

# Interobjectivity, Ideality, and Dialectics

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In his paper on interobjectivity, Bruno Latour comes close to some key ideas of cultural-historical activity theory. The very concept of activity as elaborated by Leont'ev is based on the concept of object.

A basic or, as is sometimes said, a constituting characteristic of activity is its objectivity. Properly, the concept of its object (*Gegenstand*) is already implicitly contained in the very concept of activity. The expression "objectless activity" is devoid of any meaning. (Leont'ev, 1978, p. 52)

For an activity theorist, Latour's line of argument sounds largely familiar, yet refreshing in that such powerful conceptual pleas for reorienting social theory toward objects have been rare, indeed. In this commentary, I will first point out similarities between Latour and activity theory, emphasizing ideas that should stimulate activity theory to develop further its conceptual tools.

However, there are also important differences between Latour's text and activity theory. I will discuss these differences one by one, not to seek confrontation but in order to identify potentially fruitful themes of further inquiry and debate.

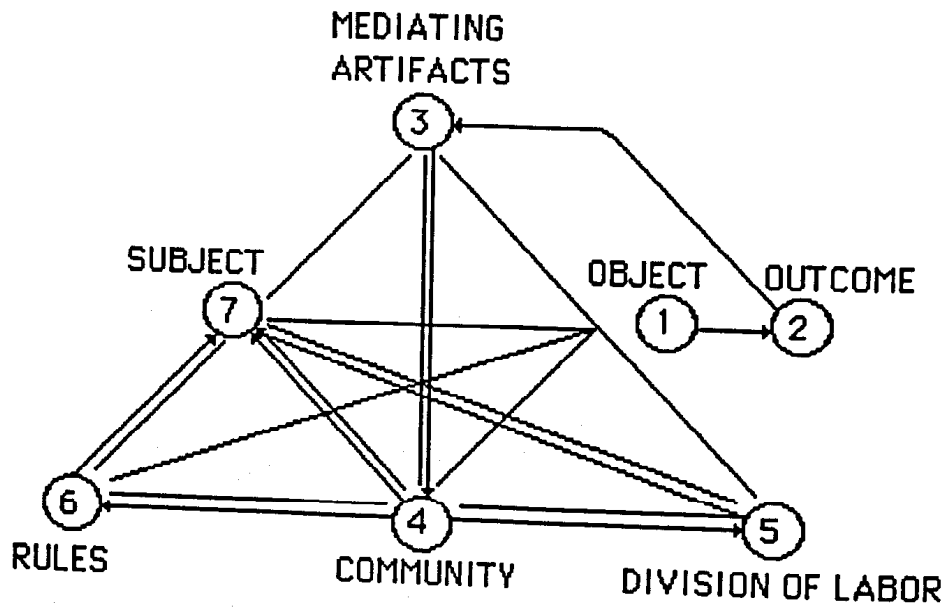
## Interobjectivity Embraced

Latour argues that human interaction, in contrast to simian interaction, is reduced and partitioned by material frames, including walls and clothes. This is an ingenious way to demonstrate the evolutionary significance of objects for humans.

Latour's point also presents an interesting challenge to activity theory. When talking about artifacts, activity theorists are used to referring to implements and tools, such as spoons, hammers, and machines. But walls, clothes, buildings, furniture, roads, parks, and other such things are not so clearly tools used by actors to achieve ends. They are something like infrastructure, material and human-made, but not easily attached to a specific set of purposes and uses. Much of the time they seem to exist to be tacitly relied upon and lived among, rather than to be used purposefully. To extend the question, what is the nature of the air we breathe? It is certainly made by humans in that our actions largely determine its quality and consistence. It is necessary for our survival, yet we wouldn't think of it as a tool.

These infrastructural entities seem to be utilities rather than utensils, media rather than means. They force us to rethink our habitual tendency to freeze and categorize objects into one fixed role and

place in the flow of activity.<sup>1</sup> In Figure 1, Latour's walls are examined as trajectories in the conceptual model of a human activity system.



**Figure 1: The trajectory of a wall in a human activity system**

The wall begins its life as an object to be created (1) for the owner of a house by means of hiring a carpenter. When the construction is finished, the wall momentarily appears as an outcome, a product (2). For a while, the owner of the house sees the finished wall as a mediating artifact, a tool with which he reaches the purpose of rearranging his living space (3). Soon enough, the wall ceases to be a tool; it becomes an aspect of the tacitly assumed community infrastructure (4) for the family living in the house and for the friends visiting it. As a designated space, e.g., as the study of the husband, it begins to define the division of labor in the family (5), and the associated rules—e.g., children are not allowed to play in this room (6). Once it has taken root at this community level of the activity, the wall is on its way to becoming a constitutive element in the makeup of the subject's identity (7).

