want to use such purposes because they are more reliable ones to measure given the available large-scale writing assessment options, or so they think. Testing firms likely would argue from different disciplinary assumptions about how to measure writing competencies (say, from psychometric ones), or predict future success in college, assumptions that most composition theorists and writing assessment theorists do not agree with (Huot, 2002; Lynne, 2004).

Arguably his weakest discussion, students, White's fourth and final stakeholder group, is characterized by White as diverse (although this diversity is not explained). Students are seen as anxious. He explains a student response to a writing prompt in a "remedial English class" that was titled, "Why Write?" One student responded, "They make you write ... so they can *getcha*!" (1996, p. 21). Thus, students in White's description are said to be diverse but are described as homogenous in their anxieties, purposes, and needs for assessment. And the purposes that shape White's version of the student stakeholder group is equally homogenous. White says that students want at least five things in writing assessment: a stressing of "the social and situational context of the writer," "maximum and speedy feedback," a breakdown of "the complexity of writing into focused units," the production of "data principally for the use of learners and teachers," a focus on "critical thinking and creativity" that also "places surface features of dialect and usage in a large social context" (1996, p. 22).

While I think that White's rendition of student purposes seems reasonable enough, and certainly if we polled random students across the nation on whether they agreed with this list of wants or purposes for writing assessment done on them, many would agree. But I wonder about the disagreement and who might disagree and why. For instance, I'm not convinced that all or even most students uniformly want a focus on critical thinking and creativity that places surface features of dialect and usage in a large social context, which I think means that they want the substantive thinking parts of their writing to be most important in any judgment of their writing and not superficial errors or deviations to the local SEAE. This sounds more like what teachers want students to want. However, I know many students every semester in my upper-division writing intensive course for all majors who ask for and demand surface-level correction or feedback on how their writing can better match the local SEAE that most of their other professors demand and expect of them, and that they know will be expected of them in their jobs in industry and society. Furthermore, this need by students is patterned. That is, it's mostly asked by white students and multilingual Hmong students, but for very different reasons. For white students, it is a part of their reaction to the grading contract's use of labor and not quality. For Hmong and other multilingual students, it's often a response to what they hope to get or expect from a writing course, and their desires to write better in the eyes of other teachers. Meanwhile the rest of the class, the majority, who are mostly Latino/a, have no strong opinion about the matter.

Furthermore, when I consider the local diversity in the classrooms at Fresno State generally, there are patterns. When surveyed at the end of their first-year writing courses, Hmong students still express anxiety and concern about their "grammar" and other superficial linguistic markers in their writing, and for good reason. They know how they are read by others in the university. They know that their next professor will see those markers as signs of illiteracy or failure. So I'm sure most Hmong students likely want feedback on such superficial features of their writing, as problematic as this is for writing teachers. They want direct instruction and feedback on the local SEAE because whether they can identify it or not, they know that to succeed in a society that values and rewards a white racial *habitus*, one must take on the markers and dispositions of *whiteness*. That's why they are in college in some sense.

To many faculty at Fresno State and to those in the community at large, the Hmong racial formation tends to be seen as one linked to illiteracy and remediation. In this case, Hmong students tend to want feedback in writing assessment ecologies that help them directly learn the local SEAE, a white, middle-class discourse, a discourse that most Fresno Hmong and many (maybe most) Latino/a in Fresno do not practice outside of school. But even those who do feel the problems of walking around with other dispositions, non-linguistic ones that mark them with a different racial *habitus* than the white one, find a tension in what they expect from any writing assessment ecology that is intended to be educative. From personal experience, I know that one must appear more than white, or as my Japanese-American ancestors used to say after World War II and internment (American concentration camps), we had to be "more American" than others, particularly whites. This mentality surely played a part in the "model minority" stereotype.

We could make similar arguments about each group that White (1996) defines, and it would require that we know the local diversity of a particular writing assessment ecology. What can be pointed out in White's description of these kinds of people in an ecology is that they are defined by their purposes for the ecology. Their purposes are formed usually from very different disciplinary, economic, and social origins, but people should be defined as more than their purposes, since their judging practices are influenced by more than purposes. If students investigate their own *habitus*, then compare it to the dominant one of

the classroom, they can see their assessment practices as more than subjective, more than personal opinion, more than "just what I think," but interconnected to larger, social, cultural, and racial *habitus*.

The people in ecologies are always a complex, classed, gendered, and racialized set of formations with particular historically and locally constructed concerns and conflicts, who also have different relations to power and to the hegemonic. One hint of how seeing the people of a writing assessment ecology as more than homogenous stakeholders can be seen in Arnetha ball's (1997) important study of African-American and European readers (teachers) who rated student writing along several dimensions. European-American teachers rated European-American student writing higher (both holistically and on each dimension) than African-American student writing; however, African-American teachers rated African-American student writing higher (both holistically and on each dimension) than European student writing (Ball, 1997, pp. 177-179). This suggests that the racial formations that make up the teachers in a local program affect how they read and respond to student writing. By the same logic, teachers' racial habitus (and their students') affect what happens in the assessment ecology. Similar patterns of judgment were found in feedback on midterm portfolios in the first-year writing program at Fresno State. The results of that study were presented at CCCCs in San Francisco in 2009.34

Antiracist writing assessment ecologies pay close attention to the people who change it, asking students to reflect upon their own *habitus* and judging practices, and examining the interconnection of those *habitus* to larger social, cultural, and racial *habitus*. The ecology doesn't assume *a priori* or essential notions of the racial *habitus* of students, but it does ask them to look for patterns of judgment in their own histories in order to find the sources of their dispositions toward valuing language, and look for difference through interactions with colleagues.

ECOLOGICAL PROCESSES

In Maxine Hairston's (1982), "The Winds of Change: Thomas Kuhn and the Revolution in the Teaching of Writing," she argues that at that time the field was entering a paradigm shift, one that focused on writing as a process. The herald to this change that she mentions is Donald Murray's (1972/2011) short piece, "Teach Writing as Process, Not Product." Since then, this is a given in the field, so much so that no one questions how important teaching process(es) is, or that writing itself is a process. Just like writing, assessing writing can be understood as a process, which is the fifth designable element in antiracist writing assessment ecologies.

In their important book, Designing Writing Tasks for the Assessment of Writ-

ing, Ruth and Murphy offer an important conception of the "writing assessment episode" (1988, p. 128) as their way of making sense of the moments of reading and interpretation that occur in any writing assessment. Their writing assessment episode makes explicit the way writing assessment is also a process. The three key moments in any writing assessment episode starts with (1) the test-maker, who designs a writing topic or prompt; (2) moves to the test-taker, who reads and interprets the topic, then writes a response; and (3) the test-rater who reads and interprets, both the initial topic and the response in order to produce a rating or score (Ruth & Murphy, 1988, p. 129). While the process may change with different kinds of decisions, purposes, parts, and people, the important aspect of the writing assessment episode that shouldn't be lost is the simple fact that classroom writing assessment ecologies, from their conception and the identifying of a dominant need or purpose, to development and use, involves processes that move chronologically, as all life does. Thus processes make up the fifth ecological element, and makes writing assessment ecologies historical in nature in the ways historical bloc helps us understand them as political.

In one sense, processes of a writing assessment ecology are the labor and actions that happen in the ecology that have some import. Chronology, or the order in which these actions happen, is important, at least in terms of understanding their influence on the other ecological elements, particularly the products (explained in the next section). For instance, the simple truism that feedback and revision helps students' drafts get better proves my point. Implied in this truism is a process that starts with one draft, moves to some kind of feedback activity (a process itself), then moves to a revision activity or practice (another process), which produces a second draft that may be judged or graded. If the entire process is designed well and focused in the right places, places that match what students need most help improving in their drafts at that time, then the process may produce better drafts, so goes the logic. Thus, even if we do not explicitly ask students to engage in them, teachers always assume by necessity that students will engage in processes of assessment.

