Activity as Object-Related: Resolving the Dichotomy of Individual and Collective Planes of Activity

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This article suggests that the principle of object-relatedness, introduced by Vygotsky and expanded by A. N. Leontiev, can be used to conceptualize human subjectivity within a profoundly social view of human development. This is achieved by reformulating the premises of cultural–historical activity theory to include the notion that material production, intersubjective exchanges, and human subjectivity form a unified three-fold dialectical system. Focusing on the constant manifold transitions among components of this system as its *modus vivendi* reveals (a) individual and collective processes as being interrelated and co-evolving levels of activity, and (b) the practical relevance of human subjectivity alongside the human relevance of material practices. Such an expanded view posits human subjectivity on a continuum of regulatory mechanisms of social practice, to which both individual and social processes belong. It is further conceptualized as a form of practical transformative pursuits in the world, and as a lawful and necessary moment of human life endowed with the capacity to generate new activity cycles. The co-evolution of collective motives and personal goals, as well as the practical relevance of theoretical constructions, are used as illustrations.

Cultural–Historical Activity Theory (CHAT) is one among a number of approaches that move away from the individualist and mentalist notions of human development, toward viewing it as embedded within sociocultural contexts and intrinsically interwoven with them. In this sense, CHAT belongs to a vast family of sociocultural theories united in a quest to overcome the pitfalls of traditional cognitivist thinking about human development. However, CHAT (i.e., a system of views initially formulated within the collaborative investigative project by Vygotsky, A. N. Leontiev, Luria, and several others in the early 20th century¹) contains a number of ideas that distinguish it from other

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CHAT is a relatively new term that has not yet acquired a conventional meaning (cf. Cole, 1996). In this article, it is used to denote the investigative project developed by Vygotsky, A. N. Leontiev, Luria and their immediate co-workers—Zaporozhets, Bozhovich, Levina, Morozova, Slavina, and Elkonin. In doing so, I follow the long established tradition in Russian psychology that (a) emphasizes the collaborative nature of the research project by Vygotsky and his immediate co-workers (see A. A. Leontiev, 1983, 1990; Luria, 1982; Yaroshevskij, 1989; and more recently, Stetsenko, 2002, 2003, 2004) and (b) unites Vygotsky's ideas with those developed by his followers with him and after his death into one school of thought (as stated on multiple occasions by members of this school, see Davydov, 1983, 1989; Elkonin, 1989; Galperin, 1983; A. N. Leontiev, 1983; Luria, 1982). I am aware of the debates on whether such a unified view of Vygotsky's school is accurate and of views that differ on this score (e.g., Kozulin, 1990; van der Veer & Valsiner, 1991; for a discussion, see Stetsenko, 1993, 2003, 2004; Stetsenko & Arievitch, in press). Given that the goal to resolve this issue is not pursued here, it

should suffice to indicate the exact meaning (of the several competing ones) in which the term CHAT is used (for a similar

usage, see Miettinen, 2001).

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Today, how search remains information pro ogy and in neig dividualism an and transaction chology and the tural anthropole sociocultural views on human development. One of the most distinctive ideas of CHAT (gaining popularity in today's literature) is that human psychological functioning and development are object-related. Based on the initial framework developed in Vygotsky's school, this article suggests some further expansion and specification of this idea. The goal is to show that the principle of object-relatedness needs to be expanded to address what is arguably the most contested and unresolved issue in CHAT and social sciences at large, namely, reconciling the view of human development as being a profoundly social process with the view that individual subjectivity and agency make the very process of human development and social life possible.

An attempt to move beyond the canonical version of activity theory will be undertaken not only because this theory is not a fully-fledged conception without its own internal contradictions, unresolved tensions, and substantive gaps (as will be discussed in this article; see also Stetsenko, 1995), but also out of a conviction that the critical stance represents an important methodology that allows us to make sense of any theory. Namely, this critical methodology is consistent with the very spirit of activity theory that postulates the centrality of transformative and creative—and thus also necessarily critical—activity as a methodological tool for meaningfully dealing with any aspect of the world, including the activity of theoretical understanding.

The principle of object-relatedness of activity does not need to be exempt from the scrutiny of such a critical and transformative methodology. All the significance of this principle notwith-standing, taking it as an isolated idea that in and of itself can explain the intricacies of psychological processes bears the danger of "placing all the conceptual eggs in one basket." Activity theory, not unlike other theoretical frameworks that purport to explain such complicated issues as human development, is a set of ideas and principles that complement and strengthen each other, impart meaning to each other, and cannot be easily grasped without each other. Hence, it is important to link the analysis of object-relatedness to that of the broader conceptual background and premises of activity theory.

That the time is ripe to cast a critical glance at the principle of object-relatedness also has a sociohistorical reason. Activity theory, just as any other theory, being a socioculturally and historically specific form of knowledge, was developed as a reaction to the trends that dominated the overall psychological landscape at the time when this theory was created. This landscape, at the beginning of and into the mid-20th century, was to a large extent influenced by psychological schools of thought that ignored the determining role of real life processes, especially in their social dimension, in psychological functioning, and either ignored the mental or postulated it as a separated realm, independent of these processes (e.g., Gestalt-psychology, reflexology, and, later, behaviorism and cognitivism). In conceptualizing human development, Vygotsky, A. N. Leontiev, and other activity theorists were reacting to this prevailing mode of thinking and strived, in the first place, to dispel the centuries-old Cartesian dichotomies between human subjectivity and real life that conceptualized mind as a largely solipsistic and individual phenomenon.

Today, however, the situation has changed dramatically. Although much of psychological research remains devoted to the cognitivist agenda of studying human functioning as context-free information processing in individual minds, there is a powerful current of ideas, both in psychology and in neighboring disciplines, that effectively contests the most cherished assumptions of individualism and mentalism so typical of the cognitivist agenda. An alternative, profoundly social and transactional, view of human development has now established itself strongly enough in psychology and the neighboring disciplines, such as social constructionism, feminist approaches, cultural anthropology, and research on learning and education (e.g., see Altman & Rogoff, 1987 for a

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raduate hy.edu le, it is -workadition nediate , 2003, hool of ilperin, thool is on, see here, it review). This emerging landscape, in which psychological processes are not treated as a separate mental realm, and in which the old Cartesian dualism between mental and nonmental is transcended, presents CHAT with some truly new challenges. Among these challenges are pivotal questions about the role of human subjectivity in carrying out activities, and whether both collective and individual functioning are implicated in human development. In other words, the major challenge today is to conceptualize psychological processes avoiding the extremes of reducing them either to a separate individual mental realm (i.e., the more traditional challenge) or, alternatively, to the essentially sociological realm of collective discourses and practices (i.e., the more recent challenge as it is now emerging in research on collective forms of activity; cf. Stetsenko & Arievitch, 1997, 2004b).