While this depiction is probably too structural for Latour, it does in its own way point toward the possibility of seeing objects as "comrades, colleagues, partners, accomplices or associates in the weaving of social life." Above all, it calls attention to the incessant movement of objects between and across their multiple potential roles and meanings.

Latour attacks the gulf between agency and structure, constructed by sociology. Objects and artifacts are the key to overcoming this gulf. But they must be put into movement. Latour defines the movement in terms of "the work of localization and globalization." Localization is done through channeling, partition, focusing, and reduction. Globalization is done through instrumentation, compilation, punctualization, and amplification.

Activity theory has traditionally operated with the Vygotskian concepts of internalization and externalization. Localization and globalization seem like powerful additional dimensions for the

analysis of activity-in-development. Take a technological and commercial innovation, such as the electronic kiosk "Postal Buddy" I analyzed with Virginia Escalante (Engeström & Escalante, 1996). Combinations of internalization and externalization can characterize different steps in the evolution of the activity system of the Postal Buddy Corporation as its founders first acquired the experiences, tools and ideas necessary for the innovation, then began to build different versions of the actual machine. Localization and globalization can further illuminate the development and eventual failure of the activity system. Postal Buddy Corporation was successful in ensuring centralized control over machines to be distributed globally. But it failed in implanting and rooting the kiosk in the local activity system of the post office.

Latour characterizes localization as partitioning and reduction. In the Postal Buddy case, partitioning, separating the kiosk from the rest of the local post office activity, was the source of friction and failure. Local mingling, dialogue, and trust building would have been sorely needed. These processes are still curiously missing in Latour's text. Symptomatically, he writes that "the very force of interaction lies in its ability to locally and momentarily suspend interference" (this volume, p. 230). Aren't help and cooperation an equally important force of interaction? In the Postal Buddy case, frustrated customers sought help from local staff but were denied it because of the partitioning.

### Action and Activity, Object and Tool

Latour (this volume, pages 235-240) writes that the point of departure for analysis is "in an action that localizes and globalizes." He points out that there must be an operator that "can weave the properties of objects with those of the social. "But what is it?" he asks. He abandons standard conceptions of action that depict a subject acting competently on an object. He argues that "we need to consider any point as being a mediation—that is to say, as an *event* that cannot be defined in terms of inputs and outputs or causes and consequences." The concept of action is needed to remind us of the emergence of novelty and surprise—the fact that we are exceeded by what we create. Now comes a crucial point:

Let us suppose that something else is, metaphorically, pulling the strings of our puppeteer—a social actor, the "artistic field," the "spirit of the times," the "epoch," "society" and so forth. This new actant, behind him, can no more master him than he can in turn master the puppet. One can only associate mediators, no one of which, ever, is exactly the cause or the consequence of its associates. Thus it is not the case that there are actors on the one side and fields of forces on the other. There are only actors—actants—any one of which can only "proceed to action" by association with others who may surprise or exceed him/her/it. (current volume, p. 237)

Latour concludes that social worlds are flat at all points. The idea of levels "comes merely from overlooking the material connections that permit one place to be linked to others."

From the point of view of activity theory, it is easy to agree that models of rational, goal-directed action will not do. In Latour's account, the puppet surprises the puppeteer. Another angle on the same principle may be found in a story told by Karl Weick.

This incident . . . happened during military maneuvers in Switzerland. The young lieutenant of a small Hungarian detachment in the Alps sent a reconnaissance unit into the icy wilderness. It began to snow immediately, snowed for 2 days, and the unit did not return. The lieutenant suffered, fearing that he had dispatched his own people to death. But on the third day, the unit came back. Where had they been? How had they made their way? Yes, they said, we considered ourselves lost and waited for the end. And then

one of us found a map in his pocket. That calmed us down. We pitched camp, lasted out the snowstorm, and then with the map we discovered our bearings. And here we are. The lieutenant borrowed this remarkable map and had a good look at it. He discovered to his astonishment that it was not a map of the Alps, but a map of the Pyrenees. (Weick, 1995, p. 54)

A third angle is offered by V. P. Zinchenko's discussion of what he calls "the liberated action."

