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White historical activity theory: toward a critical understanding of white zones of proximal development

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ABSTRACT

Best known for arguing that individual development is part of social and historical development Vygotsky's entry into education may be captured by his concept of the 'zone of proximal development' (ZPD). ZPD has not yet been synthesized with a critical study of whiteness. When ZPD is used to explain racial disparities in the service of inclusion, it is usually connected with the lives of people of color. This leaves out a critical understanding of racially dominant experiences, or whiteness. This article argues that a progressive union between Vygotsky and the field of race studies generally, Whiteness Studies specifically, benefits educators insofar as the concept of ZPD is applied to the particular ideological development of white identity. Likewise, Whiteness Studies gains an explanatory framework to account for the cognitive development of the dominant racial group, in short, a learning theory of whiteness. A Whiteness Studies intervention within Vygotskian theory pushes the limits of developmental theory when it analyzes the contours of a white ZPD. When racialized to consider whiteness, certain terms and concepts, such as Vygotsky's genotypic and phenotypic analyses, take on a different significance, even different meanings. As a racially sensitive framework, particularly within a US-based understanding, Vygotskian theory is limited without critical attention to the development of white identity and whiteness as an ideology. By focusing on this nexus, Vygotskian theory fulfills part of its historical mission as a concrete study of cultural relations.

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Introduction

Writing during a somewhat utopian moment in the post-revolutionary Soviet Union, Vygotsky's social psychology sought to articulate a learning theory that would build upon the ideals of the Bolshevik revolution and reframe individual development as a social phenomenon. While Vygotsky wrote in the 1920s and 30s, his work was forbidden and forced underground under Stalinist rule. His writings re-appeared in the 1970s when his ideas were translated globally by socio-linguists and educational theorists seeking to understand the social nature of thought and speech, learning and development (Blanck 1990; Kozulin 1986; Rosa and Montero 1990). Vygotsky's concept of the unit of activity took a central role in educational debates with the translation of *Mind in Society* (1978) in which he described his most generative concept, the zone of proximal development (ZPD). Vygotsky's contributions focused on breaking out of the individualism in extant psychological theories about identity,

preferring instead a sociocultural explanation of cognition and development (Wertsch 1991). This work has been elaborated in neo-Vygotskian research known as Cultural Historical Activity Theory (CHAT). Uptake of his ideas has often engaged notions of heterogeneity in learning activity, but thus far his ideas have not been synthesized with a critique of whiteness. Given that it would be difficult to neglect the ideology of whiteness within a US context, the project of re-interpreting Vygotsky is timely and pushes Vygotsky's theories toward fulfilling their promise of inclusivity in diverse social contexts.

In the US, Vygotsky is best known for his concept of the ZPD, which represents his social psychological contributions to theories of learning and development. Put simply, the ZPD represents an ideal spot in development where activity takes place in the space between what one can do individually and what one can achieve in collaboration with others, particularly with the help of what Vygotsky described as a more capable peer or teacher (Vygotsky 1978). He argued that all human thought, speech, and action is mediated by social, historical, and cultural tools (Vygotsky 1978, 1986). Vygotsky's genetic approach attempted to unearth the impact of history on individual actions, the ways that these histories are reified through education, and how the trajectories of these activity systems can be disrupted through the introduction of new tools.

Taking these insights as our beginning requires that Vygotsky's ideas be appropriated in the concrete and historical context of their application. In the US, this means that the powerful, if not dominant, social relation of race becomes the center of gravity for analyzing educational interactions. Specifically, the ideology of whiteness mediates individual and collective development. We define white supremacy as a socio-historical process that works to ensure white racial domination through various social institutions and through the maintenance of a white racial common sense (Leonardo 2013; Mills 1997). As a structure, white domination involves every aspect of education, from policy formation (Gillborn 2005; Leonardo 2007), to teacher development and teacher education programs (Matias 2015; Sleeter 1993), and disciplinary actions (Ferguson 2001; Parker and Stovall 2004). The supremacy of whites in almost all aspects of US schooling is not indomitable, as shown by multiculturalism's success in reforming curriculum at the national level (Banks 2006). But racial progress is coupled with racial retrenchment at the level of whites' informal attitudes and orientations (e.g., everyday racism) as well as white resentment at the national level of governance (e.g., immigration policies). In the colorblind era, these patterns of 'new racism' are becoming increasingly difficult to detect, framed as they are in race-neutral or post-racial language (Bonilla-Silva 2005). This being the case, analysis of white supremacy necessitates critical understanding of white individual development, which is part of white collective development. A learning theory of whiteness goes a long way to explain *white mind in society*, or the racial context in which US schools find themselves. It illuminates the process whereby whites learn to be white in the first place, how they cognize in light of maintaining racial interests, and the contradictions educators face when confronting the specificities of the white ZPD. Accounting for whites' social development represents a blind spot in theories of democratic education because whiteness represents precisely the ideology that threatens inclusion at the same time that inclusion is that which threatens the dominance of whiteness.

Profoundly influenced by Marx's materialist sociology (Rosa and Montero 1990), Vygotsky's theory of cognition is a theory of the whole, not unlike Lukács (1971) Hegelian emphasis on 'totality' within Marxist theory. While our task is not to take up Vygotsky's Marxism, we build upon his insistence on the inseparability of the individual from the socio-historical context. In this sense, Vygotsky's conceptual Marxism aids our argument while not occupying its center. Vygotsky believed that individual development is socially mediated and therefore supra-individual. We contribute a learning theory within the field of Whiteness Studies, which benefits from a more fully developed theory of cognition already central to Vygotskian theory. We believe this marriage represents previously untapped possibilities for inclusion and democratic learning in the field of education.

