



Systemic Structural Activity Theory

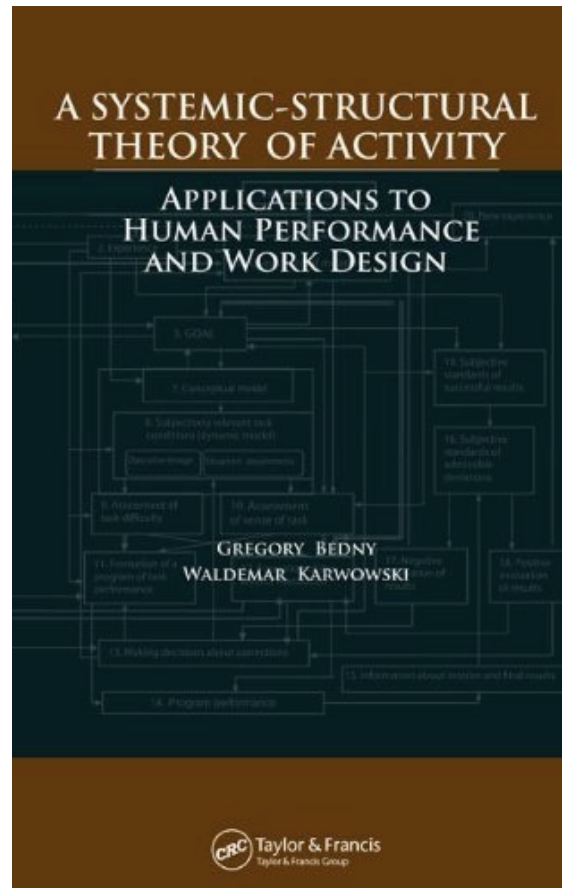
an overview of basic concepts

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Activity Theory - Lineages

- Russian Activity Theory
 - Vygotsky
 - Leontiev, Rubinshtein
 - Many others
- Scandinavian Activity Theory (CHAT)
 - Engeström,
- Systemic-Structural Activity Theory (SSAT)
 - Bedny, Karwowski and others



Bedny, G. Z., & Karwowski, W. (2007). *A systemic-structural theory of activity*. CRC Press.

Activity theory, what for?

- The concept of Activity (deyatelnost') provides a framework to understand individual human praxis, analysing the development, structure, and processes of their activities