As post-process theorists have argued, however, teaching a particular process is not the key to learning to write better, since there is no one process to master, rather ideas about the nature of writing as public, interpretive, and situated are more important when constructing writing processes (Kastman Breuch, 2002/2011, p. 104). For antiracist writing assessment ecologies, assessment processes, which are typically exchanges among teachers and students about drafts and the judgments made on those drafts, are at least public and situated through their negotiated manner. The grading contract is a good example of how negotiating processes can work toward antiracist ends. Students gain power and control over how they do their work, as much as over the nature of that work. Negotiating labor, or the processes of assessment, provides access to power and opportunity to reflect. This makes the articulated processes students negotiate a description of their ideal labor, at least as it is initially conceived.

As one might guess from my discussion so far, the key to improvement in antiracist writing assessment ecologies is students' engagement in the assessment processes of their work. The best way to maintain that engagement is reflection activities on judgment and assessment processes. The literature on reflection in writing (Belanoff & Dickson, 1991; Black, Daiker, Sommers, & Stygall, 1994; Hamp-Lyons & Condon, 2000; Yancey, 1998; Yancey & Weiser, 1997) and on reflective practices (Brookfield, 1995; Dewey, 1993; Schon, 1987) suggests some processes that could be inserted into such writing assessment ecologies in order to help writers at least become more self-aware of their practices. I've written on ways to insert reflection and self-assessment into larger writing assessment processes in other places (Inoue, 2004, 2010). However, one should be mindful of the ways that reflection as a discourse may be a racialized discourse informed by a white racial *habitus* (Inoue & Richmond, in press). This isn't a reason not to use reflection, only to make it a part of the problem-posing processes of the ecology-that is, as discussed earlier, reflection as a construct should be examined as a set of dispositions that may be different from the way some students already reflect in writing.

Using labor to determine progress and grades can provide for ways to more effectively ask students to reflect upon their *habitus*. The processes that students negotiate will be what the class uses to determine grades. Do the labor that the process dictates and you get full credit for the assignment. What students produce from the assessment processes and their reflection activities is less important than them self-consciously engaging in the process and reflecting upon that doing. This can produce problematizing of their existential writing assessment situations.

Some teachers may worry that they can't be sure that students are doing the labor that they say they are unless they grade drafts. Students have to be accountable if teachers are to know in some reasonable fashion that they have done the labor, goes the argument. If our main criterion for grading is how many hours of labor a student engages in, then we've set up a system in which we cannot know how well a student is doing (we cannot really grade them), since we have little access to students' out-of-class labors. The problem with this argument is that it is based on an assumption about students that is negative and caustic to the ecology. It assumes that the norm will be for students to lie or be dishonest when they say they've done the labor asked of them. This assumption creates writing assessment ecologies that have no faith in students, no trust, and so little room for them to build their own ways of intrinsic engagement and interest in the course's labors. These kinds of ecologies interpellate students as suspect and untrustworthy, and students feel this interpellation, then either live down to this subject position or against it. Not trusting students in the most fundamental aspect of any course is counter to healthy, sustainable ecologies. Often, what's in a draft doesn't come close to explaining the labor and thinking involved—this is why we have reflection components in portfolios, to explain the gaps, to reveal some of what is not there.

But there are ways to make more visible student labor. It still requires that we trust our students though. Students can keep labor journals that keep track of labor sessions for the class in terms of their time of day, duration, location, and even their level of engagement. Recently, I've used spreadsheets on Google Drive (Google Sheets) that are accessible and can be easily filled in during the week when students labor for the class. Twitter is another way to see labor as it happens. A teacher can ask students to tweet their labor. I do this by incorporating in my labor instructions for every assignment moments when students pause in their reading or writing and tweet something to the class with our hashtag. The tweets usually help us see something they are engaged in, a question, an interesting quote, an idea. This archives a bit of their labor as they do it, and provides a moment to pause and reflect on what they are doing, a method that helps them be more mindful of the labor process they are engaged in. My point is not that one needs to use Google or Twitter, but that if one uses labor as a way to grade, there should be mechanisms that students use to keep track of labor, reflect upon it, and make it visible to the class.

It is important to keep in mind that as Ruth and Murphy (1988) show us, processes of writing assessment are fundamentally reading and interpretive activities. Even writing drafts is a set of reading and interpretive processes. One must read the prompt, figure out the assignment, its goals, and how to proceed. As writers draft, they often reread sections or paragraphs they've just written in order to see continuity, logic, structure. Proofing and polishing are also reading processes. These are things that Nancy Sommers (1980) and Sandra Perl (1979) found in experienced and successful writers, that they draft and revise using recursive processes, going back over their texts, reading them over and over. At their core, all these reading processes are assessment processes, we are really teaching assessment processes. Antiracist assessment ecologies simply make this relationship explicit for students through a focus on processes of assessment.

Many assessment processes can have uneven consequences on different local diversities. In Fresno, for instance, the mostly affluent white (and some Latino/a) students of the nearby Clovis school district come from classrooms that heavily emphasize testing and scoring high on standardized tests, so they prac-

tice timed-writing exams a lot. But at most of the Fresno unified schools, where most of the Latino/a, Hmong, and African-American students attend, and where most are poor and on free-lunch, there is less of a focus on standardized testing (but they do still engage in a lot of testing). The consequences of a timed-writing exam process for students, then, from the Clovis-Fresno area are clear.

Clovis students score higher than those from Fresno unified.³⁵ Of those students from Clovis High who took the EPT for entrance into a CSU for the Fall 2012 semester, 73% of them scored above a 147, which is the cut-score for a remedial designation, thus they were deemed "proficient in English." At Clovis North High School and at Clovis West High School, 83% of students at each school were designated by the EPT as proficient. Meanwhile at Fresno High School, only 35% of their students for the same year scored proficient on the EPT. At Sunnyside (another Fresno unified school), 36% of their students scored as proficient. At McLane High, 41% of their students are proficient according to the EPT—and McLane is just blocks from Fresno State. Even a school that is situated in a more affluent neighborhood in Fresno, in some ways similar to the affluence in Clovis, but still in the Fresno unified school district, Bullard High School, has lower EPT scores than those in Clovis schools, achieving a more respectable 67% proficiency rate.

What are the differences beyond curriculum that create such uniform performances on the EPT? The answer is surely complex, but part of it I'm arguing has to do with how student populations from these schools, which are defined in large part by the local racial and economic diversities in Fresno and Clovis, are trained and practiced at timed-writing exam processes. Thus, the processes students experience in any classroom writing assessment ecology have consequences, but do students from these schools understand that their performances on the EPT are affected by the writing and assessment processes they practice in high school? Antiracist writing assessment ecologies attempt to make this connection explicit: assessment processes are the labor students do to understand the nature of judgment about their language. Thus understanding and controlling one's assessment labor offers students the opportunity to form critical writing and reading practices, which is another way of saying assessment practices.

ECOLOGICAL PRODUCTS

Products make up the sixth designable element of an antiracist writing assessment ecology. Like the term suggests, products refer to all of the direct and indirect consequences that occur in and from writing assessment ecologies. Direct consequences typically are things like scores, grades, decisions, the language that constitutes the actual feedback given on a draft by a teacher (which can also act as a part), etc. In other instances, direct consequences could be the written articulations of students that explain to peers, the teacher, or themselves how well theirs or others' drafts meet the expectations of a writing assignment. The indirect consequences are those that typically occur because of the direct consequences. Because a draft is graded (direct consequence), students focus on superficial editing in the draft (indirect consequence), or the grades tell them something about their abilities (good or bad) and that in turn affects their confidence or future performances in the class. The low score on the EPT that designates a student as remedial places that student in a mandatory, summer Early Start English course, which costs her more money, time, and perhaps erodes her confidence, suggesting to her that she is not ready for college. Clearly the indirect consequences of writing assessment environments appear more severe and have more long-term effects as the direct ones. But the two are connected. You cannot have indirect consequences without direct ones. Both kinds of consequences, however, are ecological products because they are produced by the ecological processes, parts, people, power arrangements, and purposes of the writing assessment ecology.

