

ACTIVITY THEORY – A QUICK OVERVIEW

[NOTE: The following is extracted and adapted from: Detlor, B., Hupfer, M., & Smith, D.H. (2018). *Digital Storytelling: An Opportunity for Libraries to Engage and Lead Their Communities*. *Canadian Journal of Library and Information Science*, 42(1-2)]

Activity Theory provides a language for understanding and making sense of complex real-world activities situated in cultural and historical contexts (Engestrom 1987 2000, Hasan and Kazlauskas 2014, Leont'ev 1981, Vygotsky 1978). Rooted in 1920s Soviet psychology, Activity Theory has evolved as a theoretical tool for studying human activities situated in the social contexts in which a user acts (Nardi 1996).

Recently, the fields of both Information Systems (Allen et al. 2013, Karanasios and Allen 2013, Karanasios 2018, Malaurent and Avison 2015, Simeonova 2017), and Information Studies (Allen et al. 2011, Spasser 1999, Wilson 2008 2013, Hasan et al. 2017) have seen a growing and keen interest in the application of Activity Theory because of the theory's ability to bring together both technology and context under the same unit of analysis, namely an activity or activity system.

Engestrom's (1987) "third generation" model of Activity Theory is the most widely-adopted by researchers today (Allen et al. 2011, Chen et al. 2013). It incorporates the following constructs, illustrated in Figure 1 below.