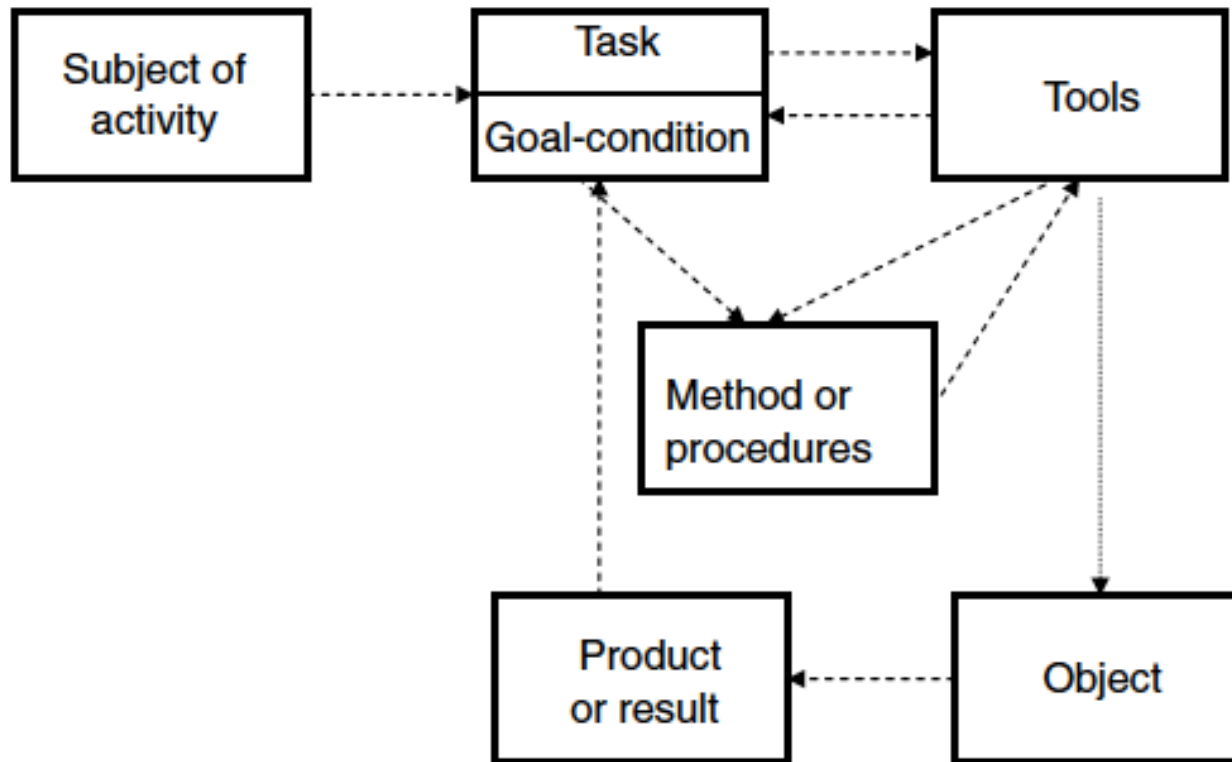
A definition of activity

- A goal-directed system, in which cognition, behavior, and motivation are integrated and organized by a mechanism of self-regulation toward achieving a conscious goal (Bedny & Karwowski, 2007, p. 1).

Russian Activity Theory vs SSAT

- Russian Activity Theory is a powerful descriptive tool rather than a strong predictive theory.
- In contrast, SSAT, which has carefully developed units of analysis and principles of development of predictive models of human performance, can be regarded as a strong predictive theory for the study of human work systems. (p. ix)

The structure of activity



(Bedny & Karwowski, 2007, p.22)

The subject

- The subject of an activity is an individual who performs in accordance with conscious goals and tasks embedded in the goals.
- The subject is an agent with accumulated historical and social experience. Through the objects that he/she transforms or changes according to the goal of activity, the acting individual emerges as a subject who reflects transformed reality in his/her consciousness, and based on this reflection regulates his/her activity in relation to others for whom he/she is a persona (Rubinshtein, 1935). (p.22-23)

The task

- Tasks may be defined as a logically organized system of mental and behavioral actions, directed toward an ultimate task-goal.
- The task is the basic component of activity and human lives can be conceptualized as an ongoing attempt to solve tasks or problems.
- Typically tasks are organized in a logical sequence the performance of which enables attainment of the final system objectives. (p.23)

The action

- An action is defined as a discrete element of activity that fulfills an intermediate, conscious goal of activity.
- The performance of all the actions required by a task leads to the achievement of the goal of the task. (p. 41)

The goal-condition

- A goal is a conscious mental representation of humans' own activity in conjunction with a motive.
- Goals are considered cognitive, informational components of activity. In contrast motives or motivation in general, are treated as energetic components of activity. The more intense the motive is, the greater the effort to reach the conscious goal.
- Motive-goals create a vector that lends goal-directed activity its directness. Methods of task performance are determined not only by the goal but also by conditions in which the goal is presented. (p.23)

The object

- The object of an activity refers to an object that has been modified by the subject according to the required goal of activity.
- This modification includes not only the physical transformation but also, for example, classification of objects according to the required goal and existing criteria.
- People create artificial objects as a means of regulating their interactions with the external world and others. These objects are called artifacts, which are seen to hold a central place in the development of the human mind. (p. 24)

The product or result

- Product is a result of the transformation of an object of activity. Product may be material, spiritual, aesthetic, etc.
- Indeed, the subjects themselves may be the objects of change as a result of activity.
- This is why in activity theory, instead of the term product one may find the notion of result. The result does not always match the goal of activity. (p. 24)

