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## EDITORIAL

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### Solidarity and Responsibility, Ontologically (Categorically)

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In this editorial I provide a sketch of how we may ground policy change in education differently, 5  
in a way that constitutes a rethinking of the very foundations of what educators take for granted.  
I do so, unapologetically, within a framework that is viable in the sense of cultural history. That  
is, one cannot pose the subject of knowing as a cogitating “I” unless this “I” itself has been  
allowed to emerge from preconscious (pre-) human life forms in radical givenness—the first  
human beings in prehistory, as young children today, found themselves thinking “I” and “Other” 10  
without knowing where this distinction has come from. This origin, because it lies prior to con-  
sciousness, individual | collective knowing (from Lat. *con-*, together [with], and *scīre*, to know),  
is inaccessible today, though hypotheses may be constructed about the conditions that may have  
given rise to the unfolding of an undifferentiated Being into one where each Self is confronted 15  
with other Selves—an event captured in the Christian Bible in terms Adam and Eve’s ability to  
see each other in their nakedness. This would deal, then, with the question of the relationship  
between individual and collective, which, in my view, is not appropriately realized in current edu-  
cational theorizing. More so, it may be impossible to think this (dialectical) relation, when the thinker  
is grounded in (strong forms of) individualism, which is opposite to ontological solidarity.

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The adjective solidary (and, accordingly, its noun form) etymologically derives from the Latin  
*solidus*, being one without spaces, and the suffix *-ary*, which derives from *arius*, connected  
with, pertaining to. The suffix is used to indicate representation or analogies. Thus, solidarity  
constitutes an analogy between soci(et)al situations, on one hand, and solid objects, on the other  
hand. All parts of solid objects have some common property that falls within and determines 25  
their boundaries against the outside, which has different properties.

Here, I provide indications about how—on evolutionary/cultural historical and ontological grounds—an *originary With* in proximity, which evolved from an initially undifferentiated *solid* whole, provided the grounds for subsequent differentiation into Self and Other and for human solidarity. This differentiation could not have occurred apart from some state of *With* and *proximity* that characterized humans prior to the appearance of language and that entailed the differentiation of Self and Other, *Me* and *You*. This differentiation *could not have occurred in the absence of the collectivity*, that is, of the pre-other *in proximity*, which entails a responsibility for the other. This responsibility is realized in what philosophers of very different origin and ilk refer to as the *one-for-the-other* structure of Being. (As with solidarity, I am not concerned with *feeling responsible* or with consciously *taking responsibility for* something, but with responsibility as an ontological and therefore inherently ethical moment of life [Being].) That is, our responsibility for the other, which in fact is symmetrical (I-for-you as You-for-me), has the same origin as solidarity and precedes all consciousness and therefore conceptual understanding. We may (consciously) *feel* solidary and *have a sense of* solidarity only because we already are solidary: consciousness *about* something comes after not before the praxis of this something. The kind of solidarity most people think of spontaneously actually is a derivative form of ontological solidarity, and it is one that, as I show, actually works against true (ontological) solidarity. In the same contradictory way as empowerment, solidarity from its preconditions that do not assume that humans are already consciousness, as these preconditions also give rise to consciousness in the same process. Underlying the idea that solidarity can be constructed ex nihilo is a constructivist fallacy that assumes that all human actions are *intended* by individual actors/thinkers, which leaves no place for the radically passive phenomena that we can experience in our daily lives (e.g., givenness of intentions, resistance of our bodies to being moved, givenness of perceptions).

## II

Readers may ask why I am so much interested in ontological issues that are furthest from the minds of classroom teachers teaching, for example, chemistry or biology in urban classrooms—places where I have spent many hours, which I have researched to a considerable extent, and where my first ideas about collective responsibility and solidarity emerged. Why does it matter whether solidarity and responsibility are grounded ontologically rather than in their commonsense equivalents that have evolved in the Judeo-Christian-Greek tradition that is the foundation of Western thought and philosophy? My first brief answer, if any one is possible, is this: Ontology and ethics are two sides of the same coin, as the “ethical” exposes what the “ontological” sets up and makes possible. *Being* inherently is ethical being, knowing, decision making, and learning all have an ethico-moral moment that education currently fails to address.

