Social Analytic Artifacts Made Concrete: A Study of Learning and Political Education

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In an educational setting designed for high-school-aged migrant students, social analytic artifacts—tools that deepen the collective analysis of social problems—were examined in relation to two questions: What kinds of artifacts were developed and emphasized in this setting? How and toward what ends did students use these artifacts? This article describes how students appropriated two artifacts—heteroglossic attunement and semantic sharpening—to engage in consequential forms of intellectual, social, and political work. Findings highlight (a) the pedagogical role of epistemic openness, (b) students’ perceptions of new problems and decisions to intervene, and (c) the development of solidarity across difference.

This piece examines the dynamics of learning in the context of social analysis. Drawing on ethnographic analysis of the Migrant Student Leadership Institute (MSLI), an educational setting designed for high-school-aged migrant students, I consider how classroom discourse, printed texts, and social relations created an environment where social analytic artifacts were codeveloped and appropriated over time. Social analytic artifacts are tools or habits of mind that deepen and propel the collective analysis of social problems.

MSLI was a summer academic outreach program that sought to blend university-level reading and writing with political education and artistic activity. Focusing on social problems relevant to the migrant community, such as economic exploitation, displacement, racism, and patriarchy, students and teachers worked together to interpret, reimagine, and re-create the social world (Freire, 1970). As a teacher and researcher in this setting, I asked: What kinds of social analytic artifacts were developed and emphasized? How and toward what ends did students use these artifacts? These questions reflect my efforts to understand how particular tools became meaningful or consequential to students. For the purpose of this study, consequential means that students used social analytic artifacts to engage in intellectual, social, and political work, and did so in

1 According to the California Department of Education, a student is considered migrant if the parent, guardian, or the student himself or herself is a migratory worker in the agricultural, dairy, lumber, or fishing industries and whose family has moved in the past 3 years (http://www.cde.ca.gov/sp/me/mt/overview.asp).

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ways that seemed to matter to them. My goal was not only to identify the tools in use, but also to understand what students used these tools to do.

The subsequent section offers a theoretically informed discussion of social analytic artifacts and a more detailed description of the context and methodology. The analysis follows, tracing the development of two artifacts that were emphasized in one MSLI classroom in the summer of 2006. The conclusion includes implications for pedagogy and research. Throughout, I emphasize how the concept of social analytic artifacts can help expand the ways we see, organize, and study young people’s development as social thinkers and actors.

SOCIAL ANALYTIC ARTIFACTS AND POLITICAL EDUCATION

Wartofsky (1973) defined artifacts as “objectifications of human needs and intentions already invested with cognitive and affective content” (p. 204). Similarly, Cole (1996) wrote,

By virtue of the changes wrought in the process of their creation and use, artifacts are simultaneously ideal (conceptual) and material. They are ideal in that their material form has been shaped by their participation in the interactions of which they were previously a part and which they mediated in the present. (p. 117)

This focus on artifacts underscores the historical, human-made quality of tool design and use. Tools carry the residue of prior needs, questions, problems, and solutions, offering both resources and constraints for current activity. As Pea (1993) stated, “The design of artifacts, both historically by others and opportunistically in the midst of one’s activity, can advance that activity by shaping what are possible and what are necessary elements of that activity” (p. 50). The introduction of new tools also provokes changes in the (artifact-using) person/s (Wertsch, 1998).

The concept of artifacts enhances the study of learning and social analysis in a number of ways. First, naming the tools or habits of mind emphasized in MSLI as social analytic artifacts draws attention to their making and appropriation in real-time talk and interaction and to the ways these artifacts served to deepen our collective thinking. Indeed, it was as a novice participant in MSLI that I first heard mentor teachers use the word artifacts to describe classroom discourse. Key moments of teacher or student talk were characterized as the live (and often artistic) crafting of tools for thinking (C. Tejeda, personal communication, 2003). Over time, the history of talk and interaction within a setting creates an “affordance laden environment” (Tálero, 2008, p. 453), increasingly replete with resources for thinking and addressing new problems. This study examines how this “small-scale history” (Esmone, Takeuchi, & Radakovic, 2011, p. 239) makes a difference for students’ shifting participation in collective social analysis over time.

Second, the concept of social analytic artifacts can help expand the ways we organize and study learning in the context of political education. Recognizing the inherently political nature of educational practice, the term political education refers to educational settings that understand themselves to be political and that consciously organize opportunities for students to analyze and work to transform the social problems that directly affect their everyday lives. This includes wrestling with questions of power, history, and ideology. Drawing from Matusov’s (1998) work, studying learning in the context of political education requires that we identify the forms of development valued within a particular setting. Beginning with the question “Did development happen?” often assumes generic interpretations of what constitutes development. This approach may lead us to overlook the subtle, but routine ways teachers emphasize certain
forms of engagement and related shifts in the ways students participate and relate to one another. Instead, if we begin with the question “What are the valued forms of development in this setting?” (in this case: what kinds of social analytic artifacts were emphasized?) we may gain a more situated, emic understanding of learning and be in a better position to critique narrow measures and argue for educational self-determination. This approach is particularly essential for studying learning in environments where the social and political dimensions of intellectual activity may be undervalued by dominant measures.  