The tools

- [Tools] are divided into two types - external or internal tools.
- With the help of external tools, an individual may transform initial material or object of activity.
- Internal tools are internalized or acquired signs and symbols that are used during their internal mental activity.
- Through the manipulation of signs and symbols, subjects internally transform ideal objects of activity into their requisite product or result. (p.24)

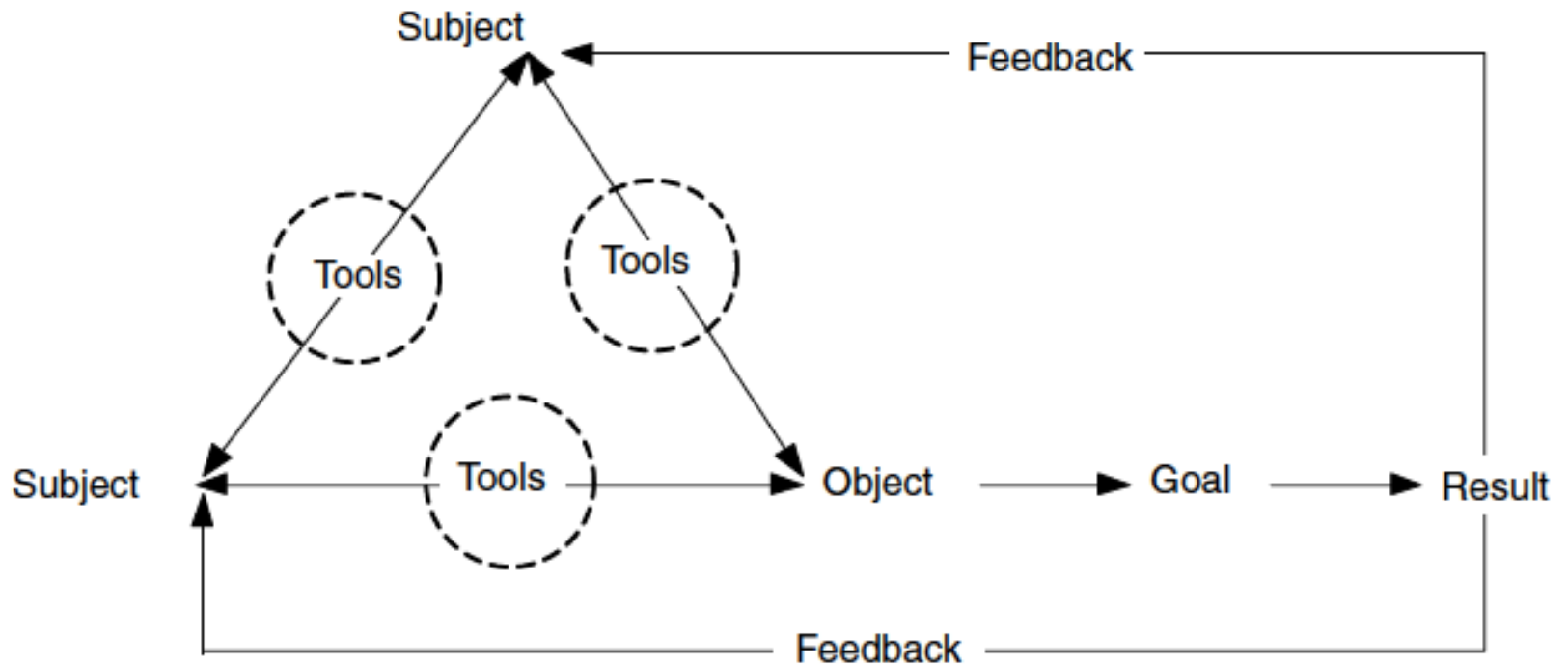
The methods or procedures

- [These] include a logically organized system of external behavioral or internal mental actions through which external objects or mental situations are transformed to specification.
- The method of performance entails a plan of activity within which all components of activity — goals, conditions, tools, etc. — are integrated (p.25)