In what follows, I first discuss the broad theoretical foundations of activity theory and the principle of object-relatedness in its canonical version, as well as explore some limitations of this version. I then address how this principle can be expanded and employed to reinstate, on the grounds of a transactional view of human development, the importance of both individual and social dimensions of human life.

FOUNDATIONAL PREMISES OF CHAT: SOME MISSING LINKS?

In today's literature, CHAT is often associated with the centrality of cultural and social contexts in human development. Activity theory indeed fully acknowledges the sociocultural origin and nature of human subjectivity² (i.e., broadly conceived psychological processes that include cognition, self-regulation, emotion, and the self). The grounding premises of activity theory, however, are much broader.

One of the central pillars of CHAT is the idea that human development is based on active transformations of existing environments and creation of new ones achieved through collaborative processes of producing and deploying tools. These collaborative processes (involving development and passing on, from generation to generation, the collective experiences of people) ultimately represent a form of exchange with the world that is unique to humans—the social practice of human labor, or human activity. In these social and historically specific processes, people not only constantly transform and create their environment; they also create and constantly transform their very lives, consequently changing themselves in fundamental ways and, in the process, gaining self-knowledge. Therefore, human activity—material, practical, and always, by necessity, social collaborative processes aimed at transforming the world and human beings themselves with the help of collectively created tools—is the basic form of life for people. This practical, social, purposeful activity (or human labor) as the principal and primary form of human life, and the contradictions brought about in its development, lie at the very foundation and are formative of everything that is human in humans.

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²Human subjectivity is a term that was not often used in activity theory. Rather, Vygotsky and Leontiev used terms such as psihika or psihicheskoe otrazhenie when referring to broadly conceived processes on the subjective pole of activity. Given that a literal translation ("psyche," "psychic reflection") appears quite clumsy, and consistent with the goals of this article, the term human subjectivity is used as an alternative to capitalize on the centrality of subjects (for a similar usage in activity theory tradition, see Holzkamp, 1972). It should be noted that much of previous translations of Vygotsky's and Leontiev's works has been rather imprecise and hardly can be taken as a standard to adhere to (cf. the recent discovery that obuchenie actually does not mean "learning" but rather "teaching-and-learning;" for this and other examples, see Daniels, 2001, pp. 9–13).

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Because human labor inevitably entails collective efforts of people acting together, its development gives rise to increasingly complex social exchanges among people, and to individual mechanisms allowing for these exchanges to be carried out. Both forms emerge precisely because they are needed to help regulate the collective material production of the very lives of individuals. In the course of history, however, these processes become increasingly and enormously complex and even assume—as emergent properties—their own levels of quasi-ontological existence and associated qualities of durability and stability. For example, the social relations among people become institutionalized in relatively stable forms ranging from the rules of conduct and cognition, such as rituals and morale, to collective forms of life such as state, religion, schooling, and family, that is, the society itself.

It was arguably the greatest insight of Marxist thinking that the social (inter-subjective) and the individual (intra-subjective) forms of social life became demystified as being derivative from (though not reducible to) the processes of material production of life.3 However, Marx focused primarily (and understandably, due to the predominantly philosophical and political-economical orientation of his writings) on the dynamics, contradictions within, and transformations between, the material production of human existence, on the one hand, and the emerging collective forms of its regulation (i.e., human society), on the other. In the Marxist approach, this correspondence was shown to be dialectical or, in modern terms, nonstatic and nonlinear, namely, as gradually progressing in the history of civilization from a relationship characterized by direct influences from material production onto societal forms of life, to a multi-directional interdependence, with growing degrees of internal contradictions. In this sense, the material production of life comes, with time, to be increasingly dependent on the types of social exchanges to which it initially gave rise. Ultimately, at mature stages of human civilization, it is not material production that solely drives human development but the complex interactions between the two and the contradictions stemming from these interactions. For example, the social-institutionalized forms of life, with time, gain such importance and complexity that they come to permeate all aspects of human life, and ultimately shape the very material production that initially gave rise to a certain society. Exploration into the dialectical interrelations between various historical types of material production and the corresponding forms of society with their diverse institutions became the cornerstone of classical Marxist philosophy and economy.

Exploration into the functioning, contradictions, and transformations between the societal and individual forms of life, relatively (and inevitably) neglected in the philosophical and economical analyses, became the focus of investigation in the cultural—historical school of psychology. Following Marx, Vygotsky realized that social exchanges among people require equally complex mechanisms that allow for self-regulation by every individual involved in these exchanges. Individual participants' ability to take part in collective processes of social exchanges was conceived as crucial for these exchanges to be carried out. It was understood that because high demands are placed on participants in these collective processes, complex mechanisms suited to meet such de-

³Note that locating the historical origins of society and human subjectivity in collective practices of material production does not deny their phenomenological richness, durability, or agency. What is denied is that these processes appear and develop on their own grounds, from within themselves, as the realities completely separate from the material life of people. Instead, the primacy of material practice means that the analysis into the richness and agency of both society and human subjectivity, to be efficient, needs to keep in sight their ultimate origination from, and embeddedness in, material processes of human practice.

mands—namely, human subjectivity (in its various aspects)—evolve. Pivotal for Vygotsky's (e.g., 1997) system of ideas was that the social exchanges between people lie at the foundation of all intra-subjective processes, because these processes originate from inter-subjective ones in both history and the individual lives of human beings. Thus, Vygotsky (1997) was arguably the first psychologist to follow in Marx's footsteps in further unraveling the centuries-old mystery of human subjectivity, by revealing its origination in the processes of social exchange among people instead of viewing it as a self-sufficient phenomenon detached from these exchanges and evolving on its own mentalist grounds.