My second brief answer is this: We cannot do good work of theorizing societal phenomena unless we construct concepts on categorical grounds rather than reifying commonsense concepts, the origin of which we do not really know because they have been handed down or imported into our life without critical interrogation and analysis. Holzkamp showed, for example, how the theoretical concept of motivation is an artifact of bourgeois psychology used for the purpose of subjugation: Teachers are asked to motivate students, that is, make them do what they do not inherently want to do, by bribing them in various ways with “fun activities” or,

especially during the heydays of behaviorism, with candy and the like. A categorical analysis shows the derivative nature of the motivation concept: collective motives (of activity) and emotions have mediated the emergence of division of labor and mediate the selection of goal-directed actions, which inherently have a positive emotional valence when they expand an individual's room to maneuver (agency) and his or her control over his or her life conditions. 75

Date charts show that the terms *solidary* and *solidarity* have been used (more widely) in English since the early 19th century; toward the end of the same century, the French sociologist Émile Durkheim treated solidarity as part of his research on the division of labor in society. To understand solidarity, we need to deal with the cultural historical origins of the concept and with the ideologies that it embodies. Handed-down concepts and constructs are among the most dangerous a (sociological, lay) theorist can use, because they embody forms of ideologies that researchers need to become extremely critical of if we want to do any form of research that deserves this name. Such critical analysis is necessary, because a scientific practice that fails to question itself literally does not know what it does and, in its facts, representations, and institutions records itself without recognizing itself. Aware of the danger of reifying theoretical concepts, and as a researcher adhering to cultural-historical analysis, I am interested therefore in constructs that are consistent with natural and cultural-historical evolution (i.e., why and how practices and the concepts that describe them have emerged). I am not interested in Whig history or science—which after the fact explicate history teleologically, drawing on the present-day situation as a resource for explicating our situation—this is circular reasoning. Theorizing needs to take the reverse trajectory, beginning with plausible states in evolution and cultural history and explicate how, given actual resources, present-day concepts and situations could have emerged—much in the same way and method Karl Marx showed how capitalist markets might have evolved from early forms of divisions of labor and bartering (exchanging cloth or grain for a coat). For example, when using concepts such as *responsibility* and *solidarity*, I am not interested in simply using these terms because the English language makes them available as discursive resources, but I am interested in investigating them categorically and how they might have arisen in and during anthropogenesis and subsequent cultural history. Phenomenology—a form of praxis used to get at the very conditions that allow phenomena to exist for human consciousness by bracketing their appearances in human consciousness—has shown to be perfectly suited to establish the beginnings of Being and consciousness. However, given the problems that the father of modern phenomenology Edmund Husserl encountered late in his work and right up to his death in establishing a science of the “I” (egology), recent forms of phenomenology embody a dialectical or postdialectical dimension that is necessary to go beyond the self-positing mind central to the work of Descartes or Immanuel Kant and his modern followers Jean Piaget and the (radical) constructivists. 105

Prior to anthropogenesis, (pre-, early) humans did not have the language required for self-reflexive (theoretical) consciousness and awareness—they may have communicated, much as humans do today, in and for praxis, but they did not do so *about* praxis. Language provides new means to life, as it makes possible the exposing of plural singularity that is Being. Consciousness generally and the awareness for selfhood and otherness have emerged from an undifferentiated *With* that gave birth to the “I” and the “We,” Self and Other: There is no “meaning” except by virtue of a self. But there cannot be self except by virtue of a with, which, in fact, structures it. More so, prior to any “me” and “you,” self and other are like a we that is neither a collective subject nor intersubjectivity. Rather it is the immediate mediation of being in, for, and with 115

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(it)self, a *plural* fold of the origin. Precisely because this *With* was undifferentiated and preconscious, it has become inaccessible in the same way that our own preconscious baby–parent transactions become inaccessible to us once we are conscious—unless of course we are followers of psychoanalysis, which aims at penetrating the pre- and subconscious. (What I denote by the term *With* is not concrete like an object but more a pointer toward something in the same way early explorers may have pointed toward *terra incognita* beyond the horizon without knowing what it is and what it looks like.) For the French philosophers Jean-Luc Nancy, as for Emmanuel Levinas, this *With* is coextensive with *proximity*, which is necessary for the differentiation of *With* into Self and Other, but the experience of which is inaccessible to consciousness. This inaccessibility of the origins (to phenomenological study) leads, in the postmodern literature, to the trope of the disappeared father. This sharing of the common origin is the source of ontological solidarity, substituting for the father, in another familial relation. This thematic therefore is both Freudian and Christian. 120