As Engeström (2001) explains, one of the principles of Vygotskian activity theory recognizes the multi-voiced activity system that is always a place where 'multiple points of view, traditions and interests' (136) come into play. That said, neo-Vygotskians in CHAT have taken up notions of culture,

but have not reconciled Vygotsky's theories with a robust theory of race, specifically whiteness. When Vygotsky is invoked for the service of understanding racialized contexts, he is used to illuminate the socio-cultural world of students of color, usually to promote cultural and linguistic diversity as an asset (Gutierrez 2000; Lee 2000). This line of appropriation has much to recommend it, for which Moll's (2001) work has been exemplar. However, we would like to take Vygotsky's insights into a new direction. By neglecting the development of students within the condition of whiteness, this set of empirical and theoretical research brackets what is arguably the most dominant ideological as well as material force in multiracial societies like the US. Inclusion in this context faces the daunting task of countering the force of globalized whiteness (Allen 2002; Leonardo 2002), whose power cannot be underestimated.

Overlooking the dominant force of whiteness within the social context of schooling limits the intellectual reach of Vygotsky's sociocultural theory. At worst, turning a blind eye to whiteness leaves Vygotskian theory vulnerable to criticisms of neglecting a cherished idea within the framework itself, or placing an individual's development within a larger historical process. We argue that marrying Vygotsky with race theory and a critical study of whiteness reinvents him for the purpose of applying his theory to the special circumstances in which educators find themselves, a point on which he consistently insisted (cf. Freire 1993). In forging a critique of whiteness with Vygotsky's theories, we interpret his ideas within a White Historical Activity System (WHAT) to understand better white social and cognitive development and in turn contribute a thoroughgoing learning theory currently absent in the study of whiteness.

The ZPD centers on socially mediated activities. If Vygotsky argues that children develop as a result of 'enculturation into the practices of society; through the acquisition of society's technology, its signs and tools; through education in all its forms' (Moll 1990, 1) then how do these theories play out when we understand the signs and tools of society as racial, which are driven (not determined) by the exclusionary power of whiteness? This necessitates a sensibility to white development yet to be seen in appropriations of Vygotsky. This intervention highlights two important features. First, white identities are not pre-determined or given but instead are forged within concrete social conditions; and second, if white identities result from context-specific processes, then outcomes may change based on educators' understanding of cultural mediation (Cole 1996), or their recognition that they are simultaneously products and producers of race.

We take as a given that global white supremacy has structurally shaped history, politics, and economics; but using Vygotsky's insights, we also analyze how whiteness functions as a sign system (Vygotsky 1986; Wertsch 2007) that organizes our experiences of the world. As a meaning system, whiteness acts as a socially reinforced intermediary between stimulus and response, or an event and one's experience of it, thereby affecting the relationship between individuals and their environment (Vygotsky 1978, 39). Whiteness is a sign system perpetuated through schooling and often presented as the only sign system appropriate for mediating social interactions in a white-dominant context (Gillborn 2008; Howard 1999; Leonardo 2009; McIntyre 1997; Sheets 2000; Sleeter 1993, 2011; Vaught 2011; Wise 2007). Beginning with the central assumption of Vygotsky's work – that individual development exists in a dialectical relationship with the social context – the Vygotskian project achieves further significance when it confronts the force of whiteness as the dominant social structure in the US.

Phenotypic vs genotypic analysis

Vygotsky's theory of development attempts to lay the groundwork for a scientific understanding of the social and cultural forms that identity takes. For this, he relies on critical distinctions between real relations that inform and influence identity as opposed to those that reify or mystify it. Vygotsky's materialist perspective traces the origins of identity to their historical roots, summed up by his contention that the 'psychological development of humans is part of the general historical development of our species and must be so understood' (1978, 60). His concern is not the atomic individual but rather the socially constituted one. In one stroke, he affirms the historical make up of the individual without

reducing history to the will of individuals. It also means that while he targets identity development, it is not a portrait of the self divorced from social processes, which in Vygotsky's context is a nod to the mode of production or a critique of the political economy. Following a dialectical approach, he writes that:

[n]aturalism in historical analysis, according to Engels, manifests itself in the assumption that only nature affects human beings and only natural conditions determine historical development. The dialectical approach, while admitting the influence of nature on man, asserts that man, in turn, affects nature and creates through his changes in nature new natural conditions for his existence. (60)

For Vygotsky, the individual and social, while conceptually distinct and separable for purposes of study, are part of a whole that is itself indivisible.

A proper science of learning is then the unveiling of the relationship between an individual and his social moorings. Seen this way, history is not something that merely happens to a person but neither is it something that an individual makes happen through sheer will (see also Althusser 1976). In Vygotsky's framework, history is forged within a social activity system and education is the material process that reconciles its contradictions. Education is then part of the historical process, the pedagogical dimension of politics. Writ large, this system refers to the productive relations, which in his context was the revolutionary supplanting of Russian feudalism with Soviet communism through the Bolshevik revolution. In the US, this system is arguably the racial formation, which introduced a racialized humanism for the benefit of whites (Omi and Winant 2015). Vygotsky is clear that the dialectical movement of change is the method he prefers, arguing that personal evolution is part of an ongoing social revolution. Arguing that a new society requires a continually evolving (i.e., revolutionary) pedagogy, Vygotsky insisted on a keen appreciation for the dynamic nature of social relations. As we argue below, the ossifying role of whiteness in US society is resistant to change and is precisely a perspective on the world that would prefer to forget race history.