The broad issues of how human subjectivity and development are produced in and by human history and society lie at the heart of both Vygotsky's and his followers' versions of CHAT (albeit at various degrees of explicitness). Differences between Vygotsky and other representative of his school, especially A. N. Leontiev, also should not be overlooked. Although for Vygotsky the transitions from inter-subjective to intra-subjective forms of psychological processes by means of cultural mediation was at the forefront of analysis, A. N. Leontiev focused relatively more on how the material practical forms of activity are transformed into intra-psychological processes.

The differences in relative emphasis between Vygotsky and A. N. Leontiev notwithstanding, the common fundamental premise of cultural-historical activity theory can be formulated as follows. Human subjectivity is not some capacity that exists in individual heads; evolves on its own, purely mentalist grounds; and develops according to some inherent laws of nature. Instead, psychological processes emerge from collective practical involvements of humans with each other and the world around them; they are governed by objective laws and are subordinate to the purposes of these practical involvements. In even broader terms, the development of human mind is conceptualized as originating from practical transformative involvements of people with the world, and as a process that can be understood only by tracing its origination in these involvements and practices.

However, such a broad—and powerfully materialist—formulation is clearly emphasizing a one-sided dependence of human subjectivity on the processes of material production (especially in A. N. Leontiev's works) and on associated societal forms of exchange between people (especially in Vygotsky's works). Namely, human subjectivity is conceptualized as originating from, and subordinate to, the collective exchanges and material production. This formulation is lacking one important idea that was implicitly present in Marx's works—the idea that in human history there exists not only an interdependence and co-evolution of the material production on the one hand, and the societal (i.e., collective, inter-subjective) forms of life, on the other. One other aspect of human life also co-evolves together with these two processes. Namely, the subjective mechanisms allowing for individual participation in collective processes of material production are also implicated in the functioning of what essentially is a unified three-fold system of interactions. That is, the idea that still needs to be spelled out is that all three processes at the very foundation of human life and development—the material production of tools, the social exchanges among people, and the individual mechanisms regulating this production and these exchanges-all co-evolve, interpenetrating and influencing each other, never becoming completely detached or independent from each other. All three types of processes need to be viewed as truly dialectically connected, that is, as dependent upon and at the same time conditioning and influencing each other, with this dialectical relation emerging and becoming more and more complex in human history.

This lack of a focus on the dialectical linkage among the three types of processes that are implicated in the production of human life, in my view, has been an impediment for the prog-

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s that are the progress of CHAT as a unified theory of human development. This difficulty is clearly reflected in the split of research traditions that continue to ensue from Vygotsky's (e.g., 1997) and A. N. Leontiev's (e.g., 1983) initial formulation, with a number of traditions relatively neglecting the level of human subjectivity such as knowledge and the self. This difficulty is also reflected, concomitantly, in how the principle of object-relatedness of activity has been conceptualized within CHAT. In what follows, I briefly discuss how this principle, if disconnected from the broader dialectical Marxist premises of activity theory, does not fully overcome the dichotomies of internal-external and collective-individual forms of activity. I then address possible ways to amend such disconnections and, consequently, advance a nondichotomous understanding of social and individual dimensions of human development.

SPECIFICATION OF OBJECT-RELATEDNESS: A. N. LEONTIEV'S CONTRIBUTION

Within CHAT, the principle of object-relatedness has been addressed by A. N. Leontiev in his last book, *Activity, Consciousness, Personality* (1983). Although A. N. Leontiev (1983) was following the fundamental Marxist premises previously discussed, he specified object-relatedness separately from the broader ideas of how human subjectivity originates out of, and also participates in and contributes to, life processes. Therefore, A. N. Leontiev's (1983) conceptualizations contained certain imbalances that need to be corrected, by simultaneously expanding and specifying this principle to avoid associating it with the very dichotomies that activity theory strives to overcome. In this section, the specific gaps and imbalances of A. N. Leontiev's (1983) account will be addressed.

A. N. Leontiev (1983) developed his idea that human psychological processes ("psychic reflection," in his terminology) are object-related in opposition to conceptualizing them as a solipsistic internal mental realm. He specifically aimed at revealing the fundamental fact that any psychological process "finds its object there, where it really exists—in the outer world, in the objective space and time" (A. N. Leontiev, 1983, p. 128). This is, in A. N. Leontiev's (1983) own definition, "the most significant feature of a subjective image, which can be termed its object-relatedness (predmetnost)..." (p. 128). For example, the light impacting the photoreceptors of the eye's retina is perceived not as internal workings of receptors, but as objects out in the world.

Less explicitly, the principle of object-relatedness in A. N. Leontiev's (1983) interpretation also includes two additional aspects.⁴ First, he emphasized that objects are turned into facts of mind (i.e., become presented in subjective images) only through active processes of humans relating to these objects, that is, through activity. In this aspect, the principle of object-relatedness is closely associated with what A. N. Leontiev (1983) terms "activeness" of psychological processes. According to A. N. Leontiev (1983), it takes more than a passive reception of inputs for psychological processes to emerge; to perceive ("reflect") objects, the subject has to actively relate to these objects, perform actions with them, actively handle them (mentally or physically). Thus, the psychological is the product of active practical activities of individuals. In A. N. Leontiev's words:

⁴These additional aspects of object-relatedness are analyzed in detail in Asmolov (1983); Davydov (1983); Stetsenko (1983, 1995).

An object of activity appears in two forms: first, in its independent existence, in which it subordinates and transforms the activity of the subject and, second, as the image of an object, as a product of reflection of the object's properties, which takes place as a result of the activity of the subject, and cannot be realized in any other way. (A. N. Leontiev, 1983, p. 170)

Activity as a source of subjective reflection, and the latter as a product of activity is literally the major theme of the whole book by A. N. Leontiev (1983). An additional meaning of psychological processes being active has to do, according to A. N. Leontiev (1983), with their "biased nature" (pristrastnost), that is, with them being inextricably linked to the motivational sphere of needs and emotions of the subject (pp. 125, 183).

The second aspect emphasized by A. N. Leontiev (1983) is that the processes of activity at the foundation of "reflection" are never merely individual but absorb the collective experiences of people. For example, the mechanism of perception is represented "not by previously accumulated associations and not by apperception in the Kantian sense, but by communal, social practice" (A. N. Leontiev, 1983, p. 133; similar ideas on pp. 131, 169). The specifics of how the social-historical experience is involved in each and every activity have to do with individuals acquiring collectively developed tools that (a) crystallize important features of objects in their relations to other objects as discovered in collective practices and (b) mediate activity, thus allowing for it to be filled with collective experience (A. N. Leontiev, 1983, p. 150).