In replacement of the “disappeared father,” another familial relation becomes central to the human condition: *fraternity*, as in the motto of the French revolution, *liberté, égalité, fraternité*. Fraternity is a core part of this trinity that defines (French) democratic values, deriving from the very fact that Fraternity is *equality* in the sharing of the incommensurable” (my emphasis). It is an important concept for understanding democracy and democratic values, because it denotes (i.e., points to) and names community, the common, the sharing of the incommensurable freedom or equality of each and every one. Fraternity therefore also is tied to equality, itself a form of denoting *solidarity*, the sharing of something that is the same and without holes. Fraternity also is linked to ethics, because of a responsibility for the other. 125 Q1

Ontological solidarity derives from, and arises on the basis of, this situation, whereby humanity as a whole generally and each individual human being specifically is part of the condition for each individual life (consciousness), and conversely, each individual is the condition for (realization of) anything like humanity to become possible. The idea of this originary equality obliquely points to a moment in history that Australian aboriginals call *Dreamtime*, the time of the undifferentiated *With*, literally the ground of solidarity, the time of no spaces and differentiation between *I*, *You*, and *We*. Ontological solidarity, in the same way as ontological responsibility, is not a question of wanting to be or producing something we shall have in common, but it is the very ground for any *human* action to emerge, make sense, and therefore to be shared. 135

There is no intention that brought about this solidarity: In some ways we are radically passive to our own nature, culturally and historically, having evolved in and through praxis that preceded all consciousness and is its (consciousness) very condition. The Ur-form of solidarity evolved without humans intending it, and when early humans found themselves speaking a language allowing them to reflect on their praxis (again passivity!), they also found themselves united in their *common* interest, in solidarity: By participating in the collective struggle, they enhanced their individual struggles to meet fundamental needs. Language, a collective phenomenon, played an important role in this early development and in reflective understanding, because—from cultural-historical (i.e., Lev S. Vygotsky, Mikhail M. Bakhtin), hermeneutic, and ethnomethodological perspectives—we (humans) could not talk *about* something unless we already understood (elementary, tacit understanding of how the world works rather than understanding that has evolved through interpretive processes that seek explanation) this something in and through forms of praxis. 145 150 155 160

Most philosophical approaches, as Karl Marx realized in his First Thesis on Ludwig Feuerbach, are problematic because they take the thing, reality, and sensuousness (including human praxis) as an object of and for contemplation rather than as subjective sensuous human activity, praxis. It is therefore necessary to engage in the phenomenological reduction to analyze the conditions for the concept of solidarity to emerge. To produce and contribute to the realization of interactional solidarity there already has to be a form of ontological solidarity that grounds it. Interactional solidarity therefore cannot be a ground, an ontological concept. 165

In contrast, a cultural-historical analysis begins with ontological solidarity and then shows how, with consciousness, it unfolded and differentiated—in a process of ascension from the abstract to the concrete—into a variety of life forms and forms of human praxis, which in turn gave rise to (philosophical) concepts, ideas of democracy, and the formation of democratic states from the reflexive relationship between forms of life and symbolic means to denote and talk about it. On an evolutionary level, the formation of bands (prides, hordes, swarms, tribes) has had advantages even though the consciousness required for understanding band-formation in a reflexive way did not yet exist at the time. It is in, and on the grounds of, such bands that anthropomorphosis realized itself with a concomitant emergence of individual | collective consciousness. These bands became the very resource for pre-humans to leave the safety of the forests and to wander onto the savannah (of East Africa) where existing forms of division of labor—such as practiced during hunting—progressively led to the further separation of different tasks at the group level. Some came to be—to draw on Alexei Nikolaevich Leont’ev’s widely cited example—hunters, others beaters, while eventually still others stayed back and specialized in the making of hunting tools, which they exchanged for food. Underlying these early forms of division of labor were *common* rather than partial interests, the survival of the collective, which guaranteed the survival of the individual and its need satisfaction. As long as the collective survived, which was possible through the contributions individuals made, the individual in turn could meet his or her basic needs (safety, food). Tools were produced for the collaborative hunt, which in turn provided the food for the band (collective) as a whole. Ontological solidarity—and, with it, the associated ontological responsibility—is not something that was added by humanity onto itself, something (pre-) humans practiced to feel good, but it was the very condition for the existence of humanity to emerge, and therefore can be affirmed (in affirmation or its negative, denial). 170 175 180 185 190