Advancing Lenin's teaching, in which labor was the ultimate axis around which to organize political activity, Vygotsky argued that spontaneous student experience had to be organized through learning activities guided by scientific understanding. Au (2007) extrapolates:

Based on a reading of both Lenin's and Vygotsky's texts, it would seem that Vygotsky's conception of leadership in relation to the ZPD mirrors Lenin's conception of political leadership in relation to the development of revolutionary consciousness among workers. (288)

In a sense, Vygotsky continues Lenin's politics into the realm of education, making the political educational and the educational political (cf. Giroux 1988). These two levels of analysis form one overarching theory of society within the Marxist paradigm. Drawing a distinct line between ideological or pre-scientific thinking, and scientific thinking properly understood, Vygotsky distinguishes between 'phenotypic' vs 'genotypic' analysis, the former a study of forms, the latter one of substance. It is here where we find the first link between Vygotsky and race studies.

Using an example with animals, Vygotsky forms a radical separation between the real and real-like. Not unlike Lukács (1971), Vygotsky affirms Marxist science's ability to fight against reification, or the mystification of social processes into natural ones. In an elegant example, Vygotsky argues that whereas a whale's outer appearance takes the form of a fish, its substance is clearly mammal, closer to a deer or mouse than it is to a shark. A genotypic analysis is not a literal nod to studies of genetics, but of origins or the deep structure of existence. Thus, while a whale looks more like a shark, its structural essence is closer to a mouse. In terms of history, genotypic analysis explains its internal 'causal dynamic basis' (1978, 62) whereas phenotypic analysis captures only its effects and external processes. This theoretical position is typical of Marxism as a way to apprehend primary relations over secondary or ideological processes. An individual's development is said to proceed from this calculus, being a unique instance within a larger nexus but confirming the origin of personhood as a historical artifact.

Vygotsky's terminology is instructive for the study of race relations and the development of white socialization. Within race studies, it is a well-known fact that biological assumptions about race made it possible to assert white superiority and enforce black subordination and exclusion (Bonilla-Silva 2003). As a literal, phenotypic trait, white skin became a marker of all that Europeans could accomplish,

from science to the arts, while people marked by darker skin would be framed by a certain law of immutability, one denoting inferiority, which provided reason either to enslave, exclude, or socially marginalize them. In keeping with Vygotsky's analogy, it seems that white Europeans did not fully appreciate the fact that their bodily forms, while distinguishable from Africans and indigenous people, did not provide evidence of a radical species difference between whites and people of color. It would be simple to verify Vygotsky's theoretical import to argue that whites were involved in a certain kind of ideological thinking, which prevented them from accurately understanding their categorical mistake. This is true enough. But neither would it explain white domination turned into a veritable law of nature, justified through the science of its time, such as eugenics, which continues into the present through the fetish of racialized intelligence as documented by entrance exams and other standardized tests. This is racial ideology turned into a science. Vygotskian orthodoxy needs revision in order to account for race beyond its phenotypic status in his theory.

It would be convenient to discredit eugenics after the fact as bogus from the 'enlightened' standards of science today but eugenics was **the** science of its time. Normal science accepted the link between race and intelligence as natural (Stepan 1990), which continues into contemporary culture (see Hernnstein and Murray 1994). It would be rather creepy to measure the size of people's crania today, but it is completely acceptable to judge their intelligence based on standardized tests. It gives us pause to examine the amount of printer ink cartridge spilled to prove scientifically and with veracity the 'race effect' (Bonilla-Silva and Zuberi 2008; cf. Hernnstein and Murray 1994). In other words, although the whale and shark indeed represent different species, without their liquid environment, they both would perish as they drown in air. Similarly, although whites and people of color belong to the same species (in fact, resemble each other more closely than do the whale and mouse), appealing to science *simpliciter* does not explain whites' otherwise non-rational belief in their own superiority. It is made possible by the proverbial water of race relations under which whites and people of color labor, a social environment simultaneously obvious (race is everywhere) and opaque (its power is obscured by whiteness). It seems a scientific, genotypic analysis of race is superseded by the power of a phenotypic worldview, the stubborn fact of which exists alongside science and sometimes buttressed by it. Or as Warmington (2009) puts it, race is a 'mediating tool' and informs our sense-making decisions. It is less a matter of race's real or non-real status as a social relation but more about how it functions to motivate our behavior.