In a classroom, the grade on a portfolio isn't the final product of the portfolio assessment ecology, the course grade or decision is, since typically that is the real decision the portfolio makes. However, my version of an antiracist writing assessment ecology doesn't produce grades from portfolios, but it does use portfolios. In my writing classes, the portfolio assessment ecology produces a set of articulations (usually five assessment documents: three from peers, a self-assessment, and my own) that are pitched not toward justifying a grade, or even a simple assessment of meeting expectations from a rubric, instead peers and I articulated three things to the writer and myself for discussion in a final conference: (1) what picture of the writer as a learner do you see in the portfolio; (2) what did you, the assessor, learn from this writer in this portfolio; and (3) what potential do you think the writer has as a writer and should most work on in the future? The articulations of these questions are used only for discussion of the writer in a final, one-on-one conference that discusses what she has done in the portfolio and where she might go as a writer in the future.

Because grades are determined already by a grading contract that bases course grades on labor only, these articulations are not about justifying grades, or figuring out the course grade. The main product I hope to encourage from the portfolio assessment is to allow writers and assessors to learn something about themselves as writers and assessors from various diverse perspectives, what I call a landscape of judgment. Like all classroom writing assessment ecologies, I do not control much of the indirect consequences, but I can control the direct consequences, in this case, the production of grades and articulations of learning by writers and readers. Antiracist assessment ecologies mostly produce complex, descriptive products that focus on the local diversity in judgments, such as my portfolio assessment, and resist hierarchizing judgments (like grades).

While I'll discuss this final assessment process in more detail in the next chapter, it is important here to point out the fluidity of ecological products and parts. In the larger writing assessment ecology of the course, the final assessment documents by group members that are discussed in our final meetings are both parts and products. They are an ecological part because they are the artifacts the writer and I use to understand the landscape of judgment about her as a learner in the class. The individual assessment documents about the writer are parts to larger assessment processes that only chronologically finishes at the end of our conference, which produces a more complex set of judgments about the writer-that is, once all the documents are read, then we discuss the differences and similarities. We discuss the landscape of judgment, which only then becomes the direct product of several processes. While this scenario may seem atypical, if one looks more closely at the way articulations of judgments and other artifacts function in any writing assessment ecology, even very conventional ones with grades and with only the teacher reading drafts, we'll likely find parts morphing into products, and products, like the feedback on a draft, morphing into parts of subsequence processes, in the same fashion.

Note, however, that the key to figuring out whether a document or portfolio is a product or a part (an artifact) in the process that leads to another product is in figuring out the relations between the document, the process of judging the writing, and the purpose for the assessing process. This is the nature of all ecological systems, transformation, or the inter-being of all elements, which is why products also are more than decisions, grades, or culminating judgments.

Furthermore, all ecological elements are productive in some fashion—that is, they have some influence on the ecological products that come from an ecology. They are productive. They produce things in the ecology. For instance, bringing in different, perhaps atypical people into the writing assessment ecology of the classroom as judges can change the products of that environment in unexpected ways. A technical writing class could bring in technical writers and managers working in the field to offer formative feedback on student writing. This in turn could alter the way teacher feedback is enacted, perhaps making it more collaborative, focusing on how to meet the demands that the outside professionals have placed on the writing. In antiracist writing assessment ecologies, this might be an occasion to examine *habitus* outside the classroom that arguably exist in professional settings. Students might interpret teacher feedback could be an investigation or inquiry into why this technical writer or industry manager value.

ues these particular things in this kind of document for this audience. What *hab-itus* can be described in the judgments and how do those dispositions compare next to the ones the class has negotiated in its rubrics or assignment? What indirect products or consequences to students do these *habitus* reasonably encourage when used to judge writing/writers?

As mentioned already, Arnetha Ball's (1997) research suggests that who the teacher is, what racial formation she participates in or what racial *habitus* she enacts in the assessment ecology matters and can produce different products, different grades, scores, and perhaps feedback. I see no reason why this same claim cannot be made about students as well. The same can be said about using different ecological parts, say a new rubric or prompt, a different process, such as a different kind of feedback method, etc., or different power arrangements (e.g., who gets to grade, or how students interact with each other).

The ecological products of an antiracist writing assessment ecology are products and not parts because they are the learning that occurs because of the ecology. Sometimes, however, the products of an ecology may get circulated back into the ecology as parts, in which case, the ecology may change. Using reflection activities to "close the loop" is one way classrooms can do this. The best recent examples of closing the loop processes that I've seen are from dynamic criteria mapping (Broad, 2003; Broad et al., 2009), in which the point of the assessment process is to produce a document that exemplifies what the participants have learned about the writing program and its values (an articulation of products), which then helps the program understand and perhaps change their practices by its use of the document as a part.

ECOLOGICAL PLACES

Using Plato's *Gorgias*, as an opening example, Nedra Reynolds (2004) offers this introduction to thinking about the importance of place in the teaching of writing: "[p]laces evoke powerful human emotions because they become layered, like sediment or a palimpsest, with histories and stories and memories ... they become embodied with the kinds of stories, myths, and legends that the spot beside the Ilissus holds" (p. 2). Place, however, is more than geography that acquires meaning. In considering a "macro-view" of writing as process, James Reither (1985) re-explains writing in terms of systems and contexts, and sees writing as an ecology, which helps us understand place as a part of that ecology:

writing is not merely a process that occurs within contexts. That is, writing and what writers do during writing cannot be artificially separated from the social-rhetorical situations in which writing gets done, from the conditions that enable writers to do what they do, and from the motives writers have for doing what they do. Writing is not to context what a fried egg is to its pan. Writing is, in fact, one of those processes which, in its use, creates and constitutes its own contexts. (p. 621)

Reither's identification of writing as a generative force that constructs contexts is very similar to Ede and Lunsford's (1984) claim a year earlier about audiences constructing writers and writers constructing audiences (p. 158). In short, the people and their labor and processes of writing create contexts that dialectically create that very writing. Writing creates contexts as much as contexts create writing.

These earlier versions of writing as contextual tend to see context in the above rhetorical ways, bound in or around the text itself, or in the superstructural, but it is also in the base of the classroom, in the material production of culture and ideas, namely the processes and environments in which assessment occurs. While context is rhetorical in the ways Reither and Ede and Lunsford describe, it is also material in nature. So I use the term place to identify both the rhetorical context and material conditions of the production of assessment (judgment) of writing in the classroom, which includes places like writing groups, the remedial location, an evaluation rubric, success, failure, a course's Internet discussion board, the classroom, the dorm room, etc. The ecological places, the seventh and final element that makes up an antiracist writing assessment ecology, can also be explicitly examined and designed. In fact, the places of an ecology may be the most important element in the system because they inter-are the entire system. Just like Reither's writing situations, we (teachers and students) create conditions and places of assessment through our interactions with the other ecological elements. Additionally, material bodies make up locations and define them by occupying places.