### III

The common notion of solidarity is different from what I am addressing here ~~and in the feature article~~. Thus, even conflict (arguing over something) could not occur if there was not a common base that could have served to bring off a conflictual situation *as* conflictual situation—for example, *arguing* over who should get (deserves) more meat or nuts. There was no language. The one that emerged is grounded in the originary *With*; from here, fatherless, language simultaneously emerged for *all* those who produced and heard the first human utterance—the word, Vygotsky quoting Ludwig Feuerbach suggested, is absolutely impossible for one person but always and already is and becomes a reality for two or more persons. The problem with labor solidarity and other solidarity movements for special purposes comes from the fact that these forms of solidarity simply pit the interests of one group (social class) against the interests of 195 200

another, and, often, against the group (labor class) itself—for example, when unionized individuals go on strike they may hurt the stock values of the companies in which their retirement plans have invested. These forms of solidarity serve to bond those within a certain boundary against those that are to be on its outside. This solidarity serves strategic purposes, which undermines the very notion of solidarity. 205

Such forms of solidarity do not exist only in labor movements and social class conflicts. In schools, there is a phenomenon that resembles class solidarity, when students organize themselves to be able to oppose the official institutional structures that confer certain powers to teachers. Again, the community that forms exhibits a certain form of solidarity that momentarily arises to realize partial interests against the interests of others; emancipatory partial interests are no better than other, ruling partial interests even though they are directed against the very institution that leads to the suppression of students from certain social classes by reproducing the very societal structures that underlie the inequities at hand. The central function of the solidarity among students is the sublation of the isolation that derives from individual assessment and the competitive struggle for advantages it may give rise to. This solidarity expresses itself, for example, in the well-known phenomenon (especially among working-class students) of letting others copy homework or answers during an examination, in opposition to the behavior of more competitively minded students (often middle class) who protect their answers from being copied for the purpose of coming out on top. The solidarity leads to a sense of *We* that is opposed to the *one* of the teacher. (I still remember how all the different maneuvers *We* enacted to disrupt history class during ninth grade, where we had a particularly oppressive teacher: When he asked for an explanation of *Our* rude behavior, I got up and explained that “facing an unjust dominating power, *the people* tend to engage in guerilla warfare.” This solidarity, however, did not assist anyone, as it simply pitted the teacher’s interest and power against our interests and subversion. We had innumerable tactics to disrupt class, including alarm clocks placed in a map stand that went off during class, door handles that came loose when pulled, doors that fell because we had taken them off the hinges, thumbtacks on the teacher’s chair on which he took a painful seat.) 210 215 220 225 230

The ideology underlying special interests also leads to the formation of the police force, which enrolls many working-class people to control the working class. The police—which the French call the *force de l’ordre* (literally, “force of the order”) even though it may be an illegitimate or oppressive order (Pinochet, Hitler)—violently suppress demonstrations and thereby suppress the very class that most of their members derive from and that defines their families and friends. The police, therefore, play into the hand of the ruling orders and classes rather than supporting the struggle of those parts of society from which many lower ranked police come. The form of schooling as we know it today contributes to this structure as it produces individualism and thereby plays into the hands of the ruling relations, because its intent is the stratification of society. Schools emerged with the formalization of the training of army personnel. By means of a system of points, attributed for academic and other achievements, students came to be hierarchically ordered, whereby those with most points became officers whereas those with the least points came to occupy the ranks of simple soldiers (police, prison wardens). The very idea of schooling, therefore, contravenes fraternity and equality, because the differential ranks lead to differential distribution of goods beyond the basic needs (shelter, food, safety, health). It is not surprising, therefore, that middle-class students do as well as they do in schools, whereas working-class students, with a very different ethos, do much less well as a whole: Working-class students 235 240 245

tend to organize in and are committed to an “egalitarian and solidary peer society” that is in conflict with the corporate culture of the school, whereas middle-class students are committed to hierarchical forms of organizations that articulate well with the reigning adult authority structure, the ruling relations, and their norms of upward mobility. 250