Thus, an emphasis on artifacts offers a window into the intellectual work students were engaged in within the context of political discussions. This view can be used to assert the value of political education as a potentially rich context for academic development. At the same time, focusing on what students used these tools to do makes visible the social and political work they were engaged in when drawing on new academic artifacts. Resisting common dichotomies—such as theory/practice and intellectual/political activity—this perspective can help us recognize and study classroom discourse as a site of struggle and change. To elaborate this point, Erickson’s (2004b) description of the practical and potentially subversive use of discourse is instructive:

The agency manifested by local social actors in bricolage and improvisation can be employed either counter-hegemonically or hegemonically, regressively or progressively, despicably or admirably. One can swim downstream with the prevailing currents of social structuration and history, treating as limits the constraints one encounters, or one can swim upstream, treating the prestructured constraints as affordances for maneuvering toward ends other than those that are societally approved or expected. The latter course costs more in terms of effort and it risks punishment. But it is possible. (p. 174)

Without shared contexts within which to analyze hegemonic narratives, we not only swim downstream, we may have a hard time seeing that we are swimming at all. Hegemony functions as common sense, a prevailing, but implicit system of beliefs (Gramsci, 1971). Drawing on Erickson’s metaphor, we worked with students to see the stream, learning to perceive inherited meanings and ways of thinking as one way of interpreting the world.

Finally, the concept of social analytic artifacts may help elucidate the historical tensions of political education, a practice always vulnerable to pedagogical heavy-handedness and the imposition of narrow ideologies, however “critical” they may be. This dimension of practice reflects broader debates regarding democratic humanism and the exigencies of revolutionary change. As the following examples illustrate, analyzing the ways teachers and students navigated moments of ideological tension offers one lens on the challenges of political education, the empirical distinctions between authoritarian and democratically inclined forms of collectivity, and the work involved in co-creating epistemic openness. In this study, epistemic openness refers to the practice of an intellectual generosity that is developmentally generative, privileging multiple sources of authority and meaning, and treating students’ sense-making as valid and full of potential (Espinoza, 2011; Talero, 2008). The concept of artifacts plays an important role here: working with students to develop tools for thinking is qualitatively distinct from working with students to take on particular ideas or stances. Both the focus on tool-use and attention to epistemic openness reflect an interest in supporting students to recognize dominant ideologies, experience a range of alternatives, and develop their own analyses. Looking closely at moments

These lines of inquiry also require that we intentionally look for forms of learning that are unanticipated, supersede, or fall outside the scope of stated pedagogical objectives.
when students utilized artifacts in unanticipated ways, and at how teachers responded, is therefore an important focus of the research. In this light, social analytic artifacts offer a useful lens for exploring the possibilities of a political education arched toward the development of agentive and heteroglossic selves (Bakhtin, 1981).

**CONTEXT**

From 2003 to 2006, I served as a teacher and researcher in MSLI, a summer academic program serving 100 high-school-age migrant students. Among the groups with the most restricted access to education, migrant students are the least likely to access college preparatory coursework and enroll in college (Jaramillo & Nuñez, 2009; Velázquez, 1996). The national high school drop out (push out) rate for migrant students is almost twice that of students from non-migrant families (Martinez & Cranston-Gingras, 1996). MSLI, and the research that grew out of it, constitute a pedagogical experiment that sought to challenge this reality. Grounded in Vygotskian, Freirean, and de-colonial traditions, MSLI was designed to equip young people with the academic and political tools necessary to enter the university and sustain their participation as students and historical actors (Freire, 1985; Tejeda, Espinoza, & Gutiérrez, 2003; Vygotsky, 1978). Challenging the assumption that underprepared students should be given a more basic curriculum, MSLI instructors worked to deepen intellectual engagement and involve students in the real work or “whole activity” of social analysis (Cole & Griffin, 1983). MSLI’s approach to re-mediation reflects a belief in the pedagogical power of heavily mediated learning environments (the coupling of complex literacy tasks with ample and deliberate assistance; Gutiérrez, 2008). The student–teacher ratio (including instructors and teaching assistants) was roughly 7:1, allowing for guided, small-group discussions and extensive written and verbal feedback. Participants included sophomores, juniors, and seniors with a range of academic experiences, including those labeled as “honors” and “remedial” by their high schools. We took advantage of this range to foster a community of learners where expert and novice roles were treated as fluid categories (Rogoff, 1994). As a learning environment, MSLI was also hybrid: aspects of formal schooling intermingled with an ethos of apprenticeship, the creation of a familial context, and the use of dramatic play. Bilingual and hybrid language practices were framed as valued forms of interaction, grounded in an understanding of difference as a profound resource for learning (Gutiérrez, Baquedano-Lopez, & Tejeda, 1999).

Together, MSLI teachers and students participated in an interdisciplinary curriculum that blended university-level reading, writing, and theatre. Participants worked with a set of social theoretical texts that included Paulo Freire’s *Pedagogy of the Oppressed*, C. Wright Mills’s *Sociological Imagination*, Ana Castillo’s “A Countryless Woman: The Early Feminista,” Eduardo Galeano’s *Open Veins of Latin America*, and Jonathon Xavier Inda’s “Biopower, Reproduction and the Migrant Woman’s Body,” among others. Students also wrote extended definitions, critical summaries, argumentative essays, and a culminating autobiography. As Manuel Espinoza (2009) wrote, the political, social, and developmental context of MSLI was an attempt to create “educational sanctuary”: 
The production of social space in which historically marginalized and demonized social groups may experience—in and through social practice, either inside or outside of the home school—the intellectual and artistic freedom, social equity, and access to educational resources (e.g., vigorous social scientific and philosophic discourse communities) typically not enjoyed in everyday institutional settings. (pp. 44–45)

Looking closely at the development of social analytic artifacts in this setting may help sensitize our perceptive capacities to what “vigorous social scientific and philosophic discourse communities” look and sound like as they come into being.

METHODOLOGY

The ethnographic analysis presented below is drawn from a larger case study of literacy and learning in one MSLI classroom (Vossoughi, 2011). Participants included 20 high school students and a three-person instructional team (Octavio Estrella, Zitlali Morales, and myself) for which I was the lead instructor. This section includes an outline of the approach that informed the case study, a description of data collection and methods used for the analysis, and a discussion of my role as the researcher.