Drawing on Lefebvre and geographer Yi-Fu Tuan, Dobrin (2012) explains the way space and place have been defined relationally. Space, the larger more abstract term, is "freedom" and "movement," while place "offers security" and is "pause," according to Tuan (Dobrin, 2012, p. 36). Dobrin uses Tuan: "The ideas of 'space' and 'place' require each other for definition. From security and stability of place we are aware of the openness, freedom, and threat of space, and vice versa." (Tuan, 1977, p. 6; as quoted in Dobrin, 2012, p. 36). For de Certeau, "place is the 'order (of whatever kind) in accord with which elements are distributed in relationships of coexistence'" (Dobrin, 2012, p. 39). Dobrin highlights an important aspect of place that de Certeau explains. Place is created by whatever occupies it, but "occupation is limited." Ultimately, Dobrin says that the order that is imposed through occupation is "imposed through power" (2012, p. 40). His conclusion, then is that "[s]pace is the site of ideological struggle; place is the result of that struggle. Place is the hegemonic made visible, readable. Space is where bodies combat to make meaning and, in doing so, make place, produce the location of hegemony" (2012, p. 42).

I'll come back to this idea of combat and conflict in places (not spaces) shortly, but I want to call attention to past theorizing of place as a site that is a result of ideological and physical conflict. I do not wish to engage in the interesting distinctions between space and place, except to reveal that before places are created in an antiracist writing assessment ecology, they are broader, often more abstract, ideological and material spaces of conflict, which continue to get worked out through conflict and difference once they become identifiable places. It is, I think, enough to know that places in an antiracist ecology are not produced out of thin air. They come from larger, more abstract spaces of conflict.

Dobrin (2012) makes much of the way place is defined by the notion of occupation. Occupation, in fact, constructs places through an association with the bodies that rest in those places, that occupy and have occupations in those places. Ultimately, he says, this means that occupation is "a struggle of power" to "inscribe meaning"; it is a result of the action of occupying a place; it is a "taking up or filling up of space," that is, occupation is spatial and temporal in nature; and it is "the manner in which individuals occupy their time through engagement or the pursuit of an activity" (2012, pp. 43-44). And so according to Dobrin (who cites Lefebvre), by this logic, bodies cannot define the space they occupy because it is through bodies' deployment and occupation of space that they then create places, which are more ordered, hierarchical, and hegemonic. As I'll discuss below, this seems to contradict Charles Mills' important theory of racing places and bodies. While bodies may not define spaces, they do define places, and places tautologically define bodies.

But even at face value, the material places in which the processes of writing assessment ecologies occur, the schools, dorm rooms, and offices where students are judged or judge themselves, are important to negotiate and make clear in antiracist writing assessment ecologies. If assessment only happens outside the classroom in the privacy of teachers' offices, what Belanoff described as "the dirty thing we have to do in the dark of our own offices" (1991, p. 61), then those private processes and perhaps private products define the classroom as a public space in the assessment ecology in which grades and the evaluation of writing are not done. If teachers use student work to discuss and evaluate patterns in all students' writing in a class, then the classroom or the Internet discussion forum become material places where such interactions, or public assessment, are ac-

ceptable. In antiracist writing assessment ecologies, assessment processes and the parts and products they produce are usually public. There is no private learning or private assessment, because any given product associated with a student or her writing inter-is with the places that learning comes from. Students and their learning inter-are in ecologies. Everyone must come to benefit from everyone else's assessments in the Sangha ecology.

In some ecologies, assessment happens in lots of places. In others, it happens in only one place. Is it okay to make judgments of worth on student writing in public places, such as a classroom or in a writing group with other students? To ask this question more broadly: where are the appropriate or condoned places in which a student, or all students, may be graded, evaluated, or given feedback? Where are the places in which that feedback or those evaluations are generated initially, or shared individually or publically? Who in those places have authority, by the nature of those places, to give evaluations or assess writing? The classroom is an institutionally authorized place for teachers to say pretty much whatever they want about student writing, but are students also authorized in that material place to do so, should they be? How might they become authorized? What about their dorm room or their home, an Internet discussion forum? What about in someone else's class? Places matter to how antiracist writing assessment ecologies function and what they produce, which includes producing different notions of authority in the assessment ecology for students and teacher. The questions above should be asked and negotiated with students, explicitly inquired into, so that students can see that there are other options for how the places of assessment are created, which can make a difference in how fair and equitable the ecology is for everyone.

We should also keep in mind the nature of places as discussed by others in composition studies, which work from concepts like community, consensus, conflict, difference, negotiation, and borderland. For instance, likely working from Pratt's (1991) contact zone metaphor, Ed White (2001) argues that assessment is "a site of conflict" (pp. 315-316) and illustrates this in his narrative of the establishment of the EPT in California in the 1970s. He urges writing teachers and administrators to acknowledge that they come to places of writing assessment with particular values, perspectives, and needs, while administrators and others come with different ones. There will be a difference of opinion on many things, but to get the work done, negotiation is needed. In some sense, this is common sense in composition studies, where we hardly contest the idea that within students' drafts and in the classroom itself there are "contact zones" (Pratt, 1991), ones filled with conflict and difference, ones that demand we understand different perspectives that simply do not agree with one another. The field has pedagogies and theories about contact zones and borderlands (Anzaldúa, 1999/1987; Horner & Lu, 1999), about how teachers create differing personae and assumptions of students (Anson, 2000; Williams, 1981), and about how to use difference and negotiation productively (Horner, 1992; Trimbur, 1989). However, within Pratt's own example, one of the Spanish imperial conquest of Peru, we see the problem presented by such a view of the classroom community, or rather the problem that "contact zones" can reveal to students in antiracist writing assessment ecologies that construct various diverse places in the ecology from the bodies of students.

For Pratt, contact zones are "social spaces where cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism, slavery, or their aftermaths as they are lived out in many parts of the world today" (1991, p. 34). She explains that "[t]he idea of the contact zone is intended in part to contrast with ideas of community that underlie much of the thinking about language, communication, and culture that gets done in the academy" (1991, p. 37). Likely, Pratt is referring to-and criticizing-discussions like Bruffee's (1984) on collaboration and community building in the classroom that work from unqualified versions of Oakeshott's "unending conversation" (1991, pp. 638-639) and Rorty's concepts of "normal" and "abnormal" discourse in communities (1991, pp. 640-641). A similar critique of "community" was put forth around the same time by Joseph Harris (1989). Harris promoted a way of seeing the classroom space, for instance, as a conflict-filled, diverse, public space, like a city (1989, p. 20), not a cozy place where people can simply come to agree or find consensus. But Harris finds problems with Pratt's contact zone too. He sees Pratt giving conflicting messages in her text, and concludes that the idea of a contact zone promoted by Pratt's argument tends to be a mostly harmless, exoticizing of the multicultural other, in which students and perspectives harmlessly bump into each other, "banging or sliding or bouncing off each other" (Harris, 2012, p. 163). In line with his public city metaphor, Harris urges us to find pedagogical ways "to make such a meeting of differences less like a battle and more like a negotiation ... to learn not only how to articulate our differences but how to bring them into useful relation with each other," which moves him to focus on negotiation that doesn't entail full agreement (p. 165).

Others have made similar arguments about the problems of consensus in collaborative activities and unqualified notions of community in classrooms. From a Marxian perspective, Myers (1986) argues against Bruffee's (1984) notions of collaboration and community by discussing the way any society reproduces ideology through acceptance and consent of mundane ideas and actions, then argues that conflict is thus necessary for change. When we see a community as mainly one in which folks agree or only search for agreement, Myers argues, we blindly reproduce ideology (or the hegemonic), and miss how the system changes or can change (1986, p. 156). Trimbur (1989) also disagrees with the clean and unqualified notion of community that Bruffee claims can support a collaborative classroom, and thus writing processes. He argues, similar to Harris, that conflict is necessary and can be used for students' benefit, and puts forth the idea of "dissensus," "a process of identifying differences and locating these differences in relation to each other" (1989, p. 610). The product of such writing classroom processes is not about "an agreement that reconciles differences through an ideal conversation," instead it is about "the desire of humans to live and work together with differences" (Trimbur, 1989, p. 615). Thus one key to designing ecological places that resist norming everyone to a white racial *habitus* is to see them as sites of negotiation in which students focus on their relations to others through an attention to their evolving differences.