This provides us an indication for dealing with the question some scholars ask concerning the boundaries of “solidarity-building interaction rituals.” If there are boundaries around solidarity, it always means that partial interests are shored up against other partial interests, a conflict and distinction that constitutes an altar on which *common* interests come to be sacrificed. When I refer to solidarity, I am interested in the interests *common* to society (humanity) as a whole, rather than in the partial interests of one group over those of another. (Etymologically, common may derive from Lat. *com-*, together [with], and *unus*, one or *munis*, bound together, exhibiting the essential link between the common and solidarity.) It is quite clear that partial interests are common within the group not because of their inner content—that which it really has in common (the *solidus*)—but which is common only because of the greater likelihood of getting it come out on the top in the mix of mutually incommensurable partial interests. The commonality that underlies such “sectarian” solidarity is random and of an external (rather than inner) nature. This is not a good foundation of solidarity, the pursuit of *common* interests, which are common because they pertain to *all* human beings. The relationships within such solidary groups are of instrumental nature, and therefore may be cancelled at any instance in the pursuit of other instrumental relations: The same person suddenly may be found on the side of a previous opponent concerning a particular issue. 255

Instrumental relations—such as those among and between teachers or students—give rise to particular emotional qualities, including insecurity, anxiety, ambiguity; other emotional qualities are gratefulness (if I truly served common interests, why should I need to be grateful to another for something that is identical to my own interests?). Feelings and emotions cannot only be had but also shown—they therefore can be used to penalize/punish and reward another (“teacher’s pet”). In instrumental relations, emotionality in the engagement with others is produced for the sole purpose of distinguishing insiders (to whom positive emotional energy is conferred) from outsiders, from whom emotional energy is drained. 265

#### IV

There is a lot in the thinking of Vygotsky and Bakhtin that matches the phenomenological and sociological literature that I am drawing on. One might ask why such similarities exist? This question brings up for me a recent article in which I presented what happens when the term “commodity” in Marx’s *Das Kapital (Capital)* is replaced by the concept “sign” and each concrete example of a commodity is replaced by a concrete example of a sign. It turns out that this turns Marx’s work into a text that bears substantial family resemblance with the texts that recent (French) hermeneutic philosophers (e.g., Paul Ricœur) and postmodern philosophers (e.g., Jacques Derrida) have produced. Whereas this result is interesting, there is an even more interesting question. Why would or should these texts be similar? While working on that article, I was looking for some underlying assumptions that are shared between the two approaches to thinking and theorizing, that is, I was seeking to reduce—in the sense of phenomenological reduction—the phenomenon of similarity to a deeper structure that expressed itself similarly and 280

differently (in one-sided ways) on the surface. The same kind of phenomenon may be at work in 290  
 the present instance, as Vygotsky and Bakhtin, adhering to the dialectical method that they have  
 come to know through the works of G.W.F. Hegel and Karl Marx, also underlies the method  
 philosophers such as Paul Ricœur and Jacques Derrida, who have been familiar with these  
 works and have deployed in their own singular ways (not always in the same way). My hunch is,  
 though this awaits a confirmation through detailed analysis, that the same (similar) materialist 295  
 dialectical form of thinking/philosophizing underlies all these authors.

In many places, my personal copy of Mikhail Bakhtin's *Toward the Philosophy of the Act*  
 contains highlighted text and references to the work of Jean-Luc Nancy (as well as Paul  
 Ricœur), whose work in turn is central to some of the texts Jacques Derrida produced and that  
 have in mind here. For example, the cultural-historical perspective on action and culture, in 300  
 which the latter goes beyond the practices (patterned actions) and artifacts that actually can be  
 observed, resonates with the perspective articulated by the philosopher of the act: My own life  
 turns out to be the life of a human being in general. My life is but a concrete and singular realiza-  
 tion of life in general, which, in and through my life and the life of other (fellow) humans,  
 nevertheless is concrete. Culture in general, and personal identity in particular, always consti- 305  
 tutes a concrete realization of possibilities that already exist.