Interpretive Ethnography and Classroom Discourse

Erickson (1986, 2010) described interpretive research as privileging the immediate and local meanings of actions as defined from the actors’ points of view, themselves always shifting and poly-vocal. In education, interpretive ethnography is centrally concerned with the socially organized nature of learning and the improvement of educational practice. Drawing on this methodology, researching MSLI was approached as a “case study” (Bogdan & Biklen, 2003). In the tradition of laboratory schools (Dewey, 1916) and design experiments (Brown, 1992; Gutiérrez & Vossoughi, 2010; Nicolopoulou & Cole, 2010) this setting provided a context for experimenting with the possible in order to stretch the ways we imagine, organize, and study learning.

Microethnographic methods were also used to study classroom discourse as a window into the quality and functions of mediational tools (Cazden, 1986; Gutiérrez & Stone, 2002) and the dynamics of shifting participation in intellectual activity (Rogoff, 2003). Studying classroom discourse involves looking closely at salient events, participation structures, and interactions among peers (Bremme & Erickson, 1977; Cazden, 2001). Relevant here were the ways students took on the roles and discourse forms that were valued in problem posing and problem solving (O’Connor & Michaels, 1996). These lenses helped me to ascertain meanings that were not readily visible and brought microethnographic texture to the study of social analytic artifacts.

Data Collection and Analysis

The primary method of data collection for the case study was participant observation. My coinstructors and I gathered a range of ethnographic information, with an eye toward the interactions,
meanings, and tools that characterized the shared accomplishment of tasks. The analysis presented here is predominantly drawn from audio-video recordings of classroom activity. The first phase of analysis included drawing on video recordings to reconstruct a sketch of the whole, tracing the pedagogical arc across the month of the program. I watched the tapes in chronological order, took notes for each recording, and produced detailed tape logs, including relevant transcriptions and interpretive commentary. I worked to identify where we began as a class, where we ended up, and how we got there.

Utilizing top-down and bottom-up approaches to data construction (Erickson, 2004a; Sipe & Ghiso, 2004) led to two broad categories of codes. These were color coded, making visible new patterns. The first pertained to the distinctly collective organization of learning in our classroom. For example, changes in the direction of student questions—from student–teacher to student–student—helped illustrate the ways participants increasingly oriented toward one another as cothinkers. The second category of codes focused on modes of inquiry. I identified the analytic moves emphasized by teachers and began recognizing the ways students’ talk reflected and contributed to the history of language use in our classroom. These insights led me to focus on the ways students utilized particular social analytic artifacts over time. I experimented with various ways of naming the artifacts I was noticing, such as analytic distance, specificity, or rhetorical precision, and settled on heteroglossic attunement and semantic sharpening because I felt they came closest to capturing the intellectual and political work students were using these tools to do.

Here, it is important to recognize that these were not the ways we were talking about these artifacts with students in the program. Though I had a strong sense of the ways we were supporting students to become more precise and agentive in their use of language, it was not until I engaged in a more systematic analysis that I became aware of the routine tools teachers were emphasizing. Surfacing the forms of development valued in this setting allowed me, as a researcher, to more effectively notice and study the ways students were picking up these artifacts (Matusov, 1998).

As an educator, this process of naming has allowed me to become more intentional and explicit in the ways I emphasize these artifacts with students. My analysis is aimed at offering the reader the interpretive and pedagogical lenses gained throughout this process.

Locating the Researcher

My role as lead instructor made me an “unusually observant participant” in this setting (Erickson, 2006). Building on a long tradition of teacher research (Cochran-Smith & Lytle, 1993), my pedagogical involvement in MSLI offers a distinct (though never complete) sensitivity to the dynamics involved in our collective efforts to analyze social problems and establish epistemic openness. Although there are limitations to participating as both teacher and researcher—namely, the lack of time to observe, reflect, and record—attending to more challenging pedagogical moments may also be easier when researchers study their own practice.

Though I was a full participant in this setting, it is also important to acknowledge my position as both insider and outsider. As a second-generation Iranian immigrant, I share a comparative and relational history of colonization with our students. This includes U.S./European efforts to control the economic resources and political destinies of our homelands, the struggles of migration, and the racialized demonization many of us encountered in school. However, my family’s experience of migration was one of political, rather than economic exile. I have not personally
faced the kinds of economic hardship experienced by many of our students, and by my own parents. My Iranian background also made me an outsider with regards to ethnicity and national origin. The majority of participants in MSLI were Mexican or Central American. Over the years, we also worked with a smaller number of Hmong, South Asian, and South American students. At the same time, the value MSLI placed on hybridity as a resource created a unique context for solidarity across difference and a mutual respect based on service to the migrant community. In this spirit, my concerns with the tensions and possibilities of political education are rooted in my personal history as a child and student of the Iranian Revolution and of third-world revolutionary movements more broadly. As reflected in the examples, my routine use of Spanish may have also contributed to establishing trust and solidarity. I entered this research mindful of the strengths and limits of my subjective experience.

ANALYSIS

In what follows, I present moments of collective social analysis in MSLI and describe the evolution and appropriation of two artifacts: heteroglossic attunement and semantic sharpening. I illustrate how students used these tools to engage in intellectual, social, and political work, and did so in ways that seemed to matter to them. These four examples highlight (a) the pedagogical role of epistemic openness, (b) students’ perceptions of new problems and decisions to intervene, and (c) the development of solidarity across difference.

A key trend that emerged in my analysis was the relationship between learning to identify and analyze dominant narratives and learning to recognize the need for semantic sharpening in our own discourse. As Bakhtin (1981) argued, every utterance is dialogic in that it involves the intermingling of several voices. Like Erickson, Bakhtin was interested in the possibilities of a discursive countercurrent. He therefore understood the novel as a reflection of “both the loud, recognized, reigning voices of his epoch . . . as well as voices still weak . . . ideas which were just beginning to ripen, embryos of future world views” (p. 100). For Bakhtin, this heteroglossic quality of language makes it alive, creative, and always potentially subversive.