Therefore, in developing the principle of object-relatedness, A. N. Leontiev (1983) strove to combat common mistakes of, in his words, all previous metaphysical psychology—"that of abstracting human beings from society and the perceived object from its ties to objective reality" (p. 133). He also aimed his account against the Cartesian dualism of external and internal, achieving substantial progress in this pursuit. However, a number of important aspects of object-relatedness of human development have not been sufficiently analyzed by A. N. Leontiev, leaving some gaps in his account of human development.

First and most importantly, A. N. Leontiev's (1983) focus on psychological processes as being derivative from human social practices was emphasized almost to the exclusion of conceptualizing these processes as playing an active role, and in effect only existing, in the reverse movements of activity—from subjective processes to the crafting of some new objects, or discovering new aspects of reality, thus transforming something out in the social world of human collective practice. In other words, the human mind, in A. N. Leontiev's interpretation, is actively produced by social practice but is much less involved, as a lawful and active participant, in the production, and even less so, in the further expansion and growth of the very social practice that gave rise to it. That is, social practice, activity, for A. N. Leontiev, is literally "behind the subjective," as its source and generator, but not simultaneously ahead of it, as a process, the continuous unfolding of which represents the condition sin qua non for the very existence of the psychological realm.

A. N. Leontiev briefly mentioned, in a few places (1983, pp. 119, 124), that mind plays an active role in the realization of human life, for example in that it mediates activity (A. N. Leontiev, 1983, pp. 110, 124). However, this role was literally mentioned⁵ and not discussed in any signifi-

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⁵For example, when criticizing the information-processing approach, A. N. Leontiev (1983) wrote: "...psychology is a concrete science about emergence and development of psychological reflection by people, which takes place in their activity and mediates it, playing an active role in it" (p.124). He then immediately shifted to discussing other issues and did not return to the active role of mind.

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sychology is a in their actives and did not cant detail, especially in contrast to how meticulously the reverse role of social practice producing human subjectivity was discussed in his book. In addition, when described, this role appears as somewhat limited. Namely, A. N. Leontiev often reduced it to the notion of subjective images being able to (a) absorb the system of objective relations, in which the reflected content uniquely exists (p. 126); (b) fill the activity with sensuousness (pp. 171–172); and (c) attune it with the motivational-affective sphere of needs and emotions. Moreover, A. N. Leontiev directly states that "...the chief task is by far not to point to the active, regulating role of consciousness. The chief task is to understand consciousness as a *subjective product*, as a transformed expression of those relations, social in nature, that become realized by humans in the objective world" (p. 168, italics added).

The significant shift of balance in conceptualizing the mind as being chiefly the product, but not the generator of, and the active participant, in social practice, is evident also in the following related aspects of A. N. Leontiev's (1983) theorizing. He pays much more attention to transfers within activity processes from objective into subjective (p. 125), and employs the notion of a "twofold transition" (A. N. Leontiev, 1983, p. 144) as the central psychological mechanism of human development. This notion refers to (a) the transition from the world into the process of activity and (b) the transition from activity to its subjective product—human subjectivity. The possibility of a manifold transition is not elaborated with the same rigor. Although A. N. Leontiev (1983) cites, in the opening pages of his book, Marx's famous words that "in the process of labor, labor constantly moves from the form of activity into the form of being, from the form of movement into the form of objective existence [predmetnost]" (p. 110), and sometimes returns to this idea later on (e.g., p.144), this profound view is not put to use to conceptualize either object-relatedness of the mind or its activeness.

A number of A. N. Leontiev's (1983) concomitant assumptions also downplay the centrality—in the very existence of the psychological realm—of psychological processes being transposed into practice and its products as an inextricable mode of existence of the psychological, rather than an additional factor that stands apart from the major path of human development. For one, the acquisition of the cultural—historical experience of previous generations (e.g., A. N. Leontiev, 1983, pp. 133, 179), especially in the form of acquiring verbal meanings, is regarded by A. N. Leontiev (and other leading activity theorists such as Davydov, e.g., 1983) as the major pathway of human development, at the expense of emphasizing that individuals also develop and contribute to this experience in their individual activities. In a similar vein, the fact that activity is subordinate to reality and that it has to adapt to the objects out in the world for psychological processes to emerge was placed by far over the humans' potential to change and mold the world and its objects through human activities and social practice. Practically the same imbalance is evident in that the concept of internalization became more explored and elaborated upon than that of externalization of psychological processes in products and aspects of the world developed each time anew in even seemingly mundane activities of individuals. Finally, it is also evident in that motives and meanings, in activity theory, became looked

⁶A. N. Leontiev's (1983) over-reliance (albeit not exclusively) on verbal forms of collective experience is analyzed in detail in Stetsenko (1983). The roots of such over-reliance can be traced back to Vygotsky and even Marx, both of whom relatively downplayed the significance of human subjectivity in the production of social life. However, this does not mean that the views of these scholars somehow lose in comparison to alternative approaches that putatively attribute more agency to individuals, because these latter approaches, for the most part, only address ephemeral agency as rooted in individualist and essentialist premises.

upon as being more potent and significant than goals and personal senses. For example, motives and meanings in their communal social modes of existence were viewed as shaping goals and personal senses (cf. A. N. Leontiev's, 1983, description of how motives can shift onto goals), but the reverse influences and the possibility of social and individual dimensions co-evolving and co-determining each other have not been elaborated upon.⁷

Taken together, these imbalances in A. N. Leontiev's (1983) account (for a similar analysis, see Engeström, 1999) can be summed up as positing society above the individual and seeing the latter as produced by, subordinate to, and molded by reality, and especially society, at the expense of emphasizing individual agency—the ability to produce, create, and make a difference in social practices. Ironically, this shift away from the centrality of individual contributions to the world (though not a complete absence of a relevant discussion8), contradicts the broad premises of activity theory itself. Namely, A. N. Leontiev himself called attention to the transformative practices as the foundation of human mind, for example, by quoting the following words by Engles: "...the transformation of nature by humans, rather than nature itself, is the most significant and immediate basis of human thinking" (see A. N. Leontiev, 1983, p. 115). The nonadaptive nature of human development was also highlighted by a number of other Russian scholars working within (e.g., Asmolov, 1983, 2001) and parallel to (e.g., Antsiferova, 1978) activity theory, and can be regarded as one of the hallmarks of Marxist psychology at large. However, the nonadaptive character of human development has not been analyzed in depth and not put to use to a sufficient degree when conceptualizing the principle of object-relatedness and other key aspects of activity theory. The discrepancy between the general emphasis on the transformative nature of human development on the one hand and the limited use of this idea in concrete conceptualizations of theoretical principles on the other, as well as the related emphasis on the collective at the expense of individual dimensions, was one of the major reasons for a number of subsequent unfortunate misinterpretations in activity theory and related traditions.