The idea of non-alibi in Being, which is constitutive of responsibility for the other, ties to the  
 thinking of Emmanuel Levinas, who links our (constitutive members of Being) presence in the  
 world to the being of others, and therefore to ethics. In fact, there frequently is a stunning family  
 resemblance in the language both philosophers use—which, in their English translations at least, 310  
 in part may derive from the common era when the translations were produced. Both Bakhtin and  
 Levinas make each individual the precondition of all other individuals, as singular in a plurality  
 of singulars, *partes extra partes*, which grounds our solidarity and responsibility for one  
 another: Because I am part the precondition of the other, as he or she is part of the precondition  
 that allow me to be me, there is responsibility. The *partes extra partes* concept may actually be a 315  
 much stronger foundation for ethics than the notions of fraternity and neighbor. Pure ethics, to  
 paraphrase Jacques Derrida, begins with respectable dignity of and for the other as the absolute  
*unlike*. I understand this in the same way that I understand the nature of partial interests founded  
 on the formation of a group with common but partial interests. Beginning ethics with the idea of  
 neighborly or brotherly commonalities and love spells the death for all ethical aims, which 320  
 for Paul Ricœur is defined something like the aim of a good life with and for others in just insti-  
 tutions. There therefore is an understanding common to the philosophers I mention here that  
 utilitarian relations based on the idea of sameness and similarity captured in the notions of  
 brother, neighbor, friend, or comrade. *Common* interests (to humanity) are inconsistent with  
*special* and *partial* interests that underlie and are used to constitute the special relations. If 325  
 concepts such as fraternity are retained, they need to be understood apart from familial relation  
 and aside from every sentimental connotation.

The same singular plural (*partes-extra-partes*) perspective can be found throughout the  
*Philosophy of the Act*, such as when the philosopher articulates difference as the starting point of  
 understanding: There are as many different worlds of the event as there are individual centers of 330  
 answerability. Bakhtin not only draws on the image of the face, which is central to the writing  
 of Levinas as the epitomic sign of the Other, but also articulates a singular plural perspective  
 found in the Jean-Luc Nancy's ideas about language as exposing of plural singularity, which  
 entails a particular form of ethics.



Nancy uses the same notion of place, or rather, *position*, to produce conjugations that lead us to a better understanding of the individual and its relation to the collective: Each singular position, from which we view and understand the world, is associated with pre-positions, sup-positions, pre-sup-positions, ex-positions, dis-position (in its polysemy, both different position and the natural tendency or bent of the mind, esp. in relation to moral or social qualities, and so on. But long before Nancy, the Russian philosopher already thought that *everyone* occupies a unique and never-repeatable place, *any* human being is singular. This place cannot be taken by someone else, is completely singular (such as one part of a stone cannot take the place of another part of the same stone, i.e., *partes extra partes*), and it is around this singular once-occurrent position that all once-occurrent Being is arranged in a once-occurrent and never-repeatable manner; where this fact becomes a center of answerability. Our ethico-moral responsibility, for Bakhtin, therefore derives from our participation in the world in its entirety, our constitutive relation in and of the world as a whole, and therefore, of all other beings that take similarly singular positions (as the different, indistinguishable yet distinguishable regions of the same stone).

This singularity in Being particularizes and concretizes (general, cultural) action possibilities into real deeds. That is, the ethico-moral nature of the human life form comes with the plural singularity (multiplicity) of Being. From this plural singularity derives the emotional moment of life, as participative and unindifferent thinking. This singularity is associated with equality (*partes extra partes*), because a priori there is no difference between the different positions that mediates Being and beings, that is, ontology (Gr.  $\equiv \text{ὄν, ἄν}$  [on], being). Singular plural entities are constitutive of one another, and therefore responsible for the other prior to all consciousness. This singular plural nature derives from the originary *With* that precedes individual/collective consciousness, and therefore all understanding of Self and Other.