Just as the novel invites us into an intellectually and aesthetically layered world, so might a classroom. The opportunity to experiment with meaning and perspective, to variegate one’s voice in developmentally generative ways, is (or ought to be) a distinguishing characteristic of the school-like setting. Thus, part of our task as teachers was to help students recognize the various shades of meaning populating a single utterance and become attuned to their ideological echoes. In this study, heteroglossic attunement involves discerning the multiple voices at work in spoken or written texts (with special attention to historical and ideological echoes), attending to the ways pitch, tone, word choice, and gesture index particular meanings, and recognizing dominant discourses in order to analyze, play with, or subvert them. Semantic sharpening refers to revising and adjusting one’s discourse (word choice, tone, and gesture) to gain analytic and political clarity. Semantic sharpening often accompanies heteroglossic attunement, recognizing the voices that can seep into our talk creates the need to take greater command of the meanings we are producing or conveying.

I consider how these artifacts “augmented and extended the possibilities of thought” (Lee, 2001, p. 124; Vygotsky, 1987), as well as the risks and sensitivities inherent in students’ contributions. As the following examples illustrate, students stuck their necks out to make meaning
in ways that were both unanticipated and, it appears, essential enough to prompt intervention and refinement. This is one way to study how social analytic artifacts became consequential to students: the necessity and utility of particular tools from the perspective of the learner as tied to their emergent perception of the problem at hand (Engeström, 1990).

Excerpt 1: "In the people’s eyes, it is"

The following exchange took place in the second week of the program during a discussion of migration and labor. In the context of a whole group lesson on the North American Free Trade Agreement, I was working with students to analyze the emergence of maquilas in newly sanctioned free trade zones on the Mexican side of the Mexico–U.S. border. This discussion included considering the ways free trade benefitted Mexican elites while intensifying the exploitation of Mexican workers. I then pointed to an image of women working in a factory in Mexico on a PowerPoint slide and asked students what they thought about why the majority of workers in the maquilas are women: “¿Por qué creen que la mayoría son mujeres?” [Tape 21, 02:00:50, 07/05/06]. Tania, Brenda, and Lena—three young women—were the first to respond, speculating that “women need jobs to support their families” and that women are often “paid less than men.” I repeated and affirmed their contributions, which conveyed a sense of solidarity with the women in the picture. At this point, Ronald interjected with a different interpretation and suggested that women are “easier to control.” His comment initiated a public conversation with Brenda and me that illustrates the substantive functions of heteroglossic attunement and semantic sharpening, and the pedagogical role of epistemic openness. Notice, in particular, our shifting relationships to the idea that women are “easier to control”:

Excerpt 1 [Tape 21, 02:01:26, 07/05/06]

Ronald 1 They’re easier to control
Shirin 2 They’re easier to control?
Brenda 3 Yeah, they have this rate that’s more for men,
4 and then women and then children
5 because children work too
Shirin 6 Ok so one of the ideas is that
7 they pay them less
8 [Ronald]
9 Can you talk a little bit more about that
10 They’re easier to control?
Ronald 11 [laughs]
Brenda 12 [laughs] Nevermiind.

3Words or syllables are in bold as a way of capturing what the speaker her- or himself emphasized, working to provide the reader the experience of participants’ talk. Brackets mark nonverbal activity, and italics are used to translate from Spanish to English. Where the English translation is evident from within the excerpt itself, the use of Spanish is not explicitly translated. Although teachers’ real names are used, all student names are pseudonyms.
Shirin 13  It’s **important**
14  Because really
15  Ellos estan pensando en esto
16  They’re **thinking** about that
17  So I just want you to explain a little bit more like what you meant

Ronald 18  Well
19  I mean, they’re women
20  They’re weaker, I guess, than guys
21  The men
22  they’ll stand up **for**
23  they’ll fight against that
24  and the women won’t

Shirin 25  What’s there to
26  What might people be **fighting** about?

Ronald 27  **Wages**

Shirin 28  Ok
29  ¿Uds. creen que las mujeres son mas débiles?
30  Do you think women are weaker?

Brenda 31  At some points

Ronald 32  In the **people’s** eyes, it is

Shirin 33  In the **people’s** eyes it is, right?
34  That’s a **really** important distinction
35  Ok
36  Es muy importante **distinguir**:
37  Qué piensan los **dueños** sobre las mujeres
38  Y qué pensamos **nosotros**
39  What do **we** think about women
40  in terms of being **strong** or **weak**
41  and what do the **owners** think

There was little conflict or tension in Ronald’s initial claim that women are “easier to control”; he appeared to be speaking with the dominant voice, suggesting that women are weaker and therefore easily controllable as workers. When I asked Ronald to explain his comment, however, he did not respond right away. He laughed (line 11), which Brenda seemed to interpret as his reluctance to back up his claim (line 12). I read this hesitation as Ronald’s concern that he might be stepping into dangerous territory, particularly as a male student interacting with a self-identified feminist teacher. Indeed, Brenda’s joking “Nevermind” (line 12) suggests that she anticipated a prompt ending to this discussion, assuming that Ronald would save himself by reneging on his original comment, and perhaps assuming that there would be little room for examining this comment (as anything other than Ronald’s problematic stance) in our classroom.

Instead, I tried to open up the discussion by positioning Ronald’s comment as an accurate representation of the ways factory owners think about female workers: “It’s **important**, because really, ellos estan pensando en esto, they’re **thinking** about that” (lines 13–17). This was my attempt to **examine** the idea that women are “easier to control” and to create some room between students’ emergent opinions and the dominant narrative. It was also part of our larger
effort to build an epistemically open environment where students could think through such ideas publically, without fear of punishment or ridicule.