The places that are constructed by and make up an antiracist writing assessment ecology are not benign mini-communities, or less benign but ultimately harmless contact zones. These places in the ecology are places of true conflict and irreconcilable differences, places of colonization. While Pratt's concept has problems, it can be a powerful way to help students see their differing stances and the places they create in the ecology as colonizing places, such as their writing groups, the classroom generally, discussion board exchanges, and anywhere multiple assessments and reflections on judgments occur. If places in antiracist writing assessment ecologies colonize, then they norm students to particular *habitus*, which should be made explicit so that students have as much power and choice as possible. It is unavoidable that the writing classroom's assessment ecology colonizes students, especially those who come with non-dominant racialized *habitus*, but we can make this fact known and discussed, even negotiated, so that students understand what they are consenting to, and make conscious choices to do so, or not.

I am, however, persuaded by Harris' and Trimbur's separate arguments about the intrinsic difference in all places where people and ideas inhabit, but they should be tempered with the spirit of Myer's Marxian critique that focuses on the reproductive nature of the hegemonic in all systems. And I'm convinced that as teachers, we must keep foremost in our minds the conflicting nature of all places—especially ones we create—and how conflict and difference can be a way to learn, develop, and make changes in our world. Yet I'm also wary of how stubborn the hegemonic is, even in a classroom that focuses on situating difference (of opinion, of ideas, of making meaning, of languages, of histories and cultures, of *habitus* etc.) without trying to harmonize, as I think Harris' good example in the Interchapter that follows his "Process" chapter shows (2012). No matter what our political or pedagogical stances are on how to read multilingual writers, how (or whether) to teach a local dominant discourse, or what the subject of any writing classroom is, it is difficult to escape the privileging of a white racial *habitus* that is so closely associated with the academy. Thus, the hegemonic will be a powerful part of the dissensus in any ecological place. It may even create the boundaries of that place.

Gloria Anzaldúa's (1987/1999) concept of borderlands offers a corrective or refocusing of Pratt's contact zone, Trimbur's idea of disensus, and Harris' public-natured city metaphor. Anzaldúa focuses on the border between the U.S. and Mexico, a border between white and brown, English and Spanish, the dominant and subaltern. It is also a place of struggle and conflict, of "*un choque*, [shock] a cultural collision" (Anzaldúa, 1897/1999; p. 100). The idea of the borderlands attends to the geographic, linguistic, physiological, and figurative border places, places on landscapes that define insiders and outsiders. Anzaldúa provides a powerful geographic metaphor that reveals the places where changes occur, where transgressions appear, and where action and drama happen. These are places perfect for people to confront their existential situations. She states the borderland this way:

The U.S.-Mexican border es una herida abierta where the Third World grates against the first and bleeds. And before a scab forms it hemorrhages again, the lifeblood of two worlds merging to form a third country-a border culture. Borders are set up to define the places that are safe and unsafe, to distinguish us from them. A border is a dividing line, a narrow strip along a steep edge. A borderland is a vague and undetermined place created by the emotional residue of an unnatural boundary. It is in a constant state of transition. The prohibited and forbidden are its inhabitants. Los atravesados live here: the squinted-eyed, the perverse, the queer, the troublesome, the mongrel, the mulato, the half-breed, the half-dead; in short, those who cross over, pass over, or go through the confines of the "normal." Gringos in the U.S. Southwest consider the inhabitants of the borderlands transgressors, alienswhether they possess documents or not, whether they're Chicanos, Indians or Blacks. Do not enter, trespassers will be raped, maimed, strangled, gassed, shot. The only "legitimate" inhabitants are those in power, the whites and those who align themselves with whites. Tension grips the inhabitants of the borderlands like a virus. Ambivalence and unrest reside there and death is no stranger. (1987/1999, pp. 25-26)

While not as encouraging of a picture of place as perhaps Harris' ideas of a city or Trimbur's dissensus, Anzaldúa's borderland reveals how places where local diversities meet the hegemonic can generate serious conflict and wounding. Race and racial formations, "Chicanos, Indians or Blacks," and whites who are in power, is central to Anzaldúa's metaphor of place, which is not the case for either Trimbur or Harris (although it is more so for Pratt). Somebody, and it's almost always the subaltern,³⁶ gets hurt or worse. But borderlands also reveal something important about the nature of places and landscape that often goes unnoticed. All places are loci for drama and action, thus they are also in constant states of change, just as the concept of ecology makes present for us. However, most of the time that change is incremental, almost imperceptible, like the slow eroding of the Grand Canyon by the Colorado river. And because the changes are so slow, by the time they are perceivable, they are already coopted by the hegemonic, even if at one time those changes, those shocks to the system were counter-hegemonic. Thus, in some sense, change is hegemonic, is essentially systemic.

Therefore, I prefer to mix the metaphors of place so that the places constructed in an antiracist writing assessment ecology refer at once to public cities of negotiation and getting along, spaces where dissensus is inherent and important to see and confront, not ignore, yet are borderlands that inherently have the potential for violent racial and cultural collisions, wounding, and change. This last element of place is at the heart of my reading of Freire's revolutionary pedagogy (1970), in which much of his discussion is about folks going into the community, the place where the subaltern inhabit, the borderland, and understanding how words work there. But there is wounding and hurt. It's not always safe.

Recall that ecology has an association with settlement and making some place inhabitable, livable, sustainable; however, places themselves, like people and parts, are usually already connected to larger colonizing structures in history. The material places of schools and classrooms, and the figurative places of the English paper and evaluation rubric, as well as the places of the remedial and mainstream writer, are all locations in which the colonizing project occurs and is reproduced through writing assessment ecologies. This is nowhere better illustrated than in Soliday's (2002) discussion of the politics of remediation, and others' discussions of remediation and access to higher education (Fox, 1999; Kynard, 2013; Miller, 1991; Stanley, 2009; Trachsel, 1992). This means we should be most conscious of the ways antiracist writing assessment ecologies' construct places that affect differently the local diversities in our classrooms and schools. We may create places that produce discomfort and unease in some, anger in others. But we should not confuse discomfort with the safety required in a successful learning environment. Learning requires us to be uncomfortable and safe. Safety in writing assessment ecologies demands that students' judgments

and opinions not be graded, but counted and heard.

Victor Villanueva (1997) offers an illustration of the uneven hurt that can occur in any assessment ecology through a complicating of the notion of multiculturalism. He says that there is "a colonial sensibility [that] remains for us in the United States—in America—and that America's people of color are most affected by that sensibility" (1997, p. 184). Students of color are "forced" in many ways to assimilate to local SEAEs and dominant, white ways of knowledge making and discourse, most notably to a white racial *habitus*, yet this forcing often is voiced by students of color as consent. Consent is achieved through writing assessment ecologies, by doing what it takes to get the grade or receive credit, by achieving. Assessment decisions reward or punish the subaltern, which is not just the student of color but often all students, since students are subordinate by their nature in assessment ecologies (there are degrees to the subaltern). Not only are students of color coerced through the assessment of writing, but are also made to consent, as we all are, only students of color tend to move through a process of internal colonialism (Villanueva, 1997, p. 186), which Villanueva identifies as having two impulses: "economic ascension and cultural resignation" (p. 189; as cited in Altbach & Kelly, 1978). We go to school and learn a local dominant academic discourse because it means economic and other opportunities, or so the myth goes. The point I'm making is that when places are created in antiracist writing assessment ecologies, they are also locations of potential internal colonializing, which limit the ideas and discourses available to judge in the ecology, and these dynamics of ecological places should be made explicit and negotiated.