It would be difficult to argue against scientific thinking *in toto*. Leonardo (2009) asserts that race studies recruits science to provide portraits of whiteness and patterns of racial mistreatment of people of color. At stake in appropriating Vygotsky's theory for a critical study of white development is not whether genotypic analysis is preferable over a phenotypic one but finding the *proper relationship* between them in order to illuminate certain social problems and setting their limits, of determining both the real and invented aspects of race. Said another way, the ideological basis of race is in recursive relationship with its material effects. A social understanding of whiteness does not elevate science over ideology but, like grasping the whole, requires the ability to work on several planes wherein whiteness, as a learned perspective on the world, goes about its work. *In the realm of race relations, white consciousness is the phenotypic construction of the world* par excellence. For Vygotsky, consciousness is not an idealist practice relegated to mental cognition or ideation, but a social activity (cf. Volosinov 2006). For consciousness is precisely consciousness about the world that furnishes its raw material (Freire 1993). In the US, that world is constituted racially and whites act within the limits prescribed by the racial contract, or the ideological agreement among whites to misinterpret the world they have created (Mills 1997). As such, white consciousness is a form of racial labor to accomplish certain ends and its unscientific status notwithstanding, has fundamentally altered the direction and history of the world. By segregating all aspects of society, from knowledge to neighborhoods, whiteness makes exclusion the central, daily functioning of the activity system.

If educators wish to understand the social basis of race and whiteness, they may find a companion in Vygotsky's distinction between genotypic and phenotypic analysis but only by appropriating it for a destiny it did not set out for itself. Unconcerned with race even on the most superficial level,

Vygotsky must be racialized, which means using his general insights without their ultimate purpose of explaining the psychological component of Marxist thought. Within US sensibilities, phenotypic analysis explains how *appearance has become essence*, or the process whereby skin color is made meaningful and transformed to signify differential human worth. It is tempting to minimize this specious classification of humans into different species as simply false, but we would also fail to explain why it has persisted for several hundred years, accompanied by global consequences. This does not suggest valorizing phenotypic difference but that it would be difficult to dismiss it as simply the false and outward expression of a more accurate relation, such as class, because whites' racial interest is precisely what is at stake (Gillborn 2006). That is, an analysis of the existential complex of race, as Fanon (1967) might argue, cannot afford to denigrate the social indicator through which blacks experience their denigration and through which whites experience their elevation.

The politics of pigmentation symbolizes something deeper to be sure, such as power, recognition, and distribution of resources, but it is central, not incidental, to race relations. In fact, no skin-tone difference, no race relations as we know it. In a critical uptake of race and whiteness, it is helpful to distinguish between the real and non-real parts of race, its institutional-material reality as well as its invented dimensions. Genotypic analysis provides the conceptual apparatus for the first while phenotypic analysis gravitates toward the second.

Thinking and speaking in a white social system

While race is socially constructed, and not 'real' as a scientific classification system, it has real material and affective impact on people: the way they, think, speak, and act in the world. While whiteness is false (see Roediger 1994), it is nonetheless a dominant relation and dictates both the macro-structural and institutional arrangements of society and the micro-level of individual thinking and speech. Social interaction takes shape with the acquisition of language in children. For Vygotsky, language is:

... a dynamic system of meaning in which the affective and the intellectual unite. It shows that every idea contains a transmuted affective attitude toward the bit of reality to which it refers. (1986, 10)

In other words, there is no neutral language. The language that structures our thought is saturated with meanings that are thoroughly social and not generated by autonomous individuals (see Volosinov 2006). The affective relations that guide our social context are driven by the dominant, white racial formation. White attitudes and preferences masquerade as common sense and are embedded in the language we speak and through which we teach our children. These social values are then internalized in the process of socio-genetic development and shape identity formation (Holland and Lachicotte 2007). Race is made real, in part, through the dynamic systems of thinking and speech that reinforce the hegemonic racial values mediating people's interactions with the world.

Close examination of Vygotsky's theory of language illuminates some of the ways whiteness is made real and reproduced through our thought and speech in ways that legitimize the structures and economies of global white supremacy. It may also prove helpful in uncovering some of the ways that thought and language can be retooled in anti-racist learning spaces to disrupt the hegemony of whiteness. Vygotsky's *Thought and Language* (1986) engaged previous theories that considered thought and language (or thinking and speech as some have translated from the Russian title) as either one and the same, or completely separate functions. Both approaches failed to reveal the nuanced relationship between these functions and the way they operate dialectically in real social contexts. Vygotsky likened their false separation to understanding the properties of water by looking at hydrogen and oxygen separately (Vygotsky 1986). While applying Vygotsky's social theory of learning to contemporary educational contexts, failing to take into consideration race and whiteness might prove to be equally fruitless. To take Vygotsky's arguments seriously, we need to look closely at the dynamic interaction between thought and speech within the limit situation of whiteness.

Vygotsky's theory maintains that thought and language exist in a dynamic, social relationship and that the proper unit of analysis for examining this relationship is that of word-meaning. Not unlike

Volosinov (2006), Vygotsky wrestles meaning away from individuals as originators on one hand, and away from structuralism's lack of attention to history and context on the other. Words (as units of meaning) become sites of interplay between the individual and the social, where people learn to see through the categories and generalizations determined by their social context. Vygotsky explains that:

... a word does not refer to a single object, but to a group or to a class of objects. Each word is therefore already a generalization. Generalization is a verbal act of thought and reflects reality in quite another way than sensation and perception reflect it. (1986, 6)

Such generalizations are social in nature as people interacting, and children learning to communicate, speak through socially shared and situated structures of meaning (Lave and Wenger 1991). These generalizations include cultural attitudes and influence what is socially accepted in a white-dominant condition. We experience our world through affective relations that are sanctioned by our social context, such as the emotional investments that white teachers have for colorblind discourse in school settings (Schofield 2005).