Ronald then elaborated on the idea that women are weaker than men, but with some newfound caution: “They’re weaker, I guess, than guys” (line 20). This more tentative tone may reflect Ronald’s concerns about my reaction. But it may also index his own efforts to attune to the meanings at work in his talk. I then asked Ronald to be more specific about what workers might be fighting for. This request is characteristic of the ways teachers in this classroom responded to comments that could be seen as general or broad. In total, I noticed 35 examples of teachers working with students to sharpen their language. Considering that we had about 20 days of instruction, this meant that almost twice a day, someone in our classroom was asked to specify or further elaborate on a comment. Rarely (seven examples) would students use a general pronoun (“they,” “society”) without being asked (and often assisted) to generate a more precise term. Ronald’s response (“wages”) helped to substantiate his suggestion that factory owners would want to “control” their workers, painting a clearer picture of the political-economic dynamic we were working to understand. This is likely what Brenda was referring to in her comments (lines 3–5) regarding the lower rates paid to women and children. In hindsight, I could have explicitly connected Ronald’s response (“wages”) to the interpretation she was working to build. This is one example of the opportunities for mediation that become visible through the process of transcription and analysis.

My subsequent question “¿Uds. creen que las mujeres son mas debiles? Do you think women are weaker?” (lines 29–30) was an additional attempt to distinguish between analyzing and espousing patriarchal ideologies. This question was posed to the entire class, rather than to Ronald alone. At this point, Brenda considered the ways women may, at times, be “weaker” than men while Ronald made an important shift. His comment, “In the people’s eyes, it is” (line 32), provided a way for him to contribute the idea that women are considered “easier to control” without fully taking on the dominant standpoint, to variegate his voice and take greater command of the social meanings this distinct use of language conveys. Ronald also made the decision to revise his statement and publically create some distance between his own beliefs and the dominant narrative. This suggests that such clarification mattered to him, and can be seen as an emergent questioning on his part of the idea that women are simply “easier to control.” My response (lines 33–41) was an attempt to name the analytic tool we had just utilized and experienced: when we engage in social analysis, it is important to distinguish between what the factory owners think and what we might think.

This does not mean “we” automatically occupy a predetermined counterhegemonic position. Indeed, Brenda’s final response—that women are weaker “at some points” (line 31)—suggests a relationship between allowing the space for ambiguity and honesty and working together to grow more complex understandings. Supporting students to hear the voices at work in a given comment (“they’re easier to control”) and sharpen their language (“In the people’s eyes, it is”) can allow us to recognize dominant narratives as one story, rather than the story. It can also help us perceive the meanings associated with subtle differences in language, the ways gesture, tone, word choice, and inflection allow distinct voices to populate our talk. Indeed, the moves teachers make to name such interventions (lines 34–41) may go far in identifying the tools available for future use. This is one example of designing artifacts “opportunistically in the midst of activity” (Pea, 1993, p. 50) in ways that enrich the environment with new intellectual affordances (Talero, 2008).
If and how did students use these artifacts beyond this moment? Methodologically, we may not be able to see the ways students reach back in time and draw on a previous interaction to engage in new ways. The use of borrowed artifacts is not readily visible. But it may also not be entirely invisible. We can, retrospectively, identify opportunities for the potential use of new tools and notice how students intervene (or not) in these moments. We can become historians of learning, attending to the ways students handle subsequent events based on their involvement in previous events (Rogoff, 1995).

Excerpt 2: “They are to people that don’t know them”

On this same day, we extended our analysis of the North American Free Trade Agreement into a small-group reading session, working with students to analyze George Lakoff and Sam Ferguson’s (2006) “The Framing of Immigration.” This article critically examines the various frames used to categorize immigrants (“illegal,” “undocumented,” “economic refugee”). In the following excerpt, I was sitting at a table with Jesús, Tania, Miguel, Jackie, Leticia, and Lena (all of whom were present for the earlier discussion), introducing the group to the concept of “framing” and working to analyze the first frame (“illegal immigrants”) Lakoff and Ferguson present. At this moment, Jesús participated in a way that directly reflects Ronald’s previous comment (“In the people’s eyes it is”) illustrating his attunement to the dominant narrative and related effort to sharpen his own language.

Excerpt 2 [Tape 24, 00:01:12, 07/05/06]

Shirin 1 The framing of immigration
2 is talking about the way this problem is represented
3 la manera en que representan este problema
4 por ejemplo (for example)
5 cuando dicen ilegal (when they say illegal)
6 I want you to imagine a frame that says
7 Illegal on both sides
8 [Shirin draws a frame, a number of students lean in]
9 ¿Qué pasa a este problema si la encuadra . . .
10 ¿Cómo se dice frame?
11 (What happens to this problem if the frame . . .
12 How do you say frame?)

Tania 13 Cuadro

Shirin 14 Cuadro?
15 Cuando el cuadro dice ilegal (When the frame says illegal)
16 What happens to these people?

Jesús 17 They become dangerous people?

Shirin 18 Beautiful, ok
19 They become dangerous people [writing this down]
20 What else? [Looking around to other students]
Here, an opportunity arose for engaging in the kind of attunement and sharpening Ronald, Brenda, and I had jointly practiced earlier that day. What did Jesús use these tools to do? At first, he answered my question by naming the dominant view of undocumented immigrants: they are considered dangerous people, a designation promoted by the “illegal frame.” The form his comment took, “They become dangerous people,” specifically the word “become,” also exhibited Jesús’s understanding of the ways dominant frames actively construct particular groups. Nevertheless, he felt the need to further refine his contribution: “They are to people that don’t know them” (line 21). This statement indicates a growing understanding and command of rhetoric, including the various meanings that can seep into our talk. Without such elaboration, Jesús may have appeared to occupy the very position he was working to name and problematize.

