Activity Theory in a Nutshell” by Yvonne Rogers


Activity Theory explains cultural practices (e.g., work, school) in the developmental, cultural and historical context in which they occur, by describing them in terms of “activities.” The backbone of the theory is presented as a hierarchical model of activity that frames consciousness at different levels. These are operations, actions and activities. A number of principles are also proposed.

Focusing the analysis around the concept of an activity can help to identify tensions between the different elements of the system. An example of where it was used to show these was MacKay et al.’s (2000) study of users working with a new software tool that identified 19 shifts in attention between different parts of the tool interface and the task at hand. Some users spent so much time engaged in these shifts that they lost track of their original task. Using the theory helped the evaluators to focus on relevant incidents.

There are two key models: (i) an activity model and (ii) the mediating role of artifacts.

(i) The “classic” individual model

At the bottom level of the model are operations, routinized behaviors that require little conscious attention, e.g., rapid typing. At an intermediate level are actions that are characterized by conscious planning, e.g., producing an index. The top level is the activity, and that provides a minimum meaningful context for understanding the individual actions, e.g., writing a chapter. There may be many different operations capable of fulfilling an action, and many actions capable of serving the same activity.
Activities can be identified on the basis of the motives that elicit them, actions on the basis of conscious goals that guide them, and operations by the conditions necessary to attain the goals. However, there is an intimate and fluid link between levels. Actions can become operations as they become more automatic and operations can become actions when an operation encounters an obstacle, thus requiring conscious planning. Similarly, there is no strict demarcation between action and activity. If the motive changes then an activity can become an action. It is also important to realize that activities are not self-contained. Activities relate to others while actions may be part of different activities, and so on.

(ii) Mediating role of Artifacts

Artifacts can be physical, such as a book or a stone, or they can be abstract, such as a system of symbols or a set of rules. Physical artifacts have physical properties that cause humans to respond to them as direct objects to be acted upon. They also embody a set of social practices, their design reflecting a history of particular use. Leontiev (1981) describes the process of learning what these inherent properties are as one of appropriation, signifying the active nature of the learning that is needed. The kind of learning involved is one of identifying and participating in the activity appropriate to the artifact.

Consider an infant learning to feed with a spoon. Leontiev (1981) observes that, at first, the infant carries the spoon to its mouth as though it were handling any other object, not considering the need to hold it horizontal. Over time, with adult guidance, the spoon is shaped in the way it is because of the social practice — the activity — of feeding and, in turn, the infant’s task is to learn that relationship — to discover what practice(s) the object embodies. By contrast a spoon dropped into the cage of a mouse, say, will only ever have the status of just another physical object — no different from that of a stone.

The idea of abstract artifacts follows from the idea of mediation, i.e., a fundamental characteristic of human development is the change from a direct mode of acting on the world to one that is mediated by something else. In AT, the artifacts involved in an activity mediate between the elements of it. The social context of an activity is also considered central. Even when seemingly working alone, an individual is still engaged in activities that are given meaning by a wider set of practices.

References