Perhaps most importantly, the centrality of objects per se as constitutive of mind (and related over-reliance on object-relatedness as a supreme and separate principle) was often taken too literally, resulting in unintended ramifications. When A. N. Leontiev forcefully stated that "con-

⁷Many of Leontiev's colleagues and followers (e.g., Asmolov et al., 2001) turned to exploring personal senses as determinants of development. When testifying to the gaps described in this article, their analysis predominantly focused on individual mind and did not specifically target either the dichotomy of social and individual, or the implications for understanding object-relatedness, co-evolution of motives and goals, and other aspects as discussed in this article.

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⁸For example, A. N. Leontiev (1983) mentions that "...the self cannot develop only within the realm of consumption; its development with necessity presupposes a shift toward production [sozidanie], which uniquely is limitless" (p. 226). However, it is only few times, on the book's closing pages and apart from the broader discussion of object-relatedness that A. N. Leontiev (1983) briefly mentions that people produce and create their world. Note also that the "self" as a translation of A. N. Leontiev's term lichnost is more appropriate than "personality" because of a much closer link of A. N. Leontiev's concerns to today's discourse on the self than on personality in the tradition of individual differences. For further discussion on the issue of the self, see Stetsenko and Arievitch (2004b).

⁹For example, Asmolov (1983, 2001) brings many important aspects of activity theory to the fore, and yet conceptualizes ideas of object-relatedness and of nonadaptive nature of activity as two separate principles. Also, he views psychological processes as "creative productive processes of bringing psychological images to life" (Asmolov, 1983, p. 122), rather than as bringing about changes in the world. Furthermore, the nonadaptive nature of human development is derived from some internal self-movement of activity driven uniquely by shifts and movements in the "dynamical sense-related system of personality" and by "creativity for the sake of creativity" (Asmolov, 2001, pp. 118–119), rather than by object-related contradictions and transformations instigated by activity in the world, as suggested here.

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t conceptuals psychologi-. 122), rather derived from lated system object-related sciousness had to be sought in the world of objects! We had to find in the external object what makes it psychological" (quoted in A. A. Leontiev, 1983, p. 14), this inevitably—and unfortunately—evoked the idea of objects, and their reflection in images, as being static and frozen, existing separately and independently from material practical activity, though produced by this activity. Indeed, in activity theory, a certain reification of mental images did occur when they became viewed as having not only their own structure, properties, and functions but also ontology, claimed to be accessible "directly" and separately from the study into activity processes (e.g., Smirnov, 1985; Zinchenko, 1983). Also, dissatisfaction with the narrow view of objects as static "things" led to rejecting the notion of motive-as-object in favor of the more traditional accounts of motivation as an internally driven process (even by Leontiev's closest co-workers and followers, e.g., Bozhovich, 1977; Davydov, 1998). In essence, some research in activity theory did operate with the classical mentalist concept of mind in place of a dialectical notion of it being the product and part of activity processes (it was Leontiev's own sad realization that the old traps of dualism were not easily avoided, see Leontiev, 1983; this was also the point of critique that Galperin, e.g., 1998, raised in many of his discussions with Leontiev).

Another conception in which some inadvertent reification of objects is implicitly present is Ilyenkov's (e.g., 1984) philosophical theory of ideality, developed in parallel with and on the same materialist foundation as activity theory (influencing many activity theorists, particularly Davydov, e.g., 1983), that has recently gained popularity with Western sociocultural theorists (e.g., Bakhurst, 1991; Jones, 2001). Ilyenkov's conception, no doubt, was deeply dialectical, and following Marx, he understood ideality as existing within constantly evolving social practices. However, Ilyenkov, in his concrete formulations, often referred to ideality as being a property or form of things (e.g., Ilyenkov, 1984, pp. 55, 64, 67, 70, 74, 76), with much of his language revolving around descriptions of things and objects (e.g., books, words, statues, etc.; Ilyenkov, 1984, pp. 16, 18, 21, 40, 51, 53), creating an impression that ideality is something intrinsic to them. Ilyenkov did add that things become ideal only when included in human labor, but his numerous descriptions of the ideal as a feature of certain categories of things inadvertently distorted the very message that Ilyenkov aimed to convey. The discourse of things and objects takes attention away from seeing the ideal as a unique quality of human activity, rather than of things and objects per se. 10 This likely represents a certain contradiction in Ilyenkov's thinking, a testament to his continuous struggle with the most complicated and deeply entrenched dichotomy of process and product in our thinking (and the tendency to place reified products over the process of their production).

How could it be that both A. N. Leontiev (1983) and Ilyenkov (1984), while developing their novel, deeply dialectical view of human development, revolutionary in its implications, could emphasize social practices as the "breeding ground," the very mode of existence of the ideal and, at the same time, conceptualize the latter as residing in things? I believe the reason for this apparent discrepancy is the tacit dichotomy of individual and social dimensions of human life that was present in works of both of these scholars, and that inadvertently spilled over into their theorizing about other aspects of human development (e.g., internal and external, object and process). In-

¹⁰This language of things in discussions of "ideality" is also present in recent, and otherwise very illuminating, interpretations of Ilyenkov (1984) by Western authors (e.g., Bakhurst, 1991). For a similar critique, see Jones (2001), who has capitalized on Ilyenkov's dialectical account by emphasizing that ideality "...is not a thing, but an aspect of activity, to be found not in words, but in the use of words in the actual doing of something" (p. 305). Or more generally, that ideality is an irreducible internal dimension of the labor process and not a property of artifacts (p. 301).

deed, both scholars, and especially Ilyekov, emphasized the role of practice in the production and existence of the ideal, and staunchly argued in favor of seeing exclusively collective, communal forms of practice as the context and source of the ideal. For example, Ilyenkov (1984) wrote that "man...is to be understood not as a separate individual..., but as a real aggregate of real people collectively realizing their specifically human life activity, as the 'aggregate of all social relations' arising between people around one common task, around the process of the social production of their life" (p. 75, italics added).