Jesús’s use of the artifacts just named can also be seen in the ways he recognized the moment as one where such sharpening was necessary, and felt comfortable intervening despite the fact that the teacher was ready to move on. Indeed, when the opportunity arose to distinguish between the voice that is analyzing and the voice that is occupying a given position, I did not stop to point out this distinction as I had with Ronald. Rather, as evidenced in line 20 (“What else?” [Looking around to other students]) I was ready to keep moving. It was Jesús who heard the moment as an opportunity for more nuanced analysis, pausing to push all of our thinking, including my own. Rather than treating this shift as a property of the individual, I believe it is better understood as an opening that emerged through the coupling of the learner and the evolving artifacts afforded by the environment.

The similarities between these two interactions help support the claim that Jesús may have drawn on the conversation he witnessed earlier that day to participate in new ways:

Ronald: “They’re easier to control” → “In the people’s eyes, it is”
Jesús: “They become dangerous people” → “They are to people that don’t know them”

Like Ronald, Jesús worked to disentangle his comment from the pejorative view represented by the “illegal frame.” Recognizing that his first statement could be heard as, “They are dangerous people” (much like Ronald’s “They’re easier to control”), Jesús intervened to sharpen and clarify his view. Moving from the passive to the active voice, both students also began identifying particular actors as responsible for the dominant perspective. These moves involve intellectual, social, and political work. Whereas Jesús’s first statement, “they become dangerous people,” stuck close to an analysis of the text, his second statement, “they are to people that don’t know them,” allowed him to express solidarity and empathy. Jesús—a second-generation, English-dominant migrant student—can be seen as taking a political stance and positioning himself as an ally.

Excerpt 2 also illustrates how our collective thinking can grow when tools are made public and students choose to take them up in unanticipated ways. In the moments that followed, other students took up Jesús’s approach. When we moved to analyze the “undocumented” frame and I asked students about the difference between “illegal” and “undocumented,” Tania said, “They’re good people, but they’re considered bad” [Tape 24, 00:04:30, 07/05/10]. These moves evidence
an increasing tendency to recognize the meanings at work in our talk, to gain distance from dom-
inant narratives, and to generate alternative frames. As Tania’s comment reflects, once students
had a handle on these tools they were able to improvise and contribute new discursive forms.

Excerpt 3: “Según es más débil/Supposedly she is weaker”

This growing improvisation is further illustrated in a third example, which took place about a
week later. Here, students had been working in small groups to analyze Ana Castillo’s (1994)
“A Countryless Woman” and Patricia Zavella’s (1987) Women’s Work and Chicano Families:
Cannery Workers of the Santa Clara Valley. Each group then presented their reading in front of
the class.

As one of the groups moved to the front of the room to present, three of the group’s members
engaged in an interaction that illustrates students’ expanding perception of the kinds of prob-
lems that require social analysis. At first, Brenda—a female, English dominant student—took
on the role of sharing her group’s ideas with the class. Jackie (another group member) then
approached Brenda and whispered “let [Miguel] explain it and then you explain it” [Tape 33,
01:11:46, 07/10/06]. Without hesitation (and as if it had been the plan all along), Brenda intro-
duced Miguel—a male, Spanish-dominant student—as their group’s representative. It became
evident through this interaction that Miguel had played a lead role in developing the analysis
shared below during the group’s earlier discussion. It is unclear how Brenda ended up as the
group’s first representative. One interpretation could be that she felt it would be more appropriate
to speak in English within the public space of the classroom. As reflected in Excerpt 1, Brenda
often spoke up in the whole group setting, whereas Miguel did so less often. This context provides
caution against interpreting this interaction as the simple privileging of a male student’s voice.
Instead, the fact that Jackie intervened and reconfigured the situation so that Miguel could share
his own words may suggest a growing understanding on the part of students that all languages
were to be treated as equal within our classroom, a point often emphasized by the teaching team.

It also suggests a nuanced understanding of power. Despite the fact that the topic was gender,
or perhaps because this was the topic, Jackie seemed to believe it was important for Miguel to
share his own analysis. As I return to below, Jackie’s intervention was markedly pedagogical—
both in her assessment that Miguel ought to share his own ideas and in the careful way she
asked Brenda to make this shift (“let [Miguel] explain it and then you explain it”), suggest-
ing that Brenda’s explanation could follow, rather than replace Miguel’s. These moves further
illustrate how students used particular artifacts—attuning to the social hierarchies that might
be reinforced had Brenda shared Miguel’s words, and had Miguel replaced, rather than pre-
ceded Brenda—to engage in consequential forms of intellectual, social, and political work. They
also provide caution against reducing learning to new forms of talk within the public classroom
space. By expanding the use of social analytic artifacts to include subtle expressions of solidarity,
such interventions may be treated as equally significant, and, as the following excerpt illustrates,
generative of new discursive openings.

Prompted by Jackie’s intervention, Miguel proceeded to explain Castillo’s central argument
(that women “have no country”) by suggesting that society supports men, but does not support
women. In so doing, he worked to specify who is meant by “society.” This moment both reflects
and builds on Ronald and Jesús’s previous comments:
Excerpt 3 [Tape 33, 01:13:22, 07/10/06]