Thus, the ecological places in an antiracist writing assessment ecology are inherently borderlands because they are sites of action, change, and drama, locations where colonizing occurs forcefully and willingly, through hegemonic means of coercion and consent. No matter how we design classroom writing assessment ecologies, no matter how much we desire to change the hegemonic in the academy, ecological places—like most places on the planet—tend to be places of colonization at some historical point, thus they are places of norming and racing. This is to say, conventional writing assessment ecologies colonize primarily by norming bodies to a white racial *habitus*, and as Charles Mills (1997) has pointed out, this is simultaneously a racing of bodies. Mills says,

The norming of space is partially done in terms of the *racing* of space, the depiction of space as dominated by individuals (whether persons or subpersons) of a certain race. At the same time, the norming of the individual is partially achieved by *spacing* it, that is, representing it as imprinted with the

characteristics of a certain kind of space. So this is a mutually supporting characterization that, for subpersons [people of color or the subaltern], becomes a circular indictment: "You are what you are in part because you originate from a certain kind of space, and that space has those properties in part because it is inhabited by creatures like yourself." (1997, pp. 41-42, emphasis in original)

Mills does not make a distinction between places and spaces. At face, Mills would seem to contradict Lefebvre and Dobrin since they say bodies do not define the spaces they come to occupy, but if we replace Mill's looser term "space" for "place," then Mills' racing of spaces theory agrees with them. Racialized places are constructed by the occupation of the racialized bodies in that place, while simultaneously those racialized bodies are also constructed by the racialized places they occupy. However, Dobrin reveals that even the broader, more abstract spaces (pre- or proto-places) is not devoid of the influence of occupying bodies: "space can be seen as a factor in constructing the occupier's identity, not the opposite-though, of course, this is an illusion. The relationship becomes eventually reciprocal in that those who come to occupy a space-say, the space of the university—must mold their identities to fit the space as defined by previous occupiers/occupations" (Mills, 1997, p. 48). But even with this explanation, the question remains, at some earlier, historic point a raced place, like remediation, the remedial classroom, failure, or success, was a space, and thus not raced initially, according to Lefebvre. Race, however, is an attribution of people, and so a construction attached to bodies and their *habitus*. How do we get to a moment in history when Mills' racing of place can be accounted for or explained? Surely, students in a writing classroom won't always accept this claim. We have to look back at the history of race itself to understand its influence on places, which has great bearing on antiracist writing assessment ecologies as counter-hegemonic historic blocs. Understanding the development of race as a concept can provide students and teachers in antiracist writing assessment ecologies ways to be critical of the colonizing that occurs in places that race students to a white racial habitus through assessment processes, and perhaps additional ways to problematize existential writing assessment situations.

The racing of places, as Mills suggests, can be traced back to the beginnings of the use of the term "race" in Western societies and literature. In his extensive study of "race" as a concept in Western philosophy and history, Ivan Hannaford (1996) explains that the word "race" did not enter Western languages until the middle of the sixteenth century. There was no Hebrew, Greek, or Roman equivalent, and its original meaning tended to be "lineage, family, and breed" (Hannaford, 1996, p. 5). The *Oxford Dictionary of Word Origins* explains the word as an Old English derivative that meant "rapid forward movement," which came from the Old Norse word, *rás*, or "current." These origins allowed the word to be developed in use to mean a "contest of speed," a "channel" or "path," ("race"). I find it interesting in a number ways that the concept of "race," so important to Anzaldúa's notion of borderlands, a place of change, also has etymological roots in Western languages that draw on a metaphor of dynamism and change, a current of water, a path, a contest of speed, and forward movement.

Drawing on at least ten different etymological sources, Hannaford explains that the term "race" "entered the Spanish, Italian, French, English, and Scottish languages during the period of 1200-1500 CE and did not have the meaning that we attach to it now. In most Western languages its earliest meaning related to the swift course or current of a river or a trial of speed" (Hannaford, 1996, pp. 4-5). In English, the word's first appearance has been attributed to a 1508 poem by Scottish poet William Dunbar called, "The Dance of the Seven Deadly Sins" (Banton, 1998, p. 17; Goldberg, 1993, p. 62; Satzewich, 1998, p. 26). The one reference comes in the fifth stanza, where the narrator is describing the dance of Envy and his family or troupe of followers "of sindry racis," all with "fenyeit wirdis quhyte," or "false white words," which was akin to "little white lies" (Conlee, 2004). In his discussion of race as a concept, Vic Satzewich explains that during the sixteenth century, the word race referred "only to a class or category of people or things. These classes or categories were not seen as biologically distinct, nor were they seen as situated in a hierarchy of superiority and inferiority" (Satzewich, 1998, p. 27). This is the way we might read Dunbar's use of the term, as a way to identify the family or category of dancers in his poem, a way to relate them together as the family of Envy, but not necessarily associate any biological traits or physiognomy to them. However, the evil, ugly, dark, or negative associations readers are supposed to make about envy are there, and they are organized by the term race.

A similar use of the term can be found in Shakespeare's *The Merchant of Venice* (1600), in which Lorenzo speaks to Jessica about listening to music in the night. Shakespeare uses race to refer to a group of horses in Lorenzo's rebuff to Jessica, saying, "The reason is your spirits are attentive/ For do but note a wild and wanton herd/ Or race of youthful and unhandled colts/ Fetching mad bounds, bellowing and neighing loud,/ Which is the hot condition of their blood" (V.i.70-74). While race groups the horses into a common category, that category has associated with it negative or less than mature attributes. Thus race, even at this early historical point, appears to begin being used with negative references to people, but not places.

So what does this have to do with the norming or racing of places in writing

assessment ecologies? People and places have always been intimately connected for obvious reasons. Without people in them, places become less socially significant. Beyond this, while race as a term had no origins or associations to geography, except to refer to the running of water or streams, it appeared to be used to group people and animals together as common. Places in this rudimentary way, raced people, only in different terms, in more conceptual ways, as immature or as a family with similar attributes.

But by 1684-just eighty some years after Shakespeare's Merchant of Venice-François Bernier published what is considered the first reference to the modern concept of race in "Nouvelle Division de la Terre par les Differents Espèces ou Races qui l'Habitent" ("A New Division of Earth and the Different Species or Races Living There") in Journal des Scavans. In the article, Bernier proposed four races based mostly on geography, color, and physical traits. He identified them as: (1) Europe, South Asia, North Africa, and America; (2) Africa; (3) Asia; and (4) Lapps (Hannaford, 1996, p. 203; Painter, 2010, pp. 43-44). While published in a prestigious academic journal of his day, Bernier's "new division" seemed to have been "idiosyncratic" and not referenced by later writers; however, Pierre Boulle concludes his study of Bernier's influence on racial discourse by saying that Bernier's text was indicative of the "shift in thought that occurred in the second half of the seventeenth century," a shift to racial discourse as we know it today (Boulle, 2003, p. 20). This shift in the use of the term race was one linked closely to geographic places, making places a primary way people are raced, or gain racial qualities and characteristics. This shift in discourse and racial thinking is more clearly seen in the more influential early writers and texts on race that came just decades later, such as Carolus Linnaeus's Systema Naturae (1735), Georges-Louis Leclerc, Comte de Buffon's Histoire Naturelle, Gènèrelle et Particulière (A Natural History, General and Particular) (1749-1788, 36 volumes), and perhaps most notably, Johann Friedrich Blumenbach's De Generis Humani Varietate Nativa (On the Natural Variety of Mankind) (1775). In each case, beginning with Bernier, geographic location, places on the globe, became racialized. Places began to racialize people. Through this most basic associative logic used by all the early writers of race theories, the territories on Earth are raced and have remained so.