According to specialists in the prevention of aviation catastrophes, in complex flying conditions humans and machines turn out to be, as it were, outside of time (we have in mind here the "time" of consciously controlled decisions and actions). It is precisely this fact that provides the potential for avoiding catastrophes. But where does this potential originate? . . . The origins of such liberated action must be sought in the characterization of living movement. . . . In order to carry it out, mind and body must comprehend, through some sort of nonrational, nonreasoned means, the most complex physics of the concrete object situation (i.e., statics, dynamics, kinematics, etc.) and coordinate this with bodily biomechanisms (which possess an enormous range of degrees of freedom that must be overcome in every motor act). It did not occur to anyone to describe these acts in terms of an act that is controlled and structured through the conscious presence of the individual subject and his or her volition. (Zinchenko, 1985, p. 112-113)<sup>2</sup>

Latour would explain these instances as associations of actants and mediators in flat networks. It is quite appropriate to abandon general societal structures as causes. Yet individual actions are embedded in concrete local collective activities. Behind a momentary action performed by a singular actor there is a long-term collective activity, a community of practice. Abandoning levels makes it difficult to account for this embeddedness.<sup>3</sup> Working up from actions to activity we may begin to grasp "the part of ourselves which we least understand and which answers the question 'Why do we act as we do?'" (Harré, Clarke, & De Carlo, 1985, p. 30).

We need to know more about Latour's puppeteer, Weick's soldiers and Zinchenko's pilots. Let us assume that the puppeteer is a member of a puppet theater company, just like the soldiers were members of their military unit and the pilot is a member of a collaborative system that minimally includes the air traffic control on the ground. These are activity systems, not fields of forces separate from or opposite to the actor. Cognition, volition and emotion are distributed and historically accumulated in these systems. The inherent complexity and contradictions of collective activity systems constantly spills over into and saturates seemingly simple and straightforward individual actions, occasionally making them appear as irrational or liberated.

Collective activity is realized through individual actions, but it is not reducible to a sum total of those actions. It does have a systemic durability in which Latour's things—objects and artifacts in Figure 1—play important roles. But to reduce the durability to the general category of objects is to give up a lot of analytical power.

First of all, an object of activity is not the same as mediating artifact, or tool. The two play dramatically different, yet constantly switching roles in the unfolding activity. The puppeteer's object is not reducible to the puppet; we need to examine the audience and the play. The soldiers used the map, but one should not equate the map and the territory. The pilots use instruments and fly an aircraft, but they also have a mission, a route, a destination outside the aircraft. When this dialectic of object and tool is swept aside, reflection tends to collapse, not only in theory but in practice, too. In the Postal Buddy case, the designers tried to make the kiosk totally self-sufficient and every screen self-explanatory. The object (what the customer wanted to print on her business card, for instance) and the mediating tool (instructions for inserting text) were so blurred and blended together that reflection

collapsed and the customer was likely to walk away with something that “came out funny” (Engeström & Escalante, 1996, p. 359).

Secondly, there is the whole bottom part of Figure 1: community, rules, and division of labor. Latour, Weick, and Zinchenko tell us nothing about this aspect of their cases. Yet, as Leont’ev (1981, pp. 209-214) shows in his famous example of primeval collective hunting, individual action only arises through the emergence of division of labor. One might argue that community, rules, and division of labor are different from things, thus irrelevant from the point of view of durability. A closer look into any institutionalized activity system will reveal that, while perhaps less palpable and more contested than some objects and mediating artifacts, this bottom part of the triangle is very durable indeed.

In sum, I sympathize with Latour’s agenda to replace the almighty “society” with networks of local actants. But in spite of the acknowledged durability of objects, Latour’s actants seem to have no analyzable inner structure; they are like monads or amebas. Instead of jumping directly from actants to networks, I suggest stopping to discover the intermediate institutional anatomy of each central actant—that is, the historically accumulated durability, the interactive dynamics, and the inner contradictions of local activity systems. And I recommend keeping one’s eyes open for both vertical and horizontal relations in activity systems and their networks.

### Object and Commodity

Latour writes that things are themselves social and carry in them the work of “people who are absent today, although their action continues to make itself felt” (this volume, p. 231). I worry about the vagueness of these assertions.

The Russian philosopher Evald Ilyenkov developed the concept of the ideal to deal with the sociality of things.<sup>4</sup> For him, ideality is the form of social human activity represented in the thing. Ideality includes “*all the things that ‘mediate’ the individuals that are socially producing their life: words, books, statues, churches, community centres, television towers, and (above all!) the instruments of labour, from the stone axe and the bone needle to the modern automated factory and the computer*” (Ilyenkov, 1977, p. 98).