One of the main issues education research has wrestled with over the past two decades since I began contributing to the field is the nature of subjectivity in the face of the desire to derive objective knowledge. The positions of Bakhtin, Nancy, and Levinas underscore the radically (inter) subjective nature of Being. But rather than a weakness, this radical subjectivity—radical because ontological—is a strength, is the very source of the objectivity of knowledge. For Nancy, too, singularity and the subjectivity that comes with it are not a weakness but the very essence—if there is such—of Being and meaning, as evident from ~~this~~ quote concerning singularity that shares so much family resemblance with the writing of Bakhtin. Meaning is multiplicitous in nature, deriving from the large and possible infinite singularities, constituting the origins of meaning (note the plural of “origin” but singular of “meaning”), which orient us back to Bakhtin’s “centers of answerability.”

The *ought* and the “centers of answerability” are topics of moral philosophy. The specific subject of moral philosophy—which deals with issues such as responsibility, equity, and so on—is the once-occurrent world in which acting consciousness orients its acts on the basis of its singular participation through concrete action (praxis): Wise judgment simultaneously determines rule and case by grasping the full singularity of a given situation. That is, moral philosophy is about concrete acts that constitute the “concrete architectonic” of the plural singular world as it presents (gives) itself to us—the multiple centers of answerability, origins of meaning—in our everyday lives, at home and at work, rather than an abstract scheme. This has the consequence that all values, be they spatiotemporal or related to sense content, are organized around the three central emotional-volitional moments: the I, the other, and the I-for-the-other.

Again, the Russian philosopher anticipates subsequent thinkers who relate position and proximity to the self-other relation and responsibility. The very nature of subjectivity—that is, the very nature of the human psyche—takes this structure of being-for-the-other. 380

This one-for-the-other structure (i.e., solidarity), although it is the foundation of the theory, is not to be understood as a commitment or as sentiment, as something that I may or may not enact and feel. This commitment already exists, it is presupposed in the theoretical consciousness. 385  
Without such an assumption, commitment would amount to an element in a simple, mechanical and logic determinism. To Levinas, the one-for-the-other structure means non-indifference: This non-indifference to the other as other and as neighbor, this solidarity, which is symmetrical, is beyond any and all conscious and intentional commitment.

## V

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A key concern in my recent writings is to aim at a different form of thinking, which is not easy to appropriate because so different from the commonsense thinking that characterizes much of Western culture. This different approach thinks difference in and for itself. One of the central difficulties with understanding philosophers of difference such as Derrida, Levinas, Nancy, and others precisely derives from the fact that they do think in very different ways: For example, 395  
they do not begin with the assumption of the self-identity of some phenomenon or concept but, on the contrary, take difference to be the starting point of thinking. Taking difference as the norm and sameness as a constructed exception is the only way to think difference for itself rather than as a deviation from the same—as has been done in much in classical thought where  $A \neq B$  because, expressed in terms of a Venn diagram, it lay outside the circle the interior of 400  
which identifies the A. (Rather than talking about individuals with different abilities, everyday lay and professional talk frequently highlights *disabilities* [Lat. *di[r, s.f]*-, two, used in the sense of negation], *misconceptions* [Germanic, *mis*-, different], *deficiencies*, *abnormalities*, *disorders* [as in ADHD].) We do not advance theoretically if we think difference as the negation of a concept or term, as G.W.F Hegel did, because we still think B in terms of A rather than in and 405  
for itself. We get a good handle on difference only when we think it for itself, difference as such, which begins with the thing itself that no longer is self-identical (i.e.,  $A \neq A$ ). To make a difference, we have to think difference differently, as an originary condition, and therefore common to us all. That is, human beings have in common that they have nothing in common.

Ultimately, my own recent theoretical interests have been devoted to establishing forms of 410  
thinking science education, learning, and cognition in terms of difference in and for itself, which is somewhat akin to thinking in terms of dialectics yet different from the latter because the former does not make the mistake of thinking difference in terms of negation ( $B = \neg A$ ). This form of thinking is important to me because it assists me in overcoming the limitations of traditional models of cognition—information processing, constructivism, conceptual change— 415  
singularly oriented toward intentional (explicit) learning. Such a form of thinking is required to overcome any aporia that has a chicken-and-egg problem structure. For example, solidarity requires the individual | collective dialectic, but the individual | collective dialectic can emerge only within ontological solidarity. To escape this aporia, some form of breaking mechanism is required which takes us out of a simple mechanical and deterministic problem–solution cycle. 420  
(A useful analogy for me resides in the arborization of the solution space of chaotic systems

when a key parameter is increased, which allows a one-state system to become a two-state system once a singularity has been traversed.)