In addition, and not unlike A. N. Leontiev, Ilyenkov viewed ideal forms as existing independently of concrete individuals and their subjectivity. For example, he insisted that the ideal exists "...outside of people's consciousness, as a completely objective, totally independent of their consciousness and will reality of a special kind, which is invisible, intangible, sensorially unperceivable" (Ilyenkov, 1984, p. 31, emphasis added). The sheer abundance of such expressions, in effect, makes them sound as the chief argument in Ilyenkov's whole conceptualization of the ideal. It is strikingly clear that Ilyenkov sets a stark opposition between individuals and society and understands the former very individualistically, as a powerless "entity" with not much of a role to play in the production of the ideal and social practice on the whole.

These discrepancies and internal contradictions in activity theory (i.e., emphasis on the primacy and dominance of social over individual, of internalization over externalization, of acquisition of sociocultural experience over its expansion, as well as the dichotomous view of these aspects of human life and unintended reification of objects) were quite understandable and legitimate in light of rhetorical goals of activity theorists at the early stages in developing this approach, especially given the extremely individualized and solipsistic views that dominated the theoretical landscape at that time. These contradictions were also perhaps linked to the one-sided version of a communitarian ideology that prevailed in the Soviet Union, shaped by the top-down command type of economy and governance in which individuals had a very little role to play other than to follow commands from those in greater authority. In any case, the de facto strict dichotomy of social and individual in initial formulations of activity theory (also taken up by many followers of this school) need to be resolved to move to new levels of a consequentially materialist and nonreductionist theory of human development that would not exclude human subjectivity from the dialectical account of social life. As mentioned in the previous section, this is particularly important in view of new challenges facing activity theory, that are represented in the discourse and research that dissolve human subjectivity in social processes.

OVERCOMING THE DICHOTOMY BETWEEN INDIVIDUAL AND COLLECTIVE ACTIVITY: MOVING BEYOND THE CANONICAL CHAT

It should be made clear that conceptualizing material social practice as the foundation of human subjectivity and explicating their relation in a number of ways (i.e., in descriptions of two-fold transitions between activity and subjectivity, of object-relatedness of mind and of primacy of material activity) was A. N. Leontiev's contribution to psychology that continues to be of great value and relevance even today. The gaps and contradictions in A. N. Leontiev's writings were

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¹¹See almost identical statements (Ilyenkov, 1984) on pp. 37–39, 41–44, 46, 47, 50, 56, 57, 62, sometimes twice on some of these pages.

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at odds with the spirit of his own broader account of human development. Therefore, these gaps represent merely the vestiges, inevitable and partial, of a dichotomous thinking (especially in theorizing the social and individual) in the otherwise novel and progressive conceptual system outlined by A. N. Leontiev. Bridging these gaps can be seen as an attempt to continue the overall CHAT tradition, including A. N. Leontiev's approach, rather than by any means, to reject it. That this kind of a critique from inside activity theory is needed was clearly realized by A. N. Leontiev himself, especially in his latest works (e.g., 1986), and by his followers such as Davydov (e.g., 1998, personal communication).

One important extension of object-relatedness can be achieved by explicating A. N. Leontiev's (1983) own ideas, especially his understanding of activity as a constantly developing complex dynamical process, or continuous flow, characterized by ever-changing cyclical moves and shifts that are never static or reified (p. 168). These changes never end, so that, for example, perceptual images are themselves processes within activity, representing its living and ever-shifting enactments. In addition, the term object (and object-as-motive) should be clarified, following A. N. Leontiev (1983), as denoting not some reified things separate from people and their social practice, but as social processes themselves. That is, although they are sometimes embodied in things (e.g., as a "dream-house" that might motivate somebody), they only matter to people as moments of social practices, embodying and representing these practices, always imbued with social (i.e., transformative and relational) dimensions behind their surface, such as social status, power, prestige, all of which are aspects of collective life and practice. A. N. Leontiev's (1983) theory does capture the inherent dynamism of activity, providing a deeply transactional approach to human development that overcomes the old "metaphysics of things" and the dichotomy of internal versus external. Bringing this dynamism of activity to the fore helps to answer those who interpret activity theory as a dualistic account (for a recent example, see Garrison, 2001; and the persuasive rebuttal, in which the dynamism of activity is underscored, see Miettinen, 2001, this issue).

However, A. N. Leontiev's (1983) account needs to be further expanded by the idea that object-relatedness has to do with other features of human development, namely with the human relevance of material practice and with the practical relevance of human subjectivity and intersubjectivity. Such an interdependence of material practice, human subjectivity, and intersubjectivity is possible if they are revealed to form a three-fold unified dialectical system of mutually co-determining and co-evolving facets of human life. In addition, the emphasis on constant transitions among the components (dimensions) of this system as its *modus vivendi* reveals the principal unity of these three dimensions. This unity is based on the idea that they all represent processes aimed at actively transforming the world. The remaining part of this section is devoted to exploring various aspects of this idea.

A. N. Leontiev's (1983) idea of activity cycles needs to be expanded to include human subjectivity, emerging within and out of activity, as being not only a product of activity but also inextricably part and parcel of further activity cycles, that is, as being involved, brought about, and implicated in the production and expansion of new activities. Thus, the emphasis is placed on human subjectivity as being object-related in the sense of it being involved in the creation and pro-

¹²Although A. N. Leontiev's (1983) did not use the word "flow," he often referred to constant transfers within the system "subject-activity-object" that form, in his words, "cyclical movements" (p. 168). These movements and transfers represent "the most complex picture of internal connections, interrelations [or inter-weavings—perepletenij], and mutual transfers born out of internal contradictions" (p. 171) within human activity.

duction of new objects, relations, and other aspects out in the world of social practice. In other words, the processes of object-related active engagements with, and contributions to, the world by each individual need to be emphasized as representing not only the source, but also the condition sin qua non and the very mode of existence of human subjectivity. This means that human subjectivity is not a "final destination" that emerges as an end product of social practice (as A. N. Leontiev's, 1983, concept of "reflection" tacitly implies). In fact, it never is a final destination, and never is anything separate from the practical ties that link people to their world. Instead, human subjectivity is revealed as existing only within the broader processes of ever expanding and ultimately practical activities that are stretching both "behind" and "ahead" of human subjectivity (and therefore, co-evolving and co-dependent with them). Human subjectivity then ultimately appears as just another form of participating and contributing to social practice, of changing and advancing this practice, and thus, as the form that realizes practical ties of humans to themselves, to other people, and to their world.