Ideality is not something constructed mentally. It is objective and has material force. Money and value are the most pertinent examples.

Chemical analysis of a gold coin will not reveal a single molecule of boot-polish, and vice versa. Nevertheless, a gold coin represents (expresses) the value of a hundred tins of boot-polish precisely by its weight and gleam. And, of course, this act of representation is performed not in the consciousness of the seller of boot-polish, but outside his consciousness in any “sense” of this word, outside his head, in the space of the market . . . . (Ilyenkov, 1977, p. 89)

In a capitalist market economy, the value-form is the dominant ideal form of things. Things are not just things, they are *commodities*. This means that they are contradictory unities of use value and exchange value. As Ilyenkov (1982, p. 255) says, “a commodity contains a contradiction within itself, in its immanent economic definitions.”

Latour suggests that we should study things as inherently social actants. Activity theory suggests that we should give some concrete historical content to the “inherent sociality.” This content is the commodity form. For the puppeteer, the puppet is not just a wonderful artifact, a use value with which

he can create and express dramatic experiences. It is also a tool with which he makes money and which partly determines his own exchange value on the market.

The picture that an artist puts all his skill into, he has to paint in order to convert it into money, into a thing that has nothing in common with painting. Nevertheless the picture retains its real sense for the rich industrialist who buys it. For him it may, perhaps, acquire the sense of a thing in which he wants to invest some of his money, or of a thing testifying to the prosperity of his firm. (Leont'ev, 1981, pp. 254-255)

Leont'ev (1981, p. 255) continues by asserting that "to ignore these peculiarities and to remove them from the context of psychological research is to deprive psychology of historical concreteness, converting it into a science solely of the psyche of an abstract man, of 'man in general'." This is equally true of sociology, cognitive science, or whatever we may call our disciplines.

The Postal Buddy kiosk was designed to be human-like and user friendly, to the point of being lovable. Yet it was also to be self-instructive and self-sufficient to the point of excluding reflective tool use and supportive interference from local post office staff. These ideal qualities were materially imprinted in the design of the software and hardware. These qualities were expressions of the peculiar and internally contradictory commodity character of the machine. They gave rise to a host of innovations and disturbances, leading to an eventual failure.

### Dialectics and Contradictions

Latour is a determined critic of dialectics. Interestingly enough, he depicts dialectics as the ultimate pinnacle of dualism in that it "feigns to overcome it by loops and spirals and other complex acrobatic figures" (Latour, 1993, p. 55).

I am unable to recognize such dialecticians as Ilyenkov in this picture. Partly this may be a consequence of the fact that Latour never gives a single quote from the dialectics he criticizes. In fact, the only name he mentions is Hegel. So it remains an open question just which and whose dialectics he might be talking about.

Interestingly enough, Latour himself is fond of operating with dialectical contradictions. In the present paper, he points out the contradictory qualities of human interaction: it is simultaneously a framework that circumscribes and a network that dislocates. In the rest of the paper, Latour proceeds to construct a "dialectical thirdness" by means of objects.

So I see an internal contradiction in Latour's writing. On the one hand, he denounces and attempts to demolish dialectics. On the other hand, he operates in the dialectical mode of identifying contradictions between opposites and constructing "third" concepts that attempt to overcome or supersede the duality.

### Notes

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<sup>1</sup> I tried to make this point a few years ago in a paper titled "When is a Tool?" (Engeström, 1990, Chapter 8).

<sup>2</sup> Zinchenko (1985, p. 114) writes, "The timelessness of liberated action in situations that are critical for the subjects is like the timelessness of acts of creation, acts of brutality, and acts of discovery." For studies of small acts of creation, see Engeström (1995a; 1995b), for a study of an act of brutality, see Engeström (1989).

<sup>3</sup> Activity theory has traditionally been too single-mindedly preoccupied with the vertical dimension of levels of development. Abandoning the idea of fixed evolutionary levels does not, however, imply that local hierarchies and levels do not exist. To the contrary, both the vertical and the horizontal dimensions are needed. For further elaboration's of this point, see Engeström (1995a; in press).

<sup>4</sup> For two recent and decent English discussions of Ilyenkov's work, see Bakhurst (1991) and Falmagne (1995). Regrettably, both of these avoid the central issue of commodity and value. It is difficult not to sense a parallel between this avoidance and the numerous Western interpretations of Vygotsky's work that have so desperately tried to depict him as non-Marxist.

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