The most influential early writer of race was Johann Friedrich Blumenbach (1752-1840). His methods were consciously empirical, considering physical features (including examining fetuses, pictures, and drawings), leaning heavily on craniology (the measuring of skulls), considering geographic location, and inserting his own notions of beauty (Bhopal, 2007, p. 1309). From these methods, Blumenbach induced a degenerate theory of races in which all races are degenerate versions of the Caucasian race (named after a group of people

who lived around the Caucasus Mountains, located between the Black Sea and Caspian Sea). Each of Blumenbach's five races, the Malay, Ethiopian, American, Mongolian, and Caucasian, are distinguished by physical characteristics: cranial size and shape, the color and texture of skin and hair, body proportions, outward demeanor, shape of eyes and nose, etc. But Blumenbach's thinking begins with geographic location, with places in which these bodies dwell.³⁷ As Raj Bhopal explains, the purpose for Blumenbach's research was to figure out if humans comprised a single species (monogeny), which he concluded was the case, or whether the popular view of the time was correct, that there were many species of humans (polygeny) (2007, p. 1308). Thus, for Blumenbach, the varieties of humans he catalogued were degenerations of the perfect one, the Caucasian, which had a geographic origin. And so, places and races are not only associated closely to each other but become hierarchized somatically, geographically, and aesthetically.

From a consideration of Blumenbach's collected treatises, edited by Thomas Bendyshe, published in 1865, Bhopal (2007) argues that Blumenbach has been misunderstood. He was not promoting a racist theory at all. He was promoting "the unity of humanity (monogeny)." In fact, "Blumenbach wrote favourably [sic] about 'negroes,' extolling their beauty, mental abilities, and achievements in literature and other fields. He pointed to variations in opportunity as the cause of differences" (Bhopal, 2007, p. 1309). However, even if we accept this antiracist position on Blumenbach's work (his motivation and perhaps purpose), which I see no reason to doubt, it is clear that the categorizing of bodies from empirical evidence (e.g., cranial size, geography, or physiognomy), in order to justify a theory of monogeny (a worthwhile goal at the time), and linking it to locations on the globe, easily gets deployed for a number of other racial projects at the time and later on, all of which associate race with place. It doesn't matter what Blumenbach's motives were. Even though Blumenbach was not making the argument that any one race is inferior to another (beyond beauty), that was the message that others took.

What makes the deployment of Blumenbach's theory so enticing is how it is a rhetoric with substantial power, the way it uses empiricism and categorization to form a tacit hierarchy. Degeneration is a hierarchical logic, much like the religious hierarchy of the chain of being from God to humanity. This logic is arranged in a calm, reasonable, rational, and seemingly objective voice, a voice that carefully explains the data, which places at the top of the racial hierarchy a white racial category. The use of empirical skull measurements, observations of physical features, and geographic location of groups of people, all of which create the categories, make it hard to argue that Blumenbach is biased, or that what he presents is anything but the truth. He is a scientist who is simply categorizing naturally occurring phenomena in different geographic places (something Aristotle is famous for). In the process, however, he also begins the project of norming and racing places to the white norm, the white *habitus*, which for him was the Caucasian. If all races are degenerated from the Caucasian, then it's not hard to see colonization as a process of norming bodies, ideas, values, languages, and *habitus* to the dominant white ones of the time. In short, the racing of place is, as Mills points out from other sources, simultaneously done by racing people, and through other historical, racial projects, Blumenbach's theory and categories become a way to assert the white, European norm as the spatial and racial ideal.

From this brief history of the concept of race, the questions we might ask our students in antiracist writing assessment ecologies lead to reflections on the function of places in the ecology. What is the function of the our rubric as a place, for example? In what ways does it colonize some through assessment processes that norm everyone to a white racial *habitus*? How might we understand our rubric, as one articulation of the writing expectations of the class, as interconnected to larger histories of racing bodies in classrooms and other societal spaces? What alternative purposes might we employ so that the places we create in the ecology work to critique and change racist outcomes or products, such as the blind norming (colonizing) of people in the ecological places of writing groups, feedback documents, and the like?

Beyond the hierarchy inherent in Blumenbach's degeneration theory, using geographic location suggests a kind of hierarchy connected to colonial conquest that would be familiar to Europeans of the time, one of center and periphery, which brings us back to Pratt's original thinking about contact zones. But there are hierarchies of places and people in Anzaldúa's borderlands that are historical in their making. Lothrop Stoddard's The Rising Tide of Color Against White World-Supremacy (1920) sees the world divided by "inner" and "outer" dikes, regions of white racial control or settlement (p. 226). Regardless of the metaphor, the white European is the center, the norm. In both Stoddard's and Blumenbach's cases, Europe is constructed as the center or origin from which all races degenerate, using geographic location as an empirical logic in concert (in several cases) with appearance.³⁸ The more distant one is located from the European center, the more degenerated, and the less value the race and place have. This primacy of the white racial center as norm is no more obvious than in typical maps of the globe, where Europe sits at the center. These maps could be situated in any number of ways, but they typically are not. So is the assumption of the racing and norming of places. This could be a metaphor for the way conventional writing classroom assessment ecologies situate racialized places of evaluation as well.

The theory that Dobrin cites that accounts for the ways in which bodies

occupy spaces, thus creating places, such as writing assessment ecologies' places, does not account well for actual history and actual places, actual people who inhabit and settle places, and the way place has been raced and race has been placed through historically changing, politically motivated colonizing, which includes the scientific colonizing that race scientists engaged in. As Marxian theory (particularly base and superstructure) teaches us, his notion of place is too abstract. We need historical details to help us think carefully about place. Places have always been sites of conquest and colonization, of hierarchy, and after the seventeenth century a site of racing bodies, languages, customs, etc.

In more specific terms, Dobrin's notion of place does not account for the fact that during the Enlightenment period, groups of non-white or non-European people were associated to geography and places on the globe, many places Europeans had very little knowledge of, and those places and people were racialized and formed into hierarchies of bodies, creating racialized places from racialized spaces and racialized bodies. The spaces were racialized because that is how the science presented it. A particular tautology was born, racialized bodies defined racialized spaces that defined racialized places that defined racialized bodies. Thus today, all places are racialized places by default, and most important, contrary to Dobrin and Lefebvre, there is no such thing as a non-racial space. Every space and place is racialized in practice, even if we might say that in the abstract and theoretical, (racialized) bodies do not define (racialized) spaces. What is a non-racialized space? It is a white racialized space since conceptions of space are defined by white logics, rhetorics, and epistemologies, as my discussion of whiteness has already argued. The writing assessment ecologies we construct thus are always racialized because the spaces we use to cultivate such ecologies and the places we create in those ecologies are not only inhabited by racialized bodies, local diversities, but always already normed and raced by those bodies as well.

Historically then, the logic of spaces and who dwells in each are associated with hierarchies, inherent goodness and beauty, as well as virtue and perfection. The racing of spaces and places also affirms the discussions of remediation as inherently a racial and racist set of projects (e.g., Fox, 1999; Horner & Lu, 1999; Hull & Rose, 1989; Soliday, 2002; Stanley, 2009). But my discussion of place also suggests another reason for why all writing assessment ecologies that construct remedial places are racist, and why it's important to account fully for the places created by any assessment ecology.