Within this paradigm, speech is a 'mediating system' that facilitates social interaction. Vygotsky argued that there is no direct experience of the world, but rather all human experience is mediated through signs (Wertsch 2007). Given our understanding of language as white-dominated, we see thought and language as part of a sign system that is mediated by a white activity system. If all language is social, then all language is racial and communicates meaning according to the shifting regimes of whiteness. As a dynamic system, language assigns social meaning to the objects to which it refers. Meaning is socially driven and subject to change; yet it also reproduces a racial common sense as individuals put to use the historically white tools they are offered. This tendency toward reproduction can be understood through what Vygotsky called the 'characteristic of reverse action' whereby signs dictate the relationships between stimulus and response and act upon the individual, but not upon the environment (1978, 39). Vygotsky explains how this reverse action changes the course of individual development: 'The use of signs leads humans to a specific structure of behavior that breaks away from biological development and creates new forms of a culturally-based psychological process' (p. 40). This social meaning saturates thinking from the earliest stages of development, coloring the experiences and perceptions of children with social meaning from the outside in. While these meanings are not fixed or permanent, children inherit them. If they remain unquestioned, they tend to reproduce the exclusionary white structures they support.

Vygotsky (1986) argues that the tools of a people, whether physical or ideological, shape their development of both language and thought. For a contemporary analogy, race and its global system of white supremacy have become widely used tools that shape social relations and peoples' connection with the natural world. Vygotsky's theories suggest that these tools actually alter the human activity system and the thought and language that develop from it (Cole 1996). The mediating tools of whiteness have become the common sense embedded in everyday practice. Many behaviors ranging from where children sit in the school cafeteria (Tatum 1997) to those that warrant strict disciplining (Ferguson 2001) would not make complete sense without a proper understanding of racialization.

There is no pure, unmediated experience or direct relationship with the world. As Wertsch explains, 'our contact with the world is indirect or mediated by signs' (2007, 178). These mediating structures are inscribed by whiteness and support a hierarchical racial structure. Wertsch extends this premise to explain the social nature of development when he writes, '[I]t is because humans internalize forms of mediation provided by particular cultural, historical, and institutional forces that their mental functioning is socio-historically situated' (2007, 178). According to Vygotsky, there is no thinking and communicating outside of the social system that mediates our relationship with the world and with one another. As an implicit mediator on the levels of thought, language, and action, whiteness becomes the social filter through which meaning passes in order for it to be recognized publicly.

Using a Vygotskian framework, Van Ausdale and Feagin's (2001) engagement of race learning explains:

We human beings do not create our personal and social worlds out of nothing. We take the elements found in our social environments – what we call the tools from the social toolbox – and use them for our own purposes.

Indeed ... young children make use of social tools rather early in the stages of childhood. There are a limited number of social tools available for children as there are for adults, and few children invent entirely new tools of their own. (20)

There is no development that precludes these social tools and it is through the earliest practice with them that children begin to think and act racially. They are transformed from universal humans into specific, racialized ones. In this transformation, language plays a central role as children learn to answer to racial interpellation whereby they are hailed as racial beings to which they respond in order to be socially recognized.

Individual thought is nothing if not historical and social (Vygotsky 1986) and our entry into social interactions is bound by a racial contract (Mills 1997). Once thought and language develop, there is no perception outside of this mediating system, which does not suggest that existence could not be inscribed by other systems. In the US, the racialized social system powerfully constitutes students' subjectivity. There are no naturally white subjects, but subjects become white through a system that recognizes them as racialized beings. As such, social meanings are absorbed by children before they can actually understand the implications of the tools they inherit (Van Ausdale and Feagin 2001). In Vygotsky's phylogenetic analysis, social language precedes, and we argue *colors*, the development of individual, egocentric thought. These racial tools offered to children have a direct impact on their development.

Re-mediation: introducing new tools

Signs often do more than we intend or say more than we actually know about a subject (Wertsch 2007). Vygotsky believed that humans use signs that have social meaning before they actually grasp its significance. This is an important feature of being socialized into whiteness through language. Wertsch (2007) writes,

The standard situation in many instructional settings involves students' saying and doing things that they only partially understand. This raises what might appear to some to be a paradox of how it is possible to say more than one understands, but it makes sense if one recognizes that the material form of sign vehicles allows us to function at a level that is "out ahead" of our current mastery. (188)

In the US educational system, where a majority of teachers are white, teachers socialize children through a white-normed meaning system. This racial mediation is empowering for white students, who move along the axis of whiteness, and in turn enforce the assumed legitimacy of whiteness. For students of color and anti-racist white students, this learning promotes a veritable schizophrenia whereby the tools they are offered cannot solve the problems they perceive. They are not legible according to the terms of the racial contract (Mills 1997). They literally know too much.

If young people adopt a racialized vocabulary before they understand its implications, their development within an anti-racist paradigm actually hinges on a process of *unlearning* the racialized sign-system handed to them (Wertsch 2007, 186) and exploding the contradictions inherent in it. The meaning of this vocabulary is not fixed, rather Vygotsky argues that 'word meanings are dynamic rather than static formations. They change as the child develops' (Vygotsky 1986, 217). We propose using the tools found in a critical study of race and whiteness to disrupt the implicit racial mediators and to introduce new signs into the activity system (Wertsch 2007, 185). This naming of current tools interrogates what is considered 'out ahead' for children in schools. Moll (1990) writes that Vygotskian pedagogy 'produce[s] learning by facilitating new forms of mediation' (12). These new forms of mediation involve introducing new tools to solve existing problems.