Miguel

1. En esa frase que dice este
2. que las mujeres no tienen país
3. es como un tipo de metáfora . . .
4. No las esta soportando
5. la sociedad
6. el país – la sociedad
7. y la sociedad somos nosotros
8. y si no las soportamos nosotros
9. esta
10. Las mujeres están en el aire . . .
11. y con el hombre no, porque
12. al hombre, siempre lo va a soportar el país
13. o la sociedad
14. Nosotros siempre vamos a soportar el hombre
15. porque
16. según es más fuerte
17. según eso viene de la naturaleza . . .
18. es el que trae el dinero a la casa
19. es el que hace el trabajo pesado
20. es el que cuida
21. es el hombre de la casa
22. [Miguel jokingly acts out a “strong man” stance; a number of students smile or laugh]
23. [Miguel jokingly acts out a “strong man” stance; a number of students]
24. Es muchas cosas que las mujeres
25. Según no pueden hacer
26. Por que
27. según es más débil
28. In this phrase that says
29. that women have no country
30. Its like a type of metaphor
31. It is not supporting them
32. society
33. the country, society
34. and society is us
35. and if we don’t support them
36. they are
37. Women are in the air
38. for the men, no, because
39. for men, the country will always support him
40. or society
41. We are always going to support the man because
42. supposedly he is stronger
43. supposedly this comes from nature
44. he’s the one that brings the money home
45. he’s the one that does the hard work
46. he’s the one that takes care
47. he’s the man of the house
48. [Miguel jokingly acts out a “strong man” stance; a number of students
Similar to Ronald and Jesús, Miguel publically analyzed a dominant perspective while carefully attuning to the meanings at work in his own talk. Through his repeated use of the word “según” (supposedly), Miguel also created space for analyzing the hierarchical valuing of men over women without occupying the dominant position. Here, “según” connotes “as people believe” or “according to the norm” and further evidences students’ growing attention to voice, perspective and rhetoric.

Whereas Ronald and Jesús sharpened their language to distance themselves from the dominant ideology, Miguel’s comments exemplify an additional function of heteroglossic attunement: using language and gesture to temporarily embody a dominant stance for comedic and political effect. Miguel used “según” to simultaneously ventriloquate and interrogate the notion that men are supported by society because they are “naturally” stronger and do the hardest kinds of work. Notice, in particular, the shift in language between lines 17 and 18 (43 and 44). Having established that his talk is “what people believe” Miguel no longer repeats the phrase “según.” He shifts to representing the dominant position without such qualification, trusting that his audience can now distinguish between the voices at work in his talk. Miguel brings back “según” when he shifts to talking about women in lines 24 to 27 (50–53). Perhaps he did not want to risk appearing to condone the belief that women are considered weaker. These moves illustrate students’ expanding use of social analytic artifacts: interpreting the shades of meaning involved in discourse, but also using those understandings to produce new meanings, and to do so in nuanced, intellectually complex, and artful ways.

Miguel was also engaging in political work. Distancing himself from the patriarchal ideology he was working to define, Miguel encouraged his audience to take responsibility for the unequal treatment of women. This is evidenced by his insistence on defining society as constituted by all of us and his use of theatrics in line 22 (48 in English). This moment was bolstered by Miguel’s recognition of the need to sharpen his own language. When he arrived at the word “society” (lines 5, 22), the very kind of word we were in the habit of pushing students to clarify, he proceeded to define what he meant by society without prompting. Miguel’s metaphor “Las mujeres estan en el aire/Women are in the air” (lines 10 and 37) also communicates a sophisticated understanding of oppression, elevating the problem we were working to analyze and offering a powerful image of patriarchy. Women are made vulnerable, floating without supports, at the whim of forces beyond our control. This was a significant moment. Miguel, an older, male student, publicly and passionately analyzed the workings of patriarchy, taking an expert stance and subtly encouraging his classmates (and teachers) to reflect on our own complicity. As with Jesús’s comments, this moment became possible through the coupling of the learner and the artifacts and relationships made available in the environment—including, in this case, Jackie’s reconfiguration of her group’s spokesperson.

All of the examples presented thus far focus on students who occupied a dominant position in relation to the particular problem they were analyzing. Ronald and Miguel were young men, working to understand and gain analytic distance from patriarchal ideologies. Jesús was...
a second-generation migrant student, working to analyze pejorative representations of undocumented immigrants. Jackie was an English-dominant student who intervened to ensure Miguel could share his own words. Thus, a central purpose of heteroglossic attunement and semantic sharpening in this setting was to reflect on self and society and develop ethical stances toward others, particularly those dehumanized by dominant narratives. Of importance, those “others” were in the room: young women, dominant Spanish speakers, undocumented students, and students whose family members were undocumented. Thus, developing careful language was not an abstract exercise; it was a concrete tool for generating solidarity with the very people we were learning with and from.

Excerpt 4: “¿Eso es lo que piensa Zavella? / Is that what Zavella thinks?”

This final example foregrounds the ways that students recognized opportunities for heteroglossic attunement and semantic sharpening in one another’s talk. Unlike the previous interactions, this example involves a female student calling attention to the problematic meanings communicated by a male student. Just prior to Miguel’s explanation of Ana Castillo’s (1994) piece, Oscar, a younger, male student, led his group’s explanation of Zavella’s reading, focusing on women’s work in the canneries. During this stretch of talk, Esmeralda was sitting in the audience intently taking notes on Oscar’s explanation. At one point, Oscar stated that “Para las mujeres, los trabajos son aburridos” (For women, the jobs are boring) and proceeded to describe the exploitation women face at the hands of managers in the canneries. As he spoke, Gloria (a member of his group) drew his attention to Esmeralda’s raised hand. The ensuing interaction is depicted in Excerpt 4:

Excerpt 4 [Tape 33, 01:07:19, 07/10/06]

Gloria 1 [Esmeralda] do you have a question?  
Esmeralda 2 El, al principio lo que estabas explicando no entendí muy bien que dice que las mujeres hacen los trabajos aburridos ¿Eso es lo que piensa Zavella?  
Oscar 9 Eso lo que, no no es lo que piensa Zavella Lo que está escribiendo, principalmente, Zavella es sobre la discriminación y la deshumanización de las mujeres en sus trabajos . . . también en la sociedad Lo que pasa allí también, At first what you were explaining I didn’t understand very well she says that women do the boring jobs Is that what Zavella thinks? That’s what, no that’s not what Zavella thinks What Zavella was writing, principally is about discrimination and dehumanization of women in the workplace and also in society What happened there
Esmeralda’s intervention suggests that for her, conflating the women’s characterization of their own work as “aburrido” (boring) with Zavella’s framing felt problematic. Indeed, if Zavella were to be describing women’s work as “boring,” she might be taking the very stance she was working to deconstruct. Through keen attention to Oscar’s words, Esmeralda recognized the problems with this representation of Zavella and chose to intervene. Esmeralda’s question was consequential in that it helped Oscar to clarify this distinction and opened up a new analysis of the reading as a particular kind of text. As Oscar explained, Zavella was describing and analyzing the “words” of women who work in the canneries, representing the subjective experiences of the women she interviewed (lines 25–29). Through this interaction, Esmeralda and Oscar (jointly) afforded Zavella the room to both respect and critically engage the women’s narratives.

This nuanced reading of an ethnographic text was provoked by Esmeralda’s recognition of the need for heteroglossic attunement and her willingness to raise her hand and ask for it. Like Jesús’s comment earlier, “they are to people that don’t know them” (Excerpt 2), and Jackie’s mediation of her group’s spokesperson (Excerpt 3), interventions that may feel to students like potential interruptions (teachers had not asked for comments) suggest that participants were perceiving problems they felt were essential to address, drawing on social analytic artifacts in consequential ways, and experiencing the environment as open to their contributions.

Alternatively, Esmeralda might have already known the answer to her question: Zavella was representing the women’s discussion of their experiences, rather than characterizing their work as “boring.” In this interpretation, Esmeralda’s decision to intervene and express confusion (line 4) may have been a pedagogical strategy meant to support Oscar’s thinking. This reading is supported by the emphasis Esmeralda gave to the word “Zavella” in her question (line 8): “¿Eso es lo que piensa Zavella?” (Is that what Zavella thinks?). This question sounds like the kind of question a teacher might ask when providing a hint to the correct answer. Indeed, her emphasis on the word “Zavella” might have clued Oscar into the need to distinguish between Zavella’s words and the words of the women she had interviewed. Esmeralda may have objected to Oscar’s characterization on political grounds, but found a careful way to intervene and support his thinking. This is not unlike the way I responded to Ronald in Excerpt 1.

The pedagogical responsibility for discerning the multiple voices at work in a single text was therefore distributed across students and teachers, such that students were asking one another the kinds of questions careful readers might ask about a text (Cole & Engeström, 1993): Who is
speaking in this part of the text? Is this what Zavella herself thinks or is she analyzing what the women in her study think? Considering this final example in light of the previous three, I argue that students’ increasing attention to opportunities for heteroglossic attunement and semantic sharpening in one another’s talk reflects a growing awareness of rhetoric, and of the kinds of questions they might ask of themselves.

**DISCUSSION AND CONCLUSION**

Together, these excerpts illustrate how particular social analytic artifacts became concrete tools for thinking, relating and acting. The analysis foregrounds what students used these artifacts to do, highlighting the new understandings students produced by appropriating the tools of heteroglossic attunement and semantic sharpening. I also emphasized the role of epistemic openness and the ways students used social analytic artifacts to take political stances and develop solidarity across difference.

These findings offer a window into the kinds of shared thinking that become possible when students who have been framed in deficit terms are treated as intellectuals with vast cultural and linguistic resources, and when learning is organized in ways that envelop students in the “whole activity” of social analysis (Cole & Griffin, 1983). Had Miguel been in a classroom where English was the only valued language, he may not have had the opportunity to share (and develop) his analysis of patriarchy in a public setting and his thinking may not have become a resource for others. And, as Jackie’s intervention showed, it was not enough for teachers to proclaim the classroom as one that valued all languages. Such an environment had to be built over time with participants recognizing opportunities to craft a different kind of intellectual ethos. Similarly, had Ronald been criticized for what could be seen as an overtly patriarchal comment, teachers and students would have lost an opportunity to think together about the idea he was grappling with and develop artifacts that rippled out beyond the moment. Instead, students were intentionally treated as much more than the categories of “English language learner” or “sexist male student” would have allowed.

In fact, the kinds of social analysis documented above were rooted in students’ everyday experiences as young men and women, as migrants, and as members of a demonized community contending with external and internal forms of hierarchy. In other words, students were treated as theorists of their own experience and encouraged to engage with one another in ways that interrupted the very hierarchies we were working to analyze. Intellectual moves had material consequences, offering a local view of the relationship between analyzing the social world and working to change it. Here it is also important to note that depending on the context and the speaker, engaging in talk that questions prevailing ideologies regarding women, Spanish speakers or undocumented immigrants might “risk punishment” (Erickson, 2004b, p. 174)—ridicule, suspicion, or, at worst, violence. Educators can therefore provide crucial opportunities for students to experiment with meaning and variegate their talk without negative repercussion, to practice swimming upstream with social and cognitive supports.

Research on learning in such contexts can make visible how students’ perceptions of new problems and decisions to intervene are intellectual and political decisions that reflect new ways of being and becoming. Detailed accounts of talk and interaction also enrich our understandings of the kinds of learning that become possible in the context of political education and make our
pedagogical practices available for reflection, revision, and development. Alongside heteroglos-
sic attunement and semantic sharpening, I imagine a range of tools that could be named and
exemplified as part of a growing set of resources for educators and researchers. Becoming more
aware of social analytic artifacts can also support educators to perceive a wider array of learning
opportunities as they emerge in moment-to-moment interaction. Such research serves the larger
goal of expanding and diversifying contexts where young people and adults work together to
transform the social problems that affect our everyday lives—work that is deeply interwoven
with the process of transforming ourselves.

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