Self-regulation

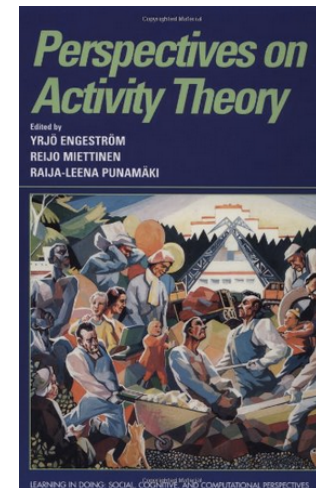
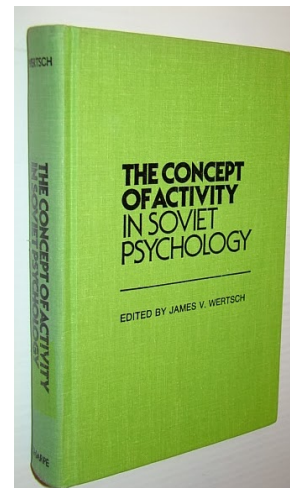
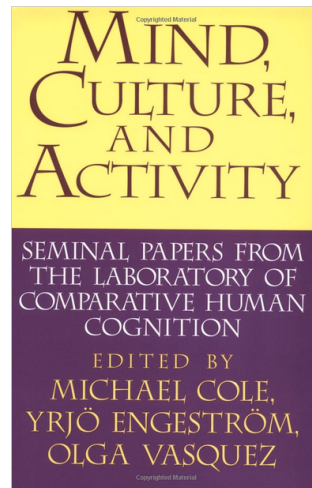
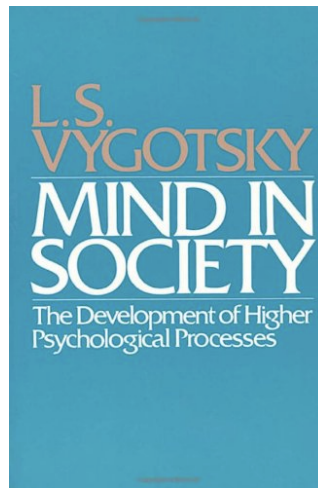
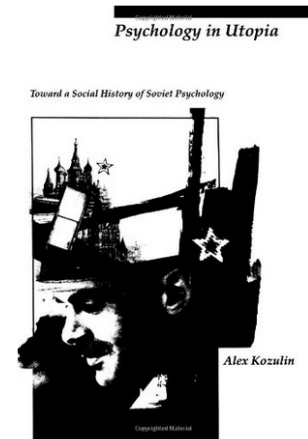
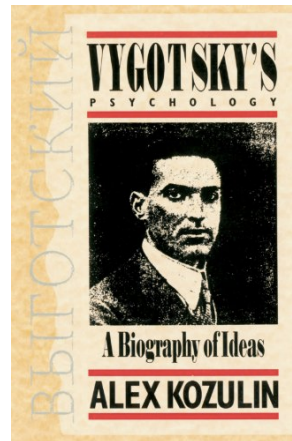
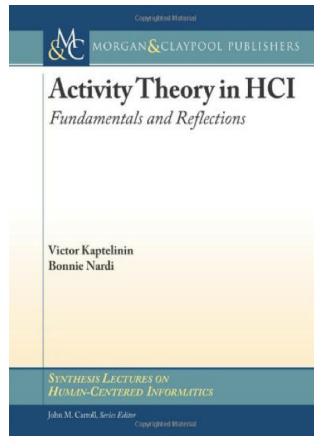
- Any activity has a recursive loop structure, organized according to the principles of self-regulation in which feedback mechanisms that evaluate performance are decisive (Anokhin, 1962; Bernshtein, 1966; Bedny and Meister, 1997).
- Subjects not only change their own strategies, based on self-regulation, but also provide scope for their external environment. Through mechanisms of self-regulation, internal activity is formed. Internal activity, which at first was performed with the support of external activity, is subsequently executed internally.
(p. 29)

A schema of activity



(Bedny & Karwowski, 2007, p.40)

Future readings





Thank you!