Re-tooling for an anti-racist paradigm of thought and speech shifts the activity system and leads to different social outcomes. As Freire (1998) suggests, hopeful existence and social change depend upon invention of new tools

One cannot reread the world if one does not improve the old tools, if one does not reinvent them, if one does not learn to deal with the related parts within the whole one seeks to discover. Likewise, a new reading of my

world requires a new language—that of possibility, open to hope. ... It is difficult to maintain it, hard to reinforce it, but is impossible to exist without it. (272)

While meaning systems are often presented as static in schooling, they are in fact dynamic (Gutiérrez and Rogoff 2003) and as Wertsch (2007) explains ‘a hallmark of the relationship between sign and behavior, as well as between word and thought, is that it undergoes fundamental change’ (186). These changes are necessary in disrupting the ideology of whiteness that may shape-shift and incorporate changes in meaning without necessarily altering its dominant course of maintaining power relations as they are. Vygotsky’s social approach to learning and development begs critique of the tools children are provided and the markers that exist ‘out ahead’ of their current development. Vygotskian theories of thinking, speech, and development leave open a space for altering the trajectory of learning and leave room for the unlearning necessary to develop an anti-racist ZPD.

Unlearning and development: toward a critical understanding of white zones of proximal underdevelopment

Although not uncontroversial, it would be no exaggeration to argue that Vygotsky’s concept of the ZPD has become the favored entry point into his theory. The ZPD is:

... the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers ... functions that will mature tomorrow but are currently in an embryonic stage ... what a child can do with assistance today she will be able to do by herself tomorrow. (86–87; emphasis in original)

The ZPD describes a student’s learning potential within a community of practice (Lave and Wenger 1991). With the assistance of an assumed more capable peer, or the figure of the teacher, students advance through stages of cognition to realize their intellectual potential. The activity-centered environment challenges them to transcend their actual development as autonomous thinkers toward a collaborative social setting where ‘the only “good learning” is that which is in advance of development’ (Vygotsky 1978, 89).

The learning that takes place does not happen haphazardly but is part of the overall pedagogical plan set in motion by the educator within a limited set of conditions. Scaffolded by the teacher’s organization of classroom activities and objectives, children’s ZPD serves as the guiding principle, where ‘learning is a necessary and universal aspect of the process of developing culturally organized, specifically human, psychological functions’ (90). Not unlike Dewey (1938), whose instrumentalism valued the educational aims determined by students’ concrete life conditions, Vygotsky places learning squarely within the practical demands of life, not limited by them but as ‘limit situations’ (Freire 1993) to be transcended. Once again, this harkens back to Lenin’s insistence that labor must be organized in order to realize its scientific potential as a revolutionary force (Au 2007). Vygotsky’s ZPD represents the attempt to organize learning in order to confirm personal development as an evolutionary force, history’s complement. As Vygotsky (1978) puts it:

To the naïve mind, revolution and evolution seem incompatible and historic development continues only so long as it follows a straight line. Where upheavals occur, where the historical fabric is ruptured, the naïve mind sees only catastrophe, gaps, and discontinuity. History seems to stop dead, until it once again takes the direct, linear path of development.

Scientific thought, on the contrary, sees revolution and evolution as two forms of development that are mutually related and mutually presuppose each other. Leaps in the child’s development are seen by the scientific mind as no more than a moment in the general line of development. (73)

Personal and historical upheavals are dialectically related and we need to look no further than the phrase ‘mind in society’ to confirm the tightly coupled relationship between self and social development. Although his analysis favors the structural plane over the personal, like Vygotsky, Freire (1993) understood that the interpersonal (i.e., social) and intrapersonal (i.e., individual) dimensions were shot through with one another. There is no mind without a society to furnish its material for cognition

and no society without a mind to give it meaning. Both are necessary in order to complete the circle between objective (external) and subjective (inner) life.

When applied to the study of race and whiteness, the ZPD goes through another transformation. What do we make of white development within a racialized predicament wherein their accurate, if not scientific, grasp of the racial formation is frustrated at every turn by their own ideological investment in maintaining power relations as they are? In fact, it is possible that the white mind in society, or *white ZPD*, is precisely that form of cognition that works against learning in advance of whites' actual development and rather maintains a white zone of proximal underdevelopment (ZPUD). It is widely acknowledged that with respect to race development, whites already lag behind their counterparts of color (Howard 1999; Leonardo and Porter 2010; McIntosh 1992). With respect to race literacy (Twine 2004), or the ability to decode race relations, whites have been found either to resist or subvert pedagogy with racial content, particularly when it challenges white advantage and structural racism (King 2004). Whites' worldview is predicated on a certain misunderstanding of the world as it is, in exchange for a world that amounts to a fantasy or hallucination (Mills 1997). This hardly lends itself to a scientific organization of pedagogic knowledge. As an epistemology of ignorance (Mills 2007), white knowledge presents an inverted image of the racial formation, not unlike the *camera obscura* that Marx and Engels (1964) described previously where the eye inverts the image in front of it in order to see it correctly. Like Hegelian idealism for Marx, it seems that whites and whiteness would need to be put back on their feet. Although Vygotsky's contention that good learning, which is in advance of actual development, still applies as a principle, it runs up against the formidable ideology of whiteness that works in the opposite direction. *Learning that maintains a white-dominated social arrangement is that which is behind actual development*. Rather than claiming that the 'developmental process lags behind the learning process' (Vygotsky 1978, 90), we argue that where it concerns whiteness, for whites learning lags behind development. This process does not happen casually as whites are committed to it as part of their proximal development. Within a US understanding of whiteness, appropriating Vygotsky would need to unveil the contours of the white ZPD.