In past education research, knowing, thinking, and learning were reduced to the implementation of simple or complex algorithm—a student says, writes, or does something *because . . .*, followed by a statement of the concepts, factual knowledge, and procedural knowledge employed. (Others, especially those in the conceptual change paradigm use “analogies,” “learning paths,” and “discrepant events” to implement other forms of algorithms.) Such algorithms, however, do not require decision making in the true sense, because the decision already is given and determined by the conditions, the givens, the procedural knowledge, and so on. To treat decisions for what they truly are, however, these cannot be thought as if *determined* by and from existing conditions (analogies, knowledge, learning paths, etc.). If it were thus, we would not need to *make* a decision, it would already be inscribed in the situation and could be derived mechanically from the premises. The verb “to decide” has its etymological origins in the Latin *dēcidēre*, a combination of *de-*, off, and *cādēre*, to cut. It literally means to cut off one or more action possibilities by giving victory to one side. Immortalized in Robert Frost’s poem “The Road Not Taken,” a decision means that we cannot travel both roads but have to take one even though “both that morning equally lay/ In leaves no step had trodden black.” A good example of this way of thinking about thinking lies in the problem of forgiveness. Thus, if one forgives the forgivable, then there is nothing to it, there is no problem at all. There cannot be forgiveness when one is asked to forgive the forgivable. Forgiving the forgivable can be done in a mechanical way, whereas forgiving the unforgivable, which cannot be prescribed, truly demands an (ethical) decision. To truly forgive, we have to forgive the unforgivable and imprescribable. In a similar way, there cannot be true democracy unless the very conditions exist that mean the end of democracy.

While writing this editorial I asked myself about the nature of democracy and how we get there—from, for example, the nondemocratic organization of schooling to which there are only few exceptions (e.g., *Lycée autogéré de Paris* [LAP], an alternative, self-administered high school where teachers and students make collective decisions about everything and do all jobs including purchasing food, cooking, cleaning the school, secretarial functions, etc.). A fleeting thought of the *democracy to come* arose, and I remembered having encountered this idea in one of Jacques Derrida’s books, written in a language that maintained and celebrated the fundamentally dialectical and irresolvable aporias of the very idea of democracy. A true democracy presupposes itself and encompasses its own destruction, precisely because of the openness of democracy to ideas that are contrary to itself. This is why we need the input of all, without ifs, buts, and whys. Students must be involved in collective decision making about learning and teaching, and for this to work solidarity is required, the pursuit of *common* goals and interests rather than that of partial interests. As with democracy, bringing students into the dialogue about curriculum design may harbor dangers. We do not have to go far back in history to encounter the situation of a post–World War I Germany, which democratically elected a government that turned out to be the worst human kind had ever seen. Solidarity, too, can be used to destroy solidarity, such as when special interests are confronted with one another. On the other hand, we have witnessed the futile attempts of the U.S. government to implement Western-style democracies in Afghanistan and Iraq only to fail miserably. One of the reasons why post–World War II Germany was a success was that it already has had a democratic tradition that had been hijacked for a dozen years (much less than the 1,000 years its main protagonists wanted to last the Reich).

Finally, I provide a third brief answer to the question why I am interested in ontological questions that entail ethico-moral dimensions of life generally and in science classroom more specifically. It should be clear to readers from the present text that my approach is holistic, attempting to understand the phenomena of knowing, learning, and teaching without parceling out emotions, motivations, interests, abilities, social situations, and other aspects that some theorists relate in internal and external causal relations. From a cultural-historical perspective in the tradition of Hegel, Marx, Leont'ev, and Holzkamp, all these relations are external because they relate what has been broken out of a whole and turned into an *element* based on some (measurable) characteristic. These relations are external precisely because they associate properties, one-sided expressions of whole phenomena, rather than establishing inner relations between moments that cannot be understood apart from one another and apart from the whole.