The related point is that psychological processes need to be conceptualized as phenomena that never belong to some separate mental realm. Psychological processes need to be conceptualized as actions, and not in the classical Piagetian sense of mental acting, but as object-related actions out in the world, making a difference in the world and participating in its construction and development. For example, even in distortions of reality, as in stereotypes, the link to reality is never eliminated. Stereotypes serve very real practical purposes, for example, of stifling social changes and preserving comfortable ways of life for certain dominant groups or individuals. Stereotypes represent, just as any other presumably purely mental phenomena, a way of being in the world in the sense that they play a practical role in life, being of consequence and significance in it.

Also, even in cases when the subjective "moment" of activity dominates and seems to exhaust all other dimensions, such as in scholarly activities of a theory-building, the processes involved necessarily extend far beyond the confines of purely mental phenomena. For example, although theory-building might appear, in a superficial observation, as a purely arm-chair activity, detached from mundane practices of life, this activity type can only emerge, exist, and develop as a form of scholars' connection and contribution to the world, a form of collaborative pursuit in the world, that is, as inevitably practical. Such a view of science as a social practice can be used as a foundation for analyzing science in a way radically different from the traditional mentalist accounts still dominating history and metatheory, including (quite paradoxically) the history of Vygotsky's school (e.g., Kozulin, 1990; Valsiner & van der Veer, 2000; van der Veer & Valsiner, 1991; Yaroshevsky, 1989). Although this approach, which is traditionally mentalist at its core, views knowledge as the product of solitary individuals who engage in purely rational, value-free pursuits of abstract principles and truths (ironically, even A. N. Leontiev, 1983, and Ilyenkov, 1984, p. 29, saw theoretical activity as separate from practice), an alternative approach focuses on science, including theory, as being a collaborative practice and activity—the process of "doing science" as a way of changing the world. In this case, understanding Vygotsky's (1997) theory entails revealing his and his colleagues' unique positioning vis-à-vis the moral, political, and historical challenges they faced, as well as the kind of political, cultural, and moral ends they were envisioning and pursuing. Such an account, for example, would necessarily focus on the fact that Vygotsky and his colleagues were striving to develop a new psychology that could participate in creating a new classless and just society—a process that they not only witnessed but also participated in and contributed to (all the tragic failings in the realization of this project on a societal scale notwithstanding). Their unique positioning in history and their active political stance regarding the gigant equality necessari have produced. For project, not only search problems it ences. All these witheir work beyond science. Thus, this to its directionality in, creating partic lows one to interpwell as to explain (for details, see Si

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In addition, seeing science as a way of transforming the world is the platform from which to counter the now popular relativistic stance of social constructionism (e.g., Gergen, 2001), according to which theoretical instruments (concepts, methods, schemes of analyses, etc.) are indeterminate as to their truth and value. An activity-based view of science, in contrast, establishes the ineluctable determinacy and certainty, including the value-, moral- and truth- related dimensions, of any theory and any of its instruments as grounded in their role and ability to contribute to inevitably determinate pursuits—always undertaken in a certain direction, that is, in view of creating specific versions of social practice. Note that this is not an absolute determinacy that can be established irrespective of a scientific practice from within which the conclusions about truth and value are reached. Instead, it is an unavoidable determinacy of theory that has to do with the determinacy of science as being practical, goal-oriented, object-related, and therefore, transformative and value-laden.

Thus, by returning to the world through activity processes in their endless manifold transitions, human subjectivity inevitably changes the world, positing (externalizing) itself in the materiality of human practice in its reified objective forms. The latter forms, that is, the cultural-historical objects, not only come to embody communal social practice as they "reflect" and carry on the history and vicissitudes of their social production (as aptly shown by Ilyenkov, 1984, and A. N. Leontiev), but also appear as coming into being only when being again involved—further transformed and creatively developed—in human practice that is carried out by concrete individuals. That is, the world of cultural-historical experience (reified in tools and objects) and human subjectivity appear as co-evolving and existing through conjoint constant reenactments in, and by the processes of, active transformations of the world.

The world then appears as humanized in a very deep sense, that is, as imbued with human subjectivity, as inevitably carrying human experience, values, and intentionality right in its very body (or fabric). Moreover, human subjectivity appears as laden with practical relevance and agency—as existing only through its practical enactments in the sociohistorically developed forms of life and practice. For example, the most vivid creations of social practice (and of human subjectivity), such as language and art, appear as the products and carriers of practice, but only when reenacted (and reconstructed) in new rounds of ever expanding cycles of practice by real people in their real life. It is in this sense that, for example, words and music are mute, and even dead, unless someone again and anew reenacts them, giving them new life (if even in a "mere" perception), thus making them ideal and alive for a particular person (see Bakhtin, 1973, 1981 on uniquely individual aspects of human development).

If human subjectivity is conceptualized as a lawful and necessary moment that co-evolves with social processes in the realization of human development through constructive and creative transformations of the world, then internalization and externalization also appear as essentially interdependent and mutually constitutive mechanisms. These processes are inextricably linked in that they exist together, both being implicated in realizing transitions among various planes of activity within their ever-expanding flow. Both internalization and externalization appear as mechanisms that are equally and simultaneously necessary for life processes to be carried out, with human subjectivity (on the internalized pole of activity) being a necessary, though transitory, moment in these processes. It is in light of such recursive turns—reinstating the objective role and relevance of human subjectivity in the world, on the one hand, and the subjective, human relevance of the world as being imbued with human subjectivity, on the other—that the individual and the world indeed cease to be separate realities. Instead, they now appear as manifold (not just two-fold) moments of the same process of activity development. The objective world ("objects") appears as being posited in the body of object-related activity processes that produce, out of the same body, human subjectivity (i.e., its "subject," who therefore also reflects and embodies the world), for it to then return to, and act back on, the world, through activity, transforming and humanizing the world that can then shape new activity cycles—in a constantly unfolding, never-ending, open-ended process of life.