For instance, the image of learning that Fourier (1971) offers is helpful. To this utopian socialist, a child reaches for the proverbial fruit on the tree branch just outside the reach of his fingertips. Or as Vygotsky (1978) relates with respect to learning, 'In play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself' (102). As a natural principle, learning is ahead of development, a facet of human striving channeled through the organization of social activities. This principle is subverted by the racial condition wherein whites reach for the 'fruit' below their knees when it concerns advancing racial knowledge. The white ZPD curtails natural development because whites maintain zones of ideological comfort at the individual level and material interests at the group level. Groping their racial way forward, whites consider a direct confrontation with racial structures a violation of their zones of comfort. To their racial sensibilities, it is too radical. In the instances where learning is in advance of their development, it is insignificantly so. The problem is that the distance that students must travel to resolve the double binds of their social conditioning is so radically different between whites and students of color, they are different in kind rather than only in degrees.

For people of color who are relegated to the 'zone of non-being' (Fanon 1967), which is ultimately a white tool of exclusion, and who are already ahead developmentally of whites when it pertains to race understanding, another kind of violation takes place. Their ZPD is not what drives mainstream pedagogy and they are not challenged in the process. To their sensibilities, it is an insufficiently radical. No teacher would aim this low with respect to other domains of knowledge and still be called an educator. But with respect to race pedagogy, teachers seem to settle for mediocrity, which is less a commentary on their intentions but more about the racialized activity system driven by the white collective unconscious (i.e., WHAT). Whereas students of color are ready to pick the fruit at the top of the tree, whiteness would convince them to pick the rotten, bruised fruits on the ground. Some whites recognize the situation and are prepared for the challenge but most of them resist signing off the racial contract (Mills 1997). As a result, their ZPD proceeds at the snail's pace of the white imaginary yet

white sensibilities drive most of what passes as official classroom pedagogy when it pertains to race. The white ZPD conceives the world on its head.

Whereas Vygotsky believed that ‘learning is a necessary and universal aspect of the process of developing culturally organized, specifically human, psychological functions’ (1978, 90), we maintain that *unlearning* is necessary to push social organization beyond whiteness. In other words, learning is also about unlearning error. Much of Vygotsky’s work focused on analyzing and describing the relationship between learning and development, especially once children have entered the social institution of the school. Clearly, children’s learning begins before they enter the institution of schooling; yet Vygotsky understood formal schooling as the site where children develop ‘higher psychological processes’ (Panofsky, John-Steiner, and Blackwell 1990). Children come to school with a preformed vocabulary that develops from spontaneous learning in the social world. In school, children learn to organize and develop a command of the meanings, attitudes, and social values embedded in language and culture. In a complex relationship, these scientific concepts re-mediate children’s already socio-historically mediated experience of the world and transform their basis. While children may acquire new scientific concepts in school, not all of this learning is in service of advancing the child’s development. In a Vygotskian framework, development is not an inevitable byproduct of learning; rather, ‘development in children never follows school learning the way a shadow follows the object that casts it’ (1978, 91). Although Vygotsky argued that good learning is in advance of actual development, a racial analysis of classroom activity systems problematizes notions of learning and development and suggests that in the racial paradigm it is whites’ *unlearning*, rather than learning, that actually leads to the development of their anti-racist subjectivities. According to Vygotsky’s theory of ‘reverse action’ the sign system wherein we develop determines how an individual experiences the world. In the US context, this system is racial. Thus, to learn anti-racism means to unlearn the implicit mediators that children inherit and internalize through white social development.

In his final writings Vygotsky wrote that development is a result of changes in the social structure, not changes within the individual (see Daniels 2007). According to Daniels, Vygotsky ‘argued that everyday thought is given structure and order in the context of systematic scientific thought,’ (2007, 311) which is important in the dialectic between agent and social structure. Students are shaped by and in turn shape the social structure within which they operate. In the classroom, there is a disjuncture between the everyday knowledge of youth of color and the scientific systems they are asked to assimilate in school learning. If ‘instruction is only useful when it moves ahead of development’ (Vygotsky 1986, 212), can students of color develop in the classrooms led by ideologically white teachers?

While Vygotsky wrote in an entirely different context and time, he identified one of the major problems in school as an orientation toward ‘yesterday’s development’ (1978, 89) as opposed to orienting learning and development toward a space of possibility. The trend of testing and accountability in the US educational climate exemplifies this problem. It does not promote learning that leads to further development. Vygotsky’s concept of the ZPD can be understood as a zone of possibility, which, when accomplished appropriately, threatens the hegemony of whiteness. In line with the racial contract methodology (Mills 1997), we argue that current educational practices often focus on what has already been learned, which calcifies in a racially-motivated system that preserves white domination as opposed to leading to its demise. Vygotsky explained that:

... the zone of proximal development permits us to delineate the child’s immediate future and his dynamic developmental state, allowing not only for what already has been achieved developmentally but also for what is in the course of maturing. (1978, 87)

In a racial analysis, unlearning whiteness means we expand the possibilities and vector of a child’s dynamic development.

As a zone of possibility (Moll and Greenberg 1990), the ZPD allows for significant shifts in the activity system based on participants’ collaboration and creation of new tools to solve existing problems. Vygotsky explained that ‘every advance [in development] is connected with a marked change in motives, inclinations, and incentives’ (1978, 92). Using the Vygotskian concept of the activity system,

Engeström analyzes the relationship between learning and development in service of uncovering ‘*how the new is generated in human development*’ (1987, 2, emphasis in original). From an anti-racist standpoint, this encourages teaching toward the development of fundamentally new social activities that interrogate whiteness and pivot on acts of unlearning as forms of *educational disobedience*. Engeström explains:

From the instructional point of view, my definition of the zone of proximal development means that teaching and learning are moving within the zone only when they aim at developing historically new forms of activity, not just at letting the learners acquire the societally existing or dominant forms as something individually new. To aim at developing historically new forms of activity implies an instructional practice which follows the learners into their life activities outside the classroom. It also implies the necessity of forming true expansive learning activity in and between the learners. The instructional task is thus twofold: to develop *learning activity* and to develop historically new forms of the *central activity*. (1987, 30, emphasis in original)

At their best, anti-racist teachers problematize the structures of white power and offer what Engeström calls a ‘given new’ activity. The students then create new forms of social activity when working through the double binds of whiteness in order to forge what Engeström describes as the ‘created new activity.’ It is not the teacher’s role to introduce or invent tools for the changing social structure, but to nurture a space of possibility wherein youth can unlearn their investments in whiteness and to recognize the distortions in social representations of their capability, apparently less than actual for students of color, more than actual for whites. This racialization of the ZPD begs a rethinking of what Vygotsky termed the more capable peer or *other*.

When we take whiteness into consideration as the social and cultural limit of education, we find a displacement of the concept of the ‘more capable peer.’ Because most teachers in the US are white women, they are susceptible to a racial repertoire marked fundamentally by strategies of colorblindness (Frankenberg 1993). In light of this, we have an inversion of capabilities in the classroom. We can no longer take for granted that when it comes to racial understanding, the more capable peer is found in the white teacher. In certain instances, young students of color who are usually criticized for lacking cultural competencies, assume the center of race pedagogy and the white teacher stands at the periphery. We have a process of reversal if a *ZPD of color* is recognized as having a more organized, at times more scientific, apprehension of race relations. People of color, not white teachers, are arguably the experts. Developmentally, students of color exist in a world where they are forced to mature faster than the average white peer because the former’s life depends on it. Because of racism, students of color face a harsher social life full of microaggressions and racial regulations that put them at risk. This predicament is clear when we consider how black males are targets of criminal profiling. In schools, Ferguson (2001) has shown how their behavior is regulated more militantly. In neighborhoods and public spaces, the recent rash of fatal shootings implies that black lives matter less, leading to black self-censorship in fear of confrontations with the police. This process does not always come with recommendations as children of color lose their ‘innocence’ due to the pressures of surviving in the inhospitable conditions of racism that adultify them (Ferguson 2001). They are forced to decipher their environmental cues with astuteness when they are considered a ‘problem’ to be solved (see Du Bois 1989). But with this burden comes the ‘gift’ of clearer understanding of the racial formation, a second sight that allows them to see the innerworkings of race. Their learning is usually much ahead of their development, often mature minds housed in immature bodies.

In a society where racial lessons are rarely lost on them, youth of color develop racial tools that allow them to survive, which does not depend ideologically on a mystification of their racial predicament. They do not have the luxury to misinterpret their circumstances, at least not without the heavy costs they would incur, some of which may be fatal. On the other hand, whites, including adults, navigate the waters of race by going around, avoiding, or evading race (Bonilla-Silva 2003). In other words, they develop within a cosmology wherein racial lessons are not learned, chalked up conveniently to the myth of ‘white ignorance’ (Leonardo 2009; Mills 2007). As a result, their development is often arrested, continuing well into adulthood as teachers. When compared to children of color, white adults evolve into immature racial minds housed in mature bodies. They have spent much of life with their

learning behind their actual development. It is difficult now to conceive of them as the more capable peer with respect to race pedagogy.

For white teachers to assume the political leadership that matches the pedagogical leadership that the racialized nation state has sanctioned for them, a Vygotskian theory of whiteness would need to insist on the cultivation of an anti-racist ZPD. The learning curve would indeed be steep but as Marx (1976) once said, one does not deserve the glorious view at the top without the steep pitches of the climb. An anti-racist ZPD for white teachers entails unlearning the common sense gained through many years of social conditioning through the ideology of whiteness, which did not tell them how race actually worked but rather how it *worked for them*. Anti-racist ZPD is different from promoting racial diversity, the value of which many white educators appreciate. The opposite of racism is not diversity but anti-racism, a much more discomfiting proposition. The promotion of inclusion in education is contradicted by the public language of whiteness that is at the center of exclusionary practices. It requires that whites travel much longer distances between their actual development and learning with the assistance of people of color, even young students. The anti-racist ZPD tests the limits of white comfort zones to arrive at the racial binds in their current development. It is a revolutionary zone wherein whites realize their political vocation as educators within a racist social context that dehumanizes both whites and people of color, with the additional burden of oppression for the latter. Anti-racist ZPD recognizes that the amount of learning that whites undergo in order to achieve their liberatory potential – already inert in people of color and must be awakened – requires that whites become radicalized, a learning that ruptures their development.

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