Foucault (Foucault & Miskowiec, 1986) identifies two kinds of places in society, utopias and heterotopias. Utopias are unreal places, and it is the heterotopias that Foucault is most interested in because they are places defined by their relation to other sites, and are "outside of all places, even though it may

be possible to indicate their location in reality" (Foucault & Miskowiec, 1986, p. 24). Every culture has these sites, and Foucault explains that earlier in Western culture, they were "crisis heterotopias," "privileged or sacred or forbidden places, reserved for individuals who are, in relation to society and to the human environment in which they live, in a state of crisis: adolescents, menstruating women, pregnant women, the elderly, etc." (1986, p. 24). These were sites of change, but were temporary. They were permeable borderlands, and the expectation was that everyone moved through them at some point in his or her life. Today, however, we are more likely to find "heterotopias of deviation, those in which individuals whose behavior is deviant in relation to the required mean or norm are placed" (Foucault & Miskowiec, 1986, p. 25). Foucault gives the example of rest homes, psychiatric hospitals, and prisons. These are less permeable places, and the typical assumption is that people avoid them. These borderlands are harder to leave or exit. They are on the fringe of society both geographically and figuratively. They are not the center of life or activity. It is not hard to read failure, all subaltern or code-meshed discourses, remediation, remedial classes, and the remedial student, as places of deviation, as heterotopias of deviation that are raced by their natures since all places are raced. Thus, like common notions of race as static (one doesn't change one's race in the middle of one's life) heterotopias of deviation can easily become, by racial association, static and fix in bodies that occupy that place.

In antiracist writing assessment ecologies, crisis heterotopias are promoted, rather than heterotopias of deviation. Our assessments of each other's words and ideas should lead to crises, big and small. This is the nature of problematizing existential writing assessment situations, a revealing of paradoxes in the judgments of writing. The purposes of places in such ecologies should be to move all students through crisis and change, not avoid such dynamism.

Finally, explicit discussions of the historical ways that places in an antiracist assessment ecology are sites of racing and norming is critical to the larger purpose of the ecology. The use of the concept of place has both an intellectual history involving conflict among locally diverse social formations, material histories of colonialism (as in the Orientalism and the global imaginary), and racialized histories that set value to geographic locations and have normed people to a white racial *habitus*. Places are raced, classed, and gendered, as much as they are hierarchized and defined by borderlands. I realize it is very difficult to know exactly how the creation of particular places in our writing assessment ecologies will play out in the short or long term, but one thing is certain. We can look to the way Western society and the academy have typically constructed places as centers of norming and racing, usually through assessment ecologies, and attempt to self-consciously create places that work as critical sites of problematizing the judgments made about our students' writing, and not simply as sites of colonizing.

CONCLUSION

The ecological power, parts, purposes, people, processes, products, and places that dialectically make up and are created in antiracist classroom writing assessment ecologies reveal the complexities of simply judging writing in a class without doing more harm to students who do not already come to the class demonstrating a white racial *habitus*. These elements offer ways to explicitly reflect upon a number of questions that help students understand the fuller conditions under which their writing is judged and produces other products (learning), which then provides them power to change those conditions and products. While not all of these ecological elements can be interrogated in any given class. My hope is that teachers and students figure out which elements offer them the most productive investigations into antiracist writing assessment practices. Since all elements inter-are with the others in the ecology, focusing on one or two can often lead to discussions of other elements.

Power is the overarching element within ecologies that is constructed by techniques, spaces, processes, and other disciplining tactics. Reflecting upon it and negotiating its terms, such as negotiating what control students have to design assignments, assessment processes, and expectations, students can determine better their own relations in the ecology. This provides agency and better chances to problematize their writing assessment situations, which will mean critiquing the dominant discourse and the white racial *habitus* that informs it.

Parts are the codes and artifacts, with their own internal biases, that are used to discipline bodies and writing, and to identify and judge. Parts, such as evaluation rubrics and dominant discourses valued in ideal texts, have historical associations with a white racial *habitus*, which usually end up privileging students who come to the classroom performing those dispositions already and disenfranchising local diversities. Parts are often the most immediate and easiest element to reflect upon and negotiate in an assessment ecology with students.

Purposes for any antiracist writing assessment ecology is vital to its functioning and should be discussed and negotiated carefully with students. A clear antiracist dominant purpose provides ways for students to understand and act in the ecology, to understand the fuller implications of their labor as an antiracist project. The dominant purpose I've offered for antiracist assessment ecologies is one that interrogates racism in writing assessment and judgment practices. It asks students to problematize their existential writing assessment situations over and over, posing problems about the way they and their colleagues judge their language, considering as part of the problems a comparison to their understandings of a white racial *habitus* that informs the dominant discourse promoted in the classroom.

People in antiracist writing assessment ecologies are not considered homogenous, nor are they simply stakeholder groups with uniform needs and wants. Like any geographic or urban environment, people in antiracist writing assessment ecologies who move about on the landscape are diverse in many ways, which affect their ways of reading and judging, and the entire system. Students can reflect upon their own subject positions as informed by historically shifting racial, cultural, and social formations that compel particular *habitus*, which they may be using to assess texts. Paying attention to who they are, without falling into the trap of *a priori* and essentializing assumptions about people, can help students problematize.

The processes that make up an antiracist assessment ecology are the actions and drama that occur, and are the means by which products come about. Like power, purposes, and parts, processes should be negotiated with students so that they have stake in them, understand them, and find them fair. Processes are the articulations and expectations of labor in the ecology, and can be focused on as the primary element of the ecology for any given assignment or task. Focusing on labor and processes can be criteria for success, grades, development, and work completed, which is often a good beginning for cultivating an antiracist writing assessment ecology.

Products are the decisions and consequences of the ecology, which may be direct or indirect, and may be different for each student. Products explain the learning that has or is occurring in the ecology, and can be a way to focus later reflections in the course. Products may also be turned back into the ecology as parts in order to change or improve the ecology.

Finally, the material and figurative places that make up antiracist writing assessment ecologies characterize and determine interactions, power relations, and the people who get to be there or not. Places also are the occasion and context for processes. Mostly, however, places are by their historical natures locations of norming to a white racial *habitus* and of racing people into hierarchies. Places, therefore, are themselves always informed by the historical racial projects that raced all places, which means that teachers and students must be aware of this fact and make decisions about it together so that their classroom ecology is not simply a place of colonizing, coercion, or uncritical, hegemonic control. Paying explicit attention—calling attention to—the places that the ecology creates, how it creates them, who seems to reside in those places, and why they do, can help antiracist writing assessment ecologies become more critical of their effects on students, and perhaps find alternative locations that are defined in alternative ways that are more responsive to students and their needs.

I offer Figure 1 as an initial way to visualize the interconnection of all seven elements. Place is primary with people situated firmly in place, and place constituted by people. Their most distinguishing feature is their consubstantiality. Processes, parts, and products are most connected to people, since they enact, create, and manipulate them, yet this means that they have a clear relationship with places of writing assessment. Finally power and purposes are connected to places and people of writing assessment ecologies, which produce processes, parts, and products. While this diagram is incomplete and does not show all of the relationships, no diagram can. Writing assessment ecologies are complex systems, resisting simple explanations and visual representations. Ecologies are more than visual. More than textual. They are more than this figure. The figure represents a small portion of the relationships of the seven interconnected elements of a writing assessment ecology.

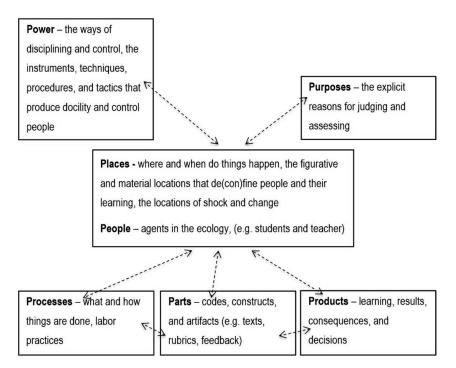


Figure 1. Seven interrelated elements constitute a writing assessment ecology.