The emphasis on the expanding and never-ending, recursive and manifold cycles of human social practice (entailing human subjectivity in it, as one of its moments and forms) reveals the principle unity of the individual and the social precisely as having the same ontological grounding. That is, it reveals the dialectical unity (though not the equivalence) and reciprocity between collective practices of material tool production on the one hand, and the diverse mechanisms that organize these practices, on the other. These mechanisms are comprised of (a) human society that regulates exchanges between individuals, that is, at the inter-subjective level, and (b) human psychological processes that allow each individual to participate effectively in collective practices, that is, at the intra-subjective or psychological levels. Thus, a continuum is outlined—from inter-individual to intra-individual processes that not only stem from but also participate in and transform the collective material practice at the same time that the latter transforms them. Human subjectivity and society, both representing the emergent properties (i.e., transformations) of the same reality—the social practice of material production—differ in their degree of generality, in their power, in the specific mechanisms of their realization, and most importantly, in their role in the genesis of practice (with the inter-subjective level of practice being historically and ontogenetically prior to the intra-subjective level). However, this claim cannot and should not conceal the fact that both are made out of the same "fabric"—the reality of practical collaborative transformations of the world from which they originate and also participate in, performing this reality and being performed by it, as they enact and carry on this practice.

These manifold transformational sequences and shifts within activity processes also allow us to conceptualize how human subjectivity, being implicated in the development of human activity, co-evolves with other forms of activity processes (i.e., various types of collective social exchanges and material production) in the history of civilization and of each human individual. Namely, the manifold transformations imply that activity develops not in a unidirectional or linear fashion, but in ever expanding cycles in which new turns can be brought about (at least in historically and ontogenetically mature forms of activity) by any of its moments, including human sub-

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jectivity. This idea is particularly important because it reveals hundly with the capacity to generate new cycles of activity (as well as, no doubt it completely break away from it). This is the broad ontological foundation and tualizing human subjectivity as an agentive (i.e., able to generate change and notation ently necessary moment within unfolding activity processes.

That individual agency taken naturalistically, in abstraction from society, and society taken in abstraction from individual agency, are equally impossible is a commonly repeated statement in many Marxist oriented works. However, this general statement can be further concretized if human subjectivity and society are conceptualized as being different poles on essentially the same continuum of diverse regulatory mechanisms—all stemming from and serving the purposes of material social practices (also creating, enacting, and performing these practices), as proposed here. For example, such a view entails that both human subjectivity and society are viewed as processes, as enactments of the same reality of human practice, and therefore as evolving together—due to them mutually molding and interpenetrating each other while co-participating (always together) in social practice and in life itself. Taking this continuum seriously, in other words, concretizes the view that individuals, including in their subjectivity (understood nonindividualistically and nonmentalistically; cf. Arievitch, 2004) are simultaneously molded by society and also mold society; that they are created by history but also create their own history, being "the authors and actors of their own drama" (Marx, 1955, p. 138).

Expanding the principles of CHAT to include the practical relevance of human subjectivity along with the human relevance of social practice, as two equally important aspects of how activity systems function to produce human life, allows us to cast A. N. Leontiev's (1983) conceptualization of motives and goals in a new light. Specifically, the view proposed here implies that motives and goals do not exist separately from each other. Instead, they appear as existing (again, in historically and ontogenetically mature forms of practice) only together, as co-constitutive and co-evolving moments in the ever-shifting balances and mutual penetrations—all within the ongoing processes of activity. Not only are the socialized (but never merely social) motives of communal practices are powerful molders of the individualized (but never merely individual) goals, as A. N. Leontiev (1983) suggested, but also goals are powerful molders of motives (in more bottom-up processes). Goals appear, then, as dynamic and transformable, potentially feeding not only from, but also into, motives, in the ever-shifting balance of mutual transitions and interpenetrations within the system of "motive-objects-goals" that co-evolve as a whole (see Miettinen, this issue, for an illustration of the idea developed here). Note that motives and goals appear (again, in mature forms of activity) as juxtaposed—sometimes equipotent, sometimes with one dominating the other, and as extending simultaneously in horizontal and vertical dimensions, like zigzags perhaps (actually, metaphors of space do not capture the dynamics of human development even if such zigzags or horizontal dimensions are added to the description, the latter proposed by Engeström, 1996; however, this helps us to see it as a nonlinear and polydirectional process).

By revealing the constantly unfolding reciprocal transfers achieved in and by human life, CHAT, in its expanded form, sets the stage for overcoming the dualism between individuals and their world, including in one of its facets—the dualism between individual and social types of activities. Thus, conceptualizing human subjectivity and collaborative exchanges as interconnected and co-evolving aspects of one and the same systemic process derivative from the collaborative material practice is based on the idea that human activity is object-related. However, this conceptualization also expands the principle of object-relatedness, drawing attention to the deeply dia-

lectical nature of human development as not simply driven by objects in the world, but as also performing and transforming the world—a process in which humans create their own life and their own subjectivity and in which this subjectivity is implicated as a real force, on a par with equally necessary collective mechanisms of life.

CONCLUSIONS

The greatest achievement of cultural-historical theorists, especially Vygotsky (1984) and A. N. Leontiev (1983), was to establish the principal sources of human subjectivity in the collaborative processes of material production of social life—human object-related activity. Their approach represented a deeply materialist ontology in viewing psychological processes. The major suggestion of this article has been to expand this materialist ontology by adding a focus on the manifold transitions among material tool production, inter-psychological processes, and human subjectivity—all being co-evolving moments in the constant unfolding of human life and history. The resulting approach can be termed a materialist ontology of human subjectivity that, at the same time, entails a humanist ontology of material practice, the two being equally important and complementary descriptions of human life and development. The proposed expanded version of CHAT suggests ways to overcome the dualism between individual and social processes by explicating the ontology and specific purposes of inter- and intra-psychological processes in their relation to material production and human life. This description thus moves into exploring the dialectical manifold transitions among the collective practices of material production, the social processes of collaboration, and concomitant human subjectivity, all of which co-evolve and mutually determine each other. This approach therefore helps to ascertain the agentive role of individual processes and of human subjectivity within a profoundly social, transactional, and object-related ontology of human life.

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