

Four Tools for Critical Inquiry in History, Social Studies, and Civic Education*

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ABSTRACT

The promotion of critical thinking is an important but elusive goal in history, social studies, and civic education. Teachers often struggle to translate general definitions of critical thinking into specific pedagogical tools to plan learning activities and to observe and interpret student work in these subjects. They also struggle to distinguish between “teaching critical content” and “teaching students to think critically.” In this paper, I draw upon scholarship on critical thinking, history education, moral education, and critical pedagogy to propose four tools for critical inquiry in the social domain: *Problem-posing*, *Reflective skepticism*, *Multi-perspectivity* and *Systemic thinking*. I describe how each tool works, discussing how they integrate the epistemic purpose of fostering good understanding with the social purpose of cultivating thoughtful, responsible, pluralist and non-violent citizens.

KEY WORDS

Critical inquiry, critical thinking, history education, social studies education, civic education, critical pedagogy.

Cuatro herramientas para la indagación crítica en la enseñanza de la historia, las ciencias sociales y la educación ciudadana

RESUMEN

La promoción del pensamiento crítico es un objetivo importante pero escurridizo en la enseñanza de la historia, las ciencias sociales y la educación ciudadana. A muchos docentes les cuesta traducir las definiciones generales de pensamiento crítico en herramientas pedagógicas específicas para planear sus clases y para evaluar el trabajo de sus estudiantes. A veces se confunde “enseñar contenidos críticos” y “enseñar a pensar críticamente.” En este artículo propongo cuatro herramientas para la indagación crítica en el ámbito social: *Pensamiento problémico*, *escepticismo reflexivo*, *multiperspectividad* y *pensamiento sistémico*. Para su definición retomo elementos de la literatura sobre el pensamiento crítico, la enseñanza de la historia, la educación moral y la pedagogía crítica. Describo lo que cada herramienta nos permite hacer, y cómo cada una de ellas articula la función epistémica de fomentar la comprensión con la función social de cultivar ciudadanos reflexivos, responsables, pluralistas y no-violentos.

PALABRAS CLAVE

Indagación crítica, pensamiento crítico, enseñanza de la historia, enseñanza de las ciencias sociales, educación ciudadana, pedagogía crítica.

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Quatro ferramentas para a indagação crítica no ensino da história, das ciências sociais e da educação cidadã

RESUMO

A promoção do pensamento crítico é um objetivo importante, mas escorregadio, no ensino da história, das ciências sociais e da educação cidadã. Para muitos docentes, é difícil traduzir as definições gerais de pensamento crítico em ferramentas pedagógicas específicas para planejar suas aulas e avaliar o trabalho de seus estudantes. Às vezes se confunde “ensinar conteúdos críticos” e “ensinar a pensar criticamente”. Neste artigo proponho quatro ferramentas para a indagação crítica no âmbito social: *Pensamento problêmico*, *ceticismo reflexivo*, *multiperspectividade* e *pensamento sistêmico*. Para sua definição, retomo elementos da literatura acerca do pensamento crítico, o ensino da história, a educação moral e a pedagogia crítica. Descrevo o que cada ferramenta nos permite fazer e como cada uma delas articula a função epistêmica de fomentar a compreensão com a função social de cultivar cidadãos reflexivos, responsáveis, pluralistas e não violentos.

PALAVRAS-CHAVE

Indagação crítica, pensamento crítico, ensino da história, ensino das ciências sociais, educação cidadã, pedagogia crítica.

We live amid bewildering complexities. Obtuseness and refusal of vision are our besetting vices. Responsible lucidity can be wrested from that darkness only by painful, vigilant effort, the intense scrutiny of particulars. Our highest and hardest task is to make ourselves people “on whom nothing is lost.” This is a claim about our ethical task, as people who are trying to live well.
(Nussbaum 1990, 148)

The promotion of critical thinking has been a longstanding goal of education. Often connected to active inquiry-based learning, it is assumed to empower students to take charge of problems they face in real life, from abstract puzzles in intellectual endeavors to the practical challenges of participating in a community. Advocates of critical thinking stress that this kind of pedagogy is necessary if we want students to construct deep and sophisticated understanding, and if we aspire to make what they learn useful in their lives, relevant to their world, and supportive of their flourishing as human beings (Dewey 1933; Duckworth 2006; Perkins 1995). Others support this idea by adding that critical thinkers develop skills and dispositions that are essential to sensitive, informed, tolerant and active citizens who are able to sustain a democratic culture (Barber 1989; Glaser 1985; Gutmann and Thompson 2004; Levine 2007; Nussbaum 2006; Parker 1996).

This connection between critical thinking and democratic ideals is appealing to many educators in subjects such as history, social studies, and civic education. International literature on education for democracy includes countless academic publications, policy documents and curricula that advocate engaging students in the critical discussion

of current public issues, enduring moral dilemmas, and competing historical narratives. However, in spite of this wide appeal, research shows that critical deliberation is rare in the classroom, and when it does happen, it is often of low quality (Hess 2004). Many teachers recognize the opportunities that education in the social domain offers for cultivating critical thinking; they value this goal and are willing to organize their teaching around it. However, when the “rubber meets the road,” many teachers struggle to move from abstract statements to concrete practice. Over the years that I have been working with teachers, I have come to identify three recurrent sources of struggle:

- a. Teachers appreciate the general notion of critical thinking, but they find it hard to translate into a specific pedagogy that fits the requirements of teaching subjects in the social domain. Most of the literature on critical thinking focuses on general cognitive skills (e.g. analysis and inference) that are at the basis of thoughtful learning in any discipline. But how do the general skills of critical thinking fit in with the more particular thought processes required in the social sciences and humanities?
- b. Even within the social domain, critical thinking carries different meanings. Some stress the capacity to propose plausible arguments that are well supported by evidence, while others highlight the formation of autonomous judgment, or the capacity to hold discrepant perspectives. Still others insist that what defines critical inquiry is the capacity to form systemic depictions of power relations and of the causes and dynamics of conflict. It is challenging for teachers to reconcile these ideas that come from disparate theoretical traditions.

- c. Teachers struggle to distinguish between “teaching critical content” and “teaching students to think critically.” This becomes particularly tricky as important bodies of critical theory regarding issues like race, gender, and class make their way into school curricula. This move is indeed important, but it begs the question: Does teaching critical content develop critical thinking? Are the two things aligned? Not necessarily. In fact, when the teaching of “critical content” is not well supported by “critical inquiry,” it easily results in a perplexing paradox that I call “critical dogmatism.”

In this paper I draw upon scholarship on critical thinking, history education, moral education and critical pedagogy to identify and characterize four core tools for critical inquiry in the social domain: *Problem-posing*, *Reflective skepticism*, *Multi-perspectivity*, and *Systemic thinking*. These tools capture the particularities of critical thinking applied to social issues in subjects such as history, social studies and civics. While there are conceptual and procedural differences among these fields, these four tools highlight critical traits that cut across them. I will describe how each tool works and discuss how they integrate the epistemic purpose of fostering deep understanding with the social purpose of cultivating thoughtful, responsible and pluralist citizens that are able and willing to manage conflict in non-violent ways.

Different Theoretical Traditions

Problem-posing, *reflective skepticism*, *multi-perspectivity* and *systemic thinking* address different facets of critical inquiry that allow us to examine and shed light on different challenges posed by social issues. My intention in characterizing four distinct tools is precisely to stress that critical inquiry is multidimensional. This is most evident when we examine different bodies of literature that have advanced particular conceptions of critical thinking. Scholars in critical thinking, history education, moral education, and critical pedagogy define different ways of knowing and reflective qualities that are deemed necessary for a sophisticated understanding of social issues. These four traditions of research (and practice) are rarely put into conversation with one another; but if we do so, their different approaches appear to be complementary rather than irreconcilable. They share common goals such as fostering inquisitiveness, informed reflection, independent thinking, and rigorous performance. Yet, in defining the essence of “critical,” they emphasize different intellectual

operations and claim different epistemic and social purposes. Such diversity is what leads me to propose a four-tool model of critical inquiry.

While it is true that each tradition puts more weight on some tools and less on others, there is no simple correspondence that would allow us to assert that one tool derives exclusively from one tradition, or that these traditions understand critical inquiry as the use of one single tool. The dialogue between these distinct bodies of literature is valuable precisely because they offer different angles from which to conceptualize the four critical inquiry tools. In what follows, I review how the notion of critical thinking appears in these four traditions, revealing both divergences and convergences among them. Then, in the next section, I characterize each tool, drawing selectively on the work of scholars from the different traditions that help us understand their nature and potential.

Critical Thinking

The concept of critical thinking developed primarily in the fields of philosophy (epistemology), education and cognitive psychology. According to what is known today as the Critical Thinking Movement, critical thinking consists of a purposeful, meta-cognitive and self-corrective process in which individuals monitor the quality of their thinking, detecting and rectifying flaws in arguments, thinking procedures, problem-solving strategies, and decision-making processes (Ennis 1962; Lipman 2003; Paul 1990; Siegel 1988). In Ennis’s words, “Critical thinking is reflective and reasonable thinking that is focused on deciding what to believe or do” (Ennis 1985, 45). This approach focuses on the appraisal of arguments following criteria of formal and informal logic, which are thought to set the standards for intellectual accountability. Thus, in this tradition, critical thinking consists of a host of general cognitive skills such as analysis, inference, evaluation, interpretation, explanation, as well as a dispositional dimension characterized as “a critical spirit, a probing inquisitiveness, a keenness of mind, a zealous dedication to reason, and a hunger or eagerness for reliable information” (Facione 1990, 11). After an intense discussion about whether critical thinking is content-neutral or domain-specific (Ennis 1990; McPeck 1990), most in the Critical Thinking Movement consider that while critical thinking skills and dispositions transcend specific disciplines, exercising them adequately demands domain-specific knowledge of concepts and methods (Facione 1990).

History Education

Scholarship on history education integrates the epistemology of history with cognitive-developmental psychology and constructivist pedagogy. While recognizing the importance of general cognitive skills, researchers in this field argue that history education must teach core concepts and procedures that are specific to the subject matter and epistemology of historical inquiry (Carretero and Voss 1994; Dickinson, Lee and Rogers 1984; Shemilt 1980; Stearns Seixas and Wineburg 2000). Historical understanding rests—they claim—on particular thinking processes involved in establishing the significance of historical events in relation to present concerns, developing plausible explanations through the heuristics of corroboration and sourcing, contextualizing beliefs and social practices, coordinating processes of change and continuity, and crafting multivocal narratives and multicausal accounts. The term *critical thinking* is not very common in this literature, but the concept of *historical thinking* advanced in it assumes that these thinking processes allow students to build a disciplined understanding of the past that is significant, rigorous, explanatory and interpretative. Some scholars argue that such historical understanding also matters because it helps students gain a critical understanding of the connections between past and present, social and personal issues, and historical processes and civic matters (Barton and Levstik 2004; Bermudez and Jaramillo 2001; Carretero and Bermudez 2012; Seixas 2004). In this sense, historical understanding is thought to provide a reflective basis for values such as global awareness, pluralism, and respect for diversity, independent thinking, and openness to controversial issues.

Moral Education

Since the late 1970s, research on moral education has drawn on ethical philosophy, developmental psychology, and constructivist pedagogy to show that individuals can develop the capacity for moral reflection and judgment, which becomes increasingly inclusive, principled, and independent of the dictates of established authorities (Gilligan 1982; Kohlberg 1984; Selman 2003). In this tradition, critical judgment consists of an active process in which participants a) recognize multiple moral dilemmas and contested issues that cannot be resolved relying simply on personal preferences, formed habits, and social

traditions, and b) engage with these dilemmas and controversies through reasoned dialogue, seeking to recognize different viewpoints and coordinate them in judgments and choices that are comprehensive, fair, and responsive to rights and needs of different parties in conflict. Moral judgment becomes critical in so far as it takes reflective distance from one's egocentric and socio-centric perspective, and is self-directed, yet sensitive to and inclusive of others.

Critical Pedagogy

Drawing upon scholarship in neo-Marxist philosophy, social sciences, and the humanities, Critical Pedagogy develops a reflective critique of the ways knowledge is constructed and communicated within social, cultural and political relationships that organize practice. Freire (1970) coined the seminal distinction between “emancipatory” and “banking” education, based on which he and others (Brookfield 1987; Freire and Faundez 1989; Giroux 1994; McLaren, 1994) conceptualized the educational goal of fostering “critical consciousness.” In doing so, these scholars brought to the field of education the Frankfurt School’s claim that the purpose of knowledge was to “liberate human beings from the circumstances that enslave them” (Horkheimer 1982, 244). Habermas (1971) furthered this claim by arguing that the technical interest in prediction and control is but one of three legitimate interests. Knowledge—he said—may only be driven by a hermeneutical interest in understanding the meaning of human expressions and/or by an emancipatory interest in transforming oppressive realities. Critical Pedagogy thus points to two distinct layers of critical inquiry. In one layer, the object of analysis are the processes of knowledge production and communication, which are assessed against epistemological criteria of truth and considering the conditions for respectful dialogue among participants. Here, critical inquiry consists of deconstructing the power relationships that frame knowledge, revealing bias, hidden assumptions, propaganda and ideological manipulation, and empowering students to construct their own knowledge. In the second layer, the object of critical inquiry is social relationships and practices in themselves, which are examined against ethical criteria such as justice and recognition. Here, critical inquiry consists of revealing and explaining the deep structural forces that regulate societies, seeking to empower students to transform dehumanizing and oppressive realities.

Table 1. Different Approaches to Critical Inquiry

Theoretical Tradition	“Critical” consists of	Purpose
Critical Thinking Movement	Meta-cognitive assessment of arguments and reasoning	Self-correction, monitoring quality of thinking and knowledge
History Education	Disciplined sourcing, multi-causal and contextualized explanations	Plausible accounts and explanations of historical events and processes
Moral Education	Independent judgment that coordinates relevant perspectives	Independent belief and fair choices of action
Critical Pedagogy	Deconstructing / revealing power relations and social structures	Human liberation and social transformation

Table 1 summarizes the different conceptions of critical thinking emphasized by the four theoretical traditions. However, as I attempt to show in the following section, this seeming divergence of approaches can be reconciled in a four-tool model that captures the variety of intellectual processes and purposes that these traditions define as critical, all of which are necessary for sophisticated understanding in the social domain.

Four Critical Inquiry Tools

Before dissecting my understanding of critical inquiry, I would like to comment on the metaphor of an *inquiry tool* on which I rely. Such a metaphor denotes an intellectual device that can be used to process something raw in order to transform it into an elaborated product. With the tools of critical inquiry we can process experiences, beliefs and data, and transform them into knowledge, understanding and practice. The transformative feature of these tools stresses that critical inquiry affords the means to recognize and work through a number of intellectual and social challenges that we confront on a regular basis, and particularly in situations of conflict and controversy: competing perspectives, uncertain claims, intricate interdependent causes and consequences, invisible social forces, and the limits of personal values and convictions. These challenges may raise obstacles that lock us in the “vices of obtuseness and refusal of vision” that Nussbaum speaks about (1990, 148). My claim is that the four tools serve to help us perform different kinds of critical inquiry with which we can recognize and resist these impediments, and transform them into opportunities and sources of “responsible lucidity” as we navigate the “bewildering complexities” of our world.

On a different note, the notion of “tool” focuses our attention on *performance*, the actual use of the tool in

different situations, which is different from the notion of “skill,” which focuses more narrowly on having (or not) a cognitive trait. Research on thinking dispositions has shown that the bottleneck in intelligent behavior is not so much the lack of sophisticated *skills*, but the lack of sharpened *sensitivity* or to detect the situations that call for the use of the skills we have, the lack of *inclination* to invest ourselves in the effort they require, and/or the lack of a *thinking culture* that makes visible and sustains this kind of performance (Perkins 2001). In this regard, my concept of critical inquiry denotes an intellectual and social performance that entails the interplay of awareness, capacity, and commitment. This leads us to another consideration. As Vygotsky made clear, *psychological tools* are first *socio-cultural tools* (Vygotsky 1978; Wertsch 1997). So are critical inquiry tools; they are created within communities of practice, and we appropriate and reconstruct them through processes of shared use as we try to make sense of the world around us. The metaphor of an inquiry tool is important because it recognizes that culture, social contexts, and relationships shape what and how we think. In sum, I use the metaphor of inquiry tools to stress the transformative, performative, and situated nature of critical inquiry.

Problem-Posing

The essence of critical thinking is to be outraged by outrageous things and ask why.
(Kohn 2004, 6)

Problem-posing is the tool that we use to raise critical questions that invite further inquiry about claims, beliefs, and social practices that are commonly taken for granted. Freire (1970) first proposed this concept to refer to the capacity to interrogate the world, challenging

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accepted truths, social conventions, alleged natural orders, and hegemonic discourses. While *banking education*—he said—positions the learner as a passive recipient of knowledge that admits no discussion and conceals key explanations for why things are the way they are, *problem-posing education* engages the learner in dialogue and reflection that co-construct knowledge, transform meaning, and stimulate action upon reality.

This tool helps us work through the impediments to *responsible lucidity* posed by ideological mystification, and by the ease with which we conform to habits and traditions. If we were to think of a specific metaphor that captures the nature and purpose of this tool, radar is the device that comes to mind because it spots objects that would otherwise remain hidden. Identifying weak arguments, intellectual puzzles, moral dilemmas, and social controversies that deserve careful examination, *problem-posing* aids us in that “vigilant effort” that Nussbaum deems indispensable for responsible lucidity (Nussbaum 1990, 148).

Problem-posing is a generative tool, the function of which is to provoke us, to throw us off balance. As Lipman says, inquiry begins when we feel the “twinge of doubt and puzzlement in the face of some aberration, some discrepancy, something that defies being taken for granted, captures our interest and demands our reflection and investigation” (Lipman 2003, 21). In the social domain, critical inquiry involves both epistemological and ethical questions. Epistemological questions lead us to a quest for truth and meaning. The quest for truth is concerned with knowledge and thinking that falls short in qualities such as precision, coherence, consistency or evidence; or that contains bias, distortions or unwarranted generalizations. The quest for meaning is concerned with claims, beliefs or practices that puzzle or unsettle us because they do not seem to make sense. Ethical questions, on the other hand, lead to a quest for fairness and welfare. They are concerned with knowledge, social narratives, and social practices that cause harm, injustice and oppression or deprive others of recognition and due care.

In this way, this tool generates problems that we can then process more systematically using the other tools. Its power stems precisely from the immediacy that alerts us to problematic issues which are often concealed. Intuition and emotions play an important role in this process (Thayer-Bacon 2000). Interestingly, emotions are often regarded as obstacles that disrupt, confuse and bias our thinking, making us prone to impulsiveness, error, and distortion. However, as Lipman (2003) and other scholars contend, emotions are not necessarily

“psychological storms” or “murky clouds,” and, in fact, they can be important sources of understanding as they “heighten our awareness, redirect our attention, and provide patterns of sensibility” (Lipman 2003, 128).

Intellectual emotions and moral sentiments serve various functions in *problem-posing*. For instance, Elgin (1996) argues that emotions signal our encounter with perplexing or troubling situations, they make things stand out; they are a source of *salience*. They also *define and frame* the problems we deem worthy of consideration and *focus* our attention. Scheffler (1991) also considers that it is intellectual emotions such as love of truth, repugnance of distortion, openness to surprise and uncertainty that allow us to experience wonder and curiosity. This is also true of the host of moral sentiments (e.g. sorrow, love, indignation, compassion, shame, fear, or hope) that capture the state of our relationships with the world and with others, and engage our thinking around them (Damasio 2003; Nussbaum 2001). Listening to emotions, *problem-posing* opens critical inquiry to realities that are harder to access through simple analytic reasoning. Speaking of emotions, it provides us with an alternative language with which to experience and express discomfort and engagement. As Nussbaum says, “In order to represent certain sorts of truths one must represent emotions,” and “in order to communicate certain truths ... one will have to write so as to arouse the reader’s emotions” (Nussbaum 1992, 210).

This tool is fundamental in critical inquiry because it makes knowledge purposeful and relevant. Critical questions connect knowledge and practice through cycles of praxis: Practical experience interrogates existing knowledge, and further reflection sheds new light on practice. In subjects like history, social studies, or civic education, *problem-posing* connects past and present (historical and current realities), and self and society (personal and social experience), thus making school learning significant to the student (Levstik 2000; Yates and Youniss 1996).

Its contribution to forming critical citizens seems obvious. Nussbaum (2006) stresses that education must cultivate the freedom and capacity of the mind to engage critically with tradition, and relates this goal with Rabin Tagore’s call for living an examined life. In Nussbaum’s words, this means “a life that accepts no belief as authoritative simply because it has been handed down by tradition or become familiar through habit” (Nussbaum 2006, 390). In this sense, this tool also protects us from premature intellectual and moral closures that impede thoughtful

and creative understanding and social transformation. Overall, *problem-posing* cultivates the purposeful, sensitive, sharp, and courageous spirit of a critical thinker.

Reflective Skepticism

Inquiry is the struggle to believe once the beliefs we had previously relied upon have been corroded and dissolved by doubt. It is doubt that signals to us that we are in a problematic situation, and it is inquiry that we engage in to get some orientation within the gloom.
(Lipman 2003, 254)

The tool of *reflective skepticism* serves us to process questions about matters of truth and to guide our engagement in methodic inquiry. As the Critical Thinking Movement asserts, critical inquiry involves processes of meta-cognitive reflection that monitor the quality of our thinking, looking to rectify what is at fault in its procedures and outcomes (Ennis 1996; Facione 1990; Siegel 1988). McPeck (1981) described critical thinking as the suspension of assent, or the disposition to interrogate, ponder, and hold back judgment until it is warranted. However, critical inquiry actually involves a tension between the pull of reasonable doubt and the pull of careful analysis to resettle the possibility of belief (Elbow 1986). On a different route, scholars in critical pedagogy define *reflective skepticism* not so much as concerned with logic or the coherence of arguments, but rather with deconstructing the socio-cultural and political dynamics of knowledge and thinking (Brookfield 1987; Giroux 1994; McLaren 1994). Bringing together the emphasis of different traditions, we see that the tool of reflective skepticism is used to perform three related intellectual operations that are essential to critical inquiry: *the methodic scrutiny of arguments and thinking procedures, the examination of underlying assumptions, and the disclosure and correction of distortions.*

The methodic scrutiny of arguments and thinking procedures: For skepticism to be critical, it must be reflective and judicious, i.e., grounded on a deliberate and careful examination of knowledge claims and thinking processes against explicit and consistent criteria. Formal logic assess the validity of arguments in terms of their structure, i.e., examining whether a conclusion follows from the supporting premises. In turn, informal logic assesses the soundness of arguments in terms of the evidence that supports them and the reasonableness of their claims (Ennis 1996; Facione 1990; Siegel 1988). In particular disciplines, the scrutiny of arguments must also rely on disciplined procedures that are adequate to

the specific subject matter. In history, for example, the evaluation of evidence that supports an account is based on the interpretation of documents and testimonies from the past. These must be carefully analyzed, corroborating different sources, considering authorship and intended audiences, and acknowledging the context of meaning (Shemilt 1980; Stearns, Seixas and Wineburg 2000).

The examination of underlying assumptions: Critical inquiry requires that we examine not only the claims about which we have doubts, but also those that we take for granted. These are often implicit assumptions of which we are not aware, but which are the basis of our thinking (Brookfield 1987; Ennis 1982; Paul 1990). Theorists of critical pedagogy emphasize that many of these assumptions are embedded in the social contexts and cultures to which we belong, and thus are tied to the interests we pursue in the world. For this reason, they define the stances we adopt regarding any given issue, and it easy to lose track of them, or to accept them as unquestionable truths. Only through conscious and deliberate reflection regarding the social discourses in which such claims are embedded can we identify these assumptions and understand their implications (Brookfield 1987).

Revealing and correcting distortions: *Reflective skepticism* also involves analysis of the distortions in knowledge that result from unintended partiality, intended manipulation, or from the asymmetries of power in the construction and communication of knowledge. Such distortions may appear as prejudices and bias, selective fragmentation, dogmatism, propaganda, ideological mystification, or representations that regard as natural practices what are really a social construction. In this regard, critical inquiry entails “seeing through the spells cast by ideology to legitimize social arrangements and practices” (Parker 2003, 70).

This tool is fundamental for critical inquiry both for intellectual and social reasons. Probing and correcting arguments, problem-solving strategies, or decision-making processes, it is a tool that protects against impulsive, ill-supported or uninformed solutions. This is especially relevant in the social domain, considering the expectation that democratic governance rests on informed and thoughtful citizens that are engaged in public affairs. As Lipman (2003) asserts,

There are great and powerful forces ranged against the individual in every society –the political, the military, and the economic are the most obvious examples-

and their aim is often to get us to acquiesce without reflection in the views they want us to have. The armor of skepticism that critical thinking can provide is not an impervious one as far as any given individual is concerned, but in a populace so armored it could be decisive". (Lipman 2003, 47)

Reflective skepticism matters because it protects us from dogmatism. It is at the same time the basis for independent thinking and for intellectual accountability, two qualities that are vital for democratic citizens who, according to Nussbaum (2001), "can think for themselves rather than simply deferring to authority," and "can reason together about their choices rather than just trading claims and counter-claims" (Nussbaum 2001, 388). We are less likely to be manipulated and misled by others, but it also helps us to resist the temptation of imposing our ideas on others.

This tool is also important because it makes possible what I will call "critical trust." Trust is a revered civic virtue, and, indeed, a necessary one. It serves as social glue, supporting negotiation and compromise, and it allows collective work. Nevertheless, the task of a truly democratic citizen is to be vigilant, to scrutinize and monitor political actors, institutions, and social practices. This requires that we learn to balance trust and skepticism, as well the need to belong and be loyal and the need to be authentic and critical. Critical trust protects us both from naïve trust and from cynicism.

In sum, *reflective skepticism* helps us to work through the impediments to responsible lucidity that derive from our discomfort with doubt and uncertainty, the careless urge for expedience, or the ease of dogma. A sharp scalpel, a microscope and a sieve are probably good metaphors to represent a tool that helps us in the "intense scrutiny of particulars" (Nussbaum 1990, 148), by dissecting claims, looking beyond what is readily apparent, and filtering what is credible from what is not. Overall, reflective skepticism nurtures the judicious spirit of a person that pauses to ponder and examine issues more deeply, following methodic procedures of inquiry.

Multi-Perspectivity

A social perspective is a standpoint that implies certain ways of being sensitive to particular aspects of social life, meanings, and interactions, and perhaps less sensitive to others. It is a form of attentiveness that brings some things into view while possibly obscuring others.
(Young 1997, 394)

Multi-perspectivity is the tool that we use to identify, reconstruct, and coordinate different perspectives that are relevant for understanding a topic or problem. It operates on interpersonal, social, and historical issues, identifying different viewpoints that make up moral dilemmas, social controversies, and multi-vocal representations of historical processes. Since the object of inquiry in the social domain consists of beliefs, practices, and experiences of human beings, a critical understanding entails recognizing the perspectives they embody, and reconstructing them in their own context of meaning. When confronted with different views that are often contested or strange, critical inquiry strives to understand, instead of dismissing, excluding or distorting. In this way, multi-perspectivity helps us to work through the impediments to responsible lucidity that result from different x-centrism (ego-, ethno-, gender, class, present). An orchestra director that distinguishes between instruments, gives the right place to each, and brings their diverse voices together in a polyphonic composition, offers a good metaphor for this tool.

The tool of multi-perspectivity performs three core intellectual operations: perspective-taking, perspective-coordination, and contextualization. Perspective-taking affords the initial acknowledgment of different perspectives that must be considered. It requires that we step back from our own positions to recognize others and how they, in their position, see and experience things. By taking other perspectives, we also gain a perspective on our own. As a result, we come to understand that our perspective is one point of view, and we gain access to other perspectives that we did not have before.

There are different approaches to perspective-taking. Scholars of historical understanding characterize perspective-taking strictly as hypothetical imagination of others in the past, based on the rigorous analysis of evidence regarding their beliefs, practices and circumstances. They argue against the idea that historical empathy requires feeling with the other, wary that this may lead to projecting referents from the present (Dickinson, Lee and Rogers 1984).

Research on moral development distinguishes two different orientations of perspective-taking: role-taking and empathetic imagination. In role-taking the person displaces itself to different positions aiming to see an issue from different vantage points. Psychologically, this involves taking distance from (abstracting) the particulars of oneself and the others in conflict, in

order to gain a third-person view that is increasingly inclusive, impartial and generalized. Kohlberg (1984) claimed that role-taking is necessary for a mature understanding and fair resolution of conflicts that emerge when competing claims to rights and obligations clash. In contrast, empathetic imagination rests on connecting deeply with the other and the particulars of their situation, in order to recognize their experience in their own terms. Gilligan (1982) claimed that this form of perspective-taking involves emotional connection and closeness rather than detachment and impartiality, and is necessary for a mature understanding and caring resolution of conflicts that emerge when competing needs and responsibilities fracture relationships, mutual recognition, and responsiveness. As Gilligan and Attanucci (1988) clarify, both orientations are necessary because they address different experiences of vulnerability: that of inequality and oppression, and that of detachment and abandonment. Identity and emotions also play an important role in our use of this tool. When we step back from our positions to recognize others we are often displaced from our comfort zones and pushed to interrogate what we take for granted. However, as we learn to reflect on these emotions, they become sources of new knowledge and deeper understanding.

Perspective-coordination entails putting different perspectives in relation to one another and integrating them in more comprehensive judgments or accounts. This coordination may manifest itself as an autonomous judgment that asserts a personal stance after having considered other perspectives, as a negotiated resolution of conflict based on mutual give-and-take, or as a synthesis that maps areas of disagreement and overlapping consensus around a controversial issue. In historical thinking, it shows up in multi-vocal accounts that recognize different experiences and integrate perspectives that are normally excluded, marginalized or distorted.

A third intellectual operation performed with the tool of *multi-perspectivity* is the *contextualization of perspectives*. Lipman makes an important distinction between errors that violate truth and errors that violate meaning. “Strictly speaking,” —he says— “the truth-preserving process is inference and the meaning-preserving process is translation” (2003, 175). Such translation implies that perspectives must be reconstructed within the context in which they make sense, to guarantee that they are represented without distortion or loss of meaning when moving across personal experiences, cultural milieus, or historical settings and times. This sensitivity to context

is stressed in the different theoretical traditions. For example, feminist perspectives on moral development claim that authentic responsiveness to the needs of others requires immersion into the particulars of the situation of others (Gilligan 1982; Martin 1992). Research on historical understanding has shown that when perspectives are not well reconstructed as expressions of particular historical contexts, they are distorted by presentism and ethnocentrism (Bermudez and Jaramillo 2001; Dickinson, Lee and Rogers 1984). In turn, critical theorists argue that the statement of universals and essences abstracted from context is often a powerful means of imposing hegemonic views to control and contain difference (Giroux 1994).

So, why is this tool of importance for critical inquiry? Paul (1990), a leading figure of the Critical Thinking Movement, makes an important distinction between weak- and strong-sense critical thinking. Lacking perspective-taking, the former only examines assumptions and arguments in which the person has no personal investment. According to Paul, this thinking “is disciplined to serve the interests of a particular individual or group” (Paul 1990, 2). In contrast, he says, “when critical thinking is disciplined to take into account the interests of diverse persons and groups, we call it fair-minded or strong-sense critical thinking” (Paul 1990, 2). This distinction has important implications for how we argue for the inclusion of different perspectives. For instance, Siegel (1995) has argued that the reasons for doing so are *moral* but not *epistemic*, i.e., inclusion is fair but it is not relevant when evaluating epistemic worthiness or defectiveness. However, others contend the opposite. If dialogue within epistemic communities is a central procedure for evaluating truth, multi-perspectivity is epistemologically necessary (Howe 1997; Thayer-Bacon 2000; Burbules and Berk 1999). In addition, particularly in the social domain, the inclusion of diverse perspectives is necessary to render a comprehensive picture of events, one that represents the complexity of social phenomena, and preserves meaning and authenticity. If relevant perspectives are not considered and well represented, the resulting judgments and accounts may not only be unfair, but biased and flawed as well.

The tool of multi-perspectivity also contributes several qualities to critical inquiry that are necessary to develop a democratic culture that permeates civic engagement beyond restricted electoral politics (Bermudez 2012b). Civic engagement requires a sense of personal responsibility for the wellbeing of others, as well as concern for the common good. The first rests on our capacity to understand how others experience our choices and actions, while the

latter results from the coordination of the different perspectives and interests that we encounter. The notion of *public* rests on the affirmation of respect for diversity through reflective dialogue, and there is no dialogue without multi-perspectivity. This is the avenue for developing the basic common grounds needed to sustain a pluralistic culture. Furthermore, citizen engagement in the deliberation of controversial issues is also crucial if we want to sustain an authentically democratic culture in which political expediency does not silence dissent or exclude alternative voices. The ways in which citizens work together and deal with their differences to achieve collective goals is at the basis of this process. McIntosh and Youniss (2010) articulate this clearly. “Although expanding the number of one’s allies to achieve political goals by majority force sometimes works, that approach is often not possible nor even desirable in democratic societies.” Rather, they say, “practical necessity, as well as the principles of democratic participation, requires interest groups to deliberate, and to present their own interests, listen to others’ interests, and negotiate a mutually agreeable decision” (McIntosh and Youniss 2010, 33). Only through this sort of reasoned dialogue, grounded both on the commitment to understand others and to assert oneself, is it possible to construct solutions that are infused with a perspective of the common good but that also ensure respect for the individual and for minority voices.

A recurrent use of *multi-perspectivity* develops a pluralist and deliberative stance that may help to confront disagreement and conflict without resorting to dogmatism, blind faith in leadership, or violence. For example, research shows that low levels of perspective-coordination contributes to immature and unhealthy management of interpersonal conflict in which *other-transforming* or *self-transforming* strategies require that only one party accommodates to the other (Selman 2003). But more generally, violence rests on imposing ideas and courses of action that admit no pondering of discrepant perspectives, shattering the possibility of fair and sustainable solutions. As Nussbaum asserts, a lack of empathetic imagining of the other leads to an “impoverishment of mind” that “nourishes the politics of obtuseness and hatred” (Nussbaum 2006, 394).

Last but not least, multi-perspectivity supports the development of social awareness and agency. Through perspective-taking, coordination, and contextualization, one progressively emerges from the contexts in which one is embedded and recognizes them as realities which one can reflect on, act upon and transform. Kegan’s

research on adult development (1994) describes this process as one in which we come to *have* a context instead of *be had* by it. Overall, this critical-thinking tool fosters the fair-minded, curious, nuanced, and pluralist spirit of a critical thinker that is open to recognizing alternative ways of understanding and being in the world, while engaging with diversity constructively.

Systemic Thinking

How people act and live is shaped by the circumstances in which they find themselves. These circumstances can be changed, their limits attenuated through action.
(West 2004, 19)

The tool of *systemic thinking* serves to deconstruct and reconstruct the larger and complex systems and processes in which people act and particular events take place. According to Lipman (2003), “thinking is a process of finding or making connections and disjunctions,” as the meaning of any one thing lies in the relationships it has, and does not have, with other things. Thus, he concludes, “each relationship, when discovered or invented, is a meaning, and great orders or systems of relationships constitute great bodies of meaning” (Lipman 2003, 23).

Mapping elements, relationships and transformations, this tool builds critical accounts and explanations that show that interpersonal, social and historical phenomena are multidimensional, interdependent, dynamic, socially constructed, and grounded on underlying social structures. In this way, systemic thinking helps us to confront the impediments to responsible lucidity that result from short-sightedness, fragmentation and naturalization which obscure the causes and consequences of social phenomena, and our possibilities to act upon them. The optical zoom in a camera is a good metaphor to represent how this tool moves back and forth from wider visions that capture connecting relationships across space and over time, to fine-grained visions that capture the detail and texture of particular sections and episodes.

Using this tool, a critical thinker performs four key intellectual operations that I have characterized as *nesting*, *networking*, *threading*, and *unearthing*. *Nesting* consists of fitting apparently discrete phenomena into wider ecologies that contain and sustain them. It works by searching for and drawing bigger pictures that reveal the scope and nature of what seemed to be isolated

elements. In this manner, systemic thinking zooms in and out, from macro to micro, from global to local, and from societal to individual levels of analysis. It helps to recognize both the place that something occupies within a larger system, and the peculiarity of each place.

Networking consists of an iterative process that disentangles and recomposes the totality and complexity of social phenomena. Through analysis, it dissects the varied elements that make it up (e.g. events, people, practices, beliefs, institutions, settings) and identifies the multiple relationships that connect them (e.g. causation, proximity, hierarchy, inclusion, exclusion, alliance, tension, resistance). Through synthesis, it reconstructs the network of related elements that reveals the dynamic mechanisms and interdependence of the social, political, economic, psychological, cultural, and geographical dimensions of a phenomenon. In history, social studies and civic education, this operation allows the explanation of causes and consequences of events, of the intricate interplay between structural forces and human agency (Dickinson, Lee and Rogers 1984; Bermudez and Jaramillo 2001).

Threading consists of tracing the different manifestations of phenomena over time and linking them in accounts or explanations that show both the continuity of features of the past that remain in the present and the transformation of features of the present that have not always been the same. In this way, systemic thinking moves fluidly between past, present, and future. It represents processes that characterize phenomena at various points in their development and reveals different dynamics of change (e.g., progress, regression, reform, revolution, gradual change, crisis, cyclic repetition, assimilation, and marginal accommodation).

Unearthing refers to the process of excavating and exposing (making visible) the deep, widespread and durable social structures that underlie superficial, episodic, or particular manifestations of social phenomena. This resembles what Freire (1970) called *structural perception*. He characterized it as the revelation that entrenched social patterns such as poverty, inequality, exclusion, impunity and corruption result from the existence of underlying structures that, while not readily visible, shape and constrain peoples' practices and beliefs, as well as the organization of social relationships. They also generate deep-seated interests and forces that propel or stand in the way of social transformation, and thus help to explain why things change or remain as they do.

Systemic thinking is fundamental to critical inquiry in the social domain. Together with *multi-perspectivity* it is the tool necessary to explain historical processes, social conflict, and personal experiences. In these domains, where universal, imperative and predictive laws have only a limited use, explanation often rests on the reconstruction of the causal process and mechanism that describe how things came to be in a particular instance or how things work in a particular context. Zooming in and out, *systemic thinking* can identify analogies and patterns across time and space, but without losing sight of the particularity of each manifestation. This qualitative form of explanation strives to maintain the complexity of phenomena, and it does so by attending to diversity, particularity, and situatedness in context. This contrasts with other types of explanation that seek to reduce the complexity of phenomena, focusing on basic constituents and regularities and abstracting them from context to identify general principles and laws. *Systemic thinking* is the tool that provides the explanation of complexity.

This tool also informs our sense of agency. Relating past, present, and future, and situating personal experience with social contexts, systemic thinking gives the individual a sense of connectedness and transcendence, and it reveals that personal struggles reflect societal problems that can be collectively addressed. This is important to support the development of a political identity, collaboration with others, and the investment of oneself in building a collective future (Hart and Gullan 2010; Yates and Youniss 1996). Furthermore, systemic thinking makes possible the fundamental understanding that current social arrangements are but one possibility, open to transformation, reversal, or radical redefinition. It is on this realization that our sense of agency rests. Tracing historical processes of change, this tool denaturalizes social phenomena, showing that they are not natural and immutable states but socially constructed realities that we can act upon. Understanding human agency in socio-historical processes also requires that we understand efficacy or the actual possibility of effecting change (Kahne and Westheimer 2004). This, in turn, requires that we understand the intricate interplay between larger structural forces and human agency (Bourdieu 1998; Thompson 1978). Here again, systemic thinking helps as it reconstructs the networks of elements and relationships in which human action takes place, mapping tensions, obstacles, resistance to change, and the dynamics of organized collective action (e.g. leadership, collaboration, confrontation, and resistance).

To conclude, *systemic thinking* is crucial for a critical understanding of societal and historical responsibility that complements the sense of personal responsibility afforded by *multi-perspectivity*. This tool allows us to map the different consequences that social organizations, dynamics, and practices have in the lives of different people. It integrates short- and long-term effects, local and global impacts, and intended and unintended consequences. It also helps us to recognize the often-unequal distribution of costs and benefits in the ways in which societies organize and resolve a conflict. These operations are the psychological basis of the emancipatory interest of the social sciences described philosophically by Habermas (1971). Privilege and oppression are invisible when conflicts are framed in individualistic and intentional terms, but they emerge in a wider systemic framing. As Parker says, critical civic engagement entails the capacity to “identify a public problem, imagine a better world and clarify just where, how and at whose expense are we coming up short” (Parker 2003, 113). Along these lines, Cherryholmes (1980) analyzes civic education that seeks to prepare students to grapple with society’s problems but fails to engage them in a critical examination of the solutions for which they and others strive. In his view, this results from naïve positions that ignore the relationship between knowledge, action, and power, thus hindering students’ capacity to reflect on which problems are more or less worth solving, according to whom, for what purposes, in whose favor, and at whose expense. Overall, systemic thinking embodies the *ecological* spirit of a critical thinker that strives to maintain the big picture and not lose sight of diversity, complexity, and transformation.

The characterization of four distinct tools underscores that *problem-posing*, *reflective skepticism*, *multi-perspectivity* and *systemic thinking* serve to perform different but necessary forms of critical inquiry. Table 2 synthesizes and contrasts the driving questions, the intellectual processes, and the purposes that define each tool.

My argument so far has been that the four tools can be distinguished from one another because they perform different kinds of critical inquiry. That is, they raise different kinds of questions to guide our critical explorations, they engage us in different kinds of intellectual operations, and they serve different purposes. Now, before concluding, I want to step back from these differences to consider the ways in which the four tools share a common ontological and epistemological foundation that makes them converge in a coherent practice and process.

The four theoretical traditions that inform my definition of the tools of critical inquiry partake in longstanding debates regarding the nature of our knowledge and the claims we can make about the extent to which such knowledge represents what we take to be reality. Some in the Critical Thinking Movement favor a positivist claim that objective knowledge is possible if the product of our thinking mirrors external reality accurately. In turn, some scholars of Critical Pedagogy tend to agree with postmodern relativist claims which hold that reality is itself a social construction and that there is no such thing as a real world outside of our intellectual constructs. But there is no single or conclusive position regarding these questions in any of these theoretical traditions, and we would be guilty of gross oversimplification if we failed to recognize that. A review of these discussions is beyond the scope of this paper, but I will delineate the position that I take as the foundation of my model of critical inquiry, and explain how that position reconciles particular approaches within each of the traditions which I draw upon.

The position I assume has been conceptualized by Maxwell (2012) as *critical realism*, and holds that while “all knowledge is ‘theory-laden’; this does not contradict the existence of a real world to which this knowledge refers” (Maxwell 2012, vii). In his discussion with both the positivism that dominates quantitative research and the relativism that dominates qualitative research, Maxwell explains the importance of distinguishing between ontology (the nature of reality) and epistemology (the nature of our knowledge). This distinction allows critical realism to “combine a realist ontology (the belief that there is a real world that exists independently of our beliefs and constructions) with a constructivist epistemology (the belief that our knowledge of this world is inevitably our own construction, created from a specific vantage point, and that there is no possibility of our achieving a purely ‘objective’ account that is independent of all particular perspectives)” (Maxwell 2012, vii). He illustrates this with a poignant example: “most of us believe that global warming is occurring, with potentially serious consequences for humanity, regardless of how many people deny it” (Maxwell 2012, vii).

Realist ontology postulates that there is a real world out there that we can approach, interrogate, and strive to explain. The aim of critical inquiry is precisely to examine and reconstruct real phenomena such as the experiences, perspectives and practices of people, or the causal mechanisms and social dynamics in processes of change.

Table 2. Four Critical Inquiry Tools

TOOL	Driving questions	Intellectual processes What does the tool do?	epistemic and social purposes Why does it matter?
Problem-posing	Why does this matter? What does this mean? Does this make sense? How is this possible? What is missing here? Is this fair? Who does this serve and harm? Could it be different?	Recognizes intellectual puzzles, moral dilemmas, and social controversies; Raises questions that invite further inquiry. Core operations: > Epistemic questions about truth and meaning > Ethical questions about fairness and welfare	Confronts ideological mystifications; Challenges conformity with habits and tradition; Cultivates purposeful, relevant and significant knowledge; Connects past-present, self-society; Nurtures capacity for living “an examined life”; Opens cycles of transformative praxis; Protects from intellectual and moral closure.
Reflective skepticism	Is this statement accurate? Is the data relevant? Is this explanation plausible? Is this account credible? Is this claim warranted? Is there evidence to support it? Does the story hang together?	Meta-cognitive self-corrective tool; Processes questions of truth; Guides methodic inquiry; Integrates reasonable disbelief < > cautious analysis to resettle belief. Core operations: >Scrutinizes arguments and thinking >Examines underlying assumptions >Reveals and corrects distortions	Confronts discomfort with uncertainty, urge for careless expedience, and ease of dogmatism; Detects and solves flaws in arguments, thinking process, problem-solving strategies, or decision-making processes; Cultivates independent thinking and critical trust; Protects against impulsive, ill-supported or uninformed resolution of problems; Protects from dogmatism.
Multi-perspectivity	How did different actors experience these events? Who has a stake in this problem and its solution? What are other ways to think about this issue? How do others experience my ideas/ choices?	Identifies, reconstructs and coordinates perspectives; Preserves meaning and authenticity; Reconstructs moral dilemmas, social controversies, and multi-vocal accounts of historical processes. Core operations: >Perspective taking >Perspective coordination >Contextualization of perspectives	Confronts the impediments posed by x-centrism (ego, ethno, gender, class, present); Cultivates pluralist and deliberative stance; Cultivates sense of personal responsibility; Cultivates tolerance through reflective dialogue; Cultivates social awareness and sense of agency; Renders comprehensive and fair-minded explanations and accounts.
Systemic thinking	Why did this happen? How does this work? Has it always been the same? How may it change? How does this fit in the bigger picture? What are the impacts? Who gains and who loses?	Deconstructs/reconstructs systems and processes; Represents totality and complexity of phenomena; Reconstructs causal processes and mechanisms; Coordinates structural forces and human agency; Explains different dynamics of change. Core operations: >Nesting - fits phenomena into wider ecologies >Networking - disentangles and recomposes elements-relationships >Threading - traces change and continuity over time >Unearthing - exposes underlying social structures	Confronts short sightedness, fragmentation and naturalization of social phenomena; Cultivates a sense of connectedness and transcendence; Cultivates sense of agency and efficacy; Cultivates understanding of societal and historical responsibility; Recognizes unequal distribution of costs and benefits in conflict resolution.

All of these exist in the world, independently of whether we know it or of how we represent them. Through critical inquiry, we strive to grasp these phenomena, developing models and interpretations to guide our understanding of them and to orient our action upon them. This assumption is essential to the role we claim that critical inquiry should have in education. Advocating critical inquiry only makes sense if we believe that the knowledge and understanding we construct through it has, or can have, consequences in reality. Continuing with his example, Maxwell reminds us, “Most of us think that changing people’s understanding of the causes of global warming can help to reduce our production of greenhouse gases and thus mitigate the rise in temperature” (Maxwell 2012, viii). Along these lines, I would say that there is no reason to foster critical inquiry if there is no reality which we can act upon. The claim that each critical inquiry tool serves particular purposes assumes that there is in fact a world out there that we can transform and make better.

As for constructivist epistemology, a central claim is that “all knowledge is partial, incomplete and fallible” (Maxwell 2012, 5). It is precisely for that reason that it must be critically examined, aiming to correct logical flaws, biases and distortions. *Reflective skepticism* is the tool that we use to recognize and deal with the uncertainty and shortcomings of claims that are often asserted as indisputable truths. In this sense, critical inquiry is an ongoing process of improvement of knowledge in which we construct increasingly reasonable claims that bring us closer to that reality we seek to understand. Holding this position, however, does not imply any expectation that such claims will come to be definitive and objective depictions that mirror the external world exactly. In fact, this logic underlies constructivist psychology and pedagogy, according to which individuals can develop their cognitive capacity to produce an increasingly stable understanding.

Piaget (1957) explained the mechanisms of assimilation and accommodation that drive this process, and his theory effectively challenged both the idealist and empiricist conceptions that dominated contemporary theories of teaching and learning. In a Piagetian framework, knowledge is more stable when there is less conflict or dissonance between the claims we make and the portions of the world to which they refer. Building on this perspective, Kohlberg (1984) claimed that the principle of justice was at the same time a cognitive structure and a structure in social relationships; and that moral development involved an interplay between the

structures of justice in our judgment and the structures of justice that we encounter in our everyday lives. Moral judgments are more stable when they are more inclusive, as the result of an increasing coordination of perspectives, yet there is no end-point to the process, just as there is no conclusive moral judgment involved. Good as they may be, all judgments must remain open to challenge, and they may be thrown off balance if new claims emerge that have not been considered.

Another central claim of a constructivist epistemology is that knowledge is always constructed from particular standpoints. This resonates in several ways with the conception of critical inquiry proposed in this paper. One manifestation of these standpoints is the fact that our knowledge is defined by the questions we ask, and the questions we ask are informed by the experiences and interests we have in the world we live in. This is the core of *problem-posing*. Critical inquiry begins when we raise questions that identify intellectual and moral problems in what is normally taken for granted. Using this tool we reveal implicit standpoints and their implications, or we suggest alternative standpoints to be considered as our questions open the path for new explorations. In turn, the tool of *multi-perspectivity* serves to understand the multiple standpoints, reconstructing their claims in their own contexts of meaning, and mapping possible areas of overlapping consensus as well as areas of irreducible difference. This tool is fundamental for critical inquiry because difference and diversity are intrinsic to relationships, societies and cultures. On this issue, my characterization of *multi-perspectivity* resonates with what Rosenau (1992) describes as the postmodern search for “diversity rather than unity, difference rather than synthesis, complexity rather than simplification” (1992, 8, cited by Maxwell 2012, 66).

Last, but not least, constructivist epistemology also asserts that because people are located in unequal social systems, their multiple perspectives do not partake on equal terms in the processes of knowledge construction (and learning). In this regard, it is the tool of *systemic thinking* that helps us to reconstruct the all-encompassing yet invisible social forces that define and organize the positions from which different actors construct and express their experiences and perspectives. This idea that our thinking and understanding is embedded in social relationships resonates with another aspect of my conception of critical inquiry that I have elaborated elsewhere (Bermudez 2012a and 2014). Critical inquiry involves the whole person; it not only mobilizes our thinking, but also our identities and emotions. We

rarely think in isolation, because we are, essentially, thinkers-in-relation-to-others. This is most evident in the fact that the conversations that develop around critical inquiry are largely driven by discursive processes of affirmation, recognition, contestation and resistance amongst participants. If we really want to engage students in critical inquiry, we must consider how their cultural, social, and interpersonal relationships motivate and bear the consequences of critical inquiry.

Conclusion

Teachers are in a privileged position to foster the “responsible lucidity” that Martha Nussbaum characterizes as our highest and hardest task, the ethical task of “people who are trying to live well” (Nussbaum 1990, 148). Compared to other social institutions like the family, the workplace, the church, or the military, a distinctive and legitimate mission of schools is to teach students to interrogate and engage thoughtfully with the world they live in, a world of “bewildering complexities.” However, this requires that students learn to grapple with social issues and conflicts in their full complexity, and this, in turn, demands a pedagogy that makes different forms of critical thinking visible.

My goal in this paper has been to identify and characterize four tools for critical inquiry that appear recurrently in four bodies of literature. *Problem-posing, reflective skepticism, multi-perspectivity and systemic thinking* represent distinguishable facets of critical inquiry in the social domain that afford a better understanding of social, historical and interpersonal issues. Students learn to use these tools with increasing sophistication (Bermudez 2014), and such development should be the goal of explicit pedagogical interventions. Limitations of space prevent me from discussing different pedagogical uses of these tools in the classroom. Nonetheless, I have explained the core operations of each tool and the epistemic and social purposes they serve, hoping that a deeper understanding of their nature and potential will help educators to design curriculum, plan teaching activities, observe and reflect about students’ performance, and determine assessment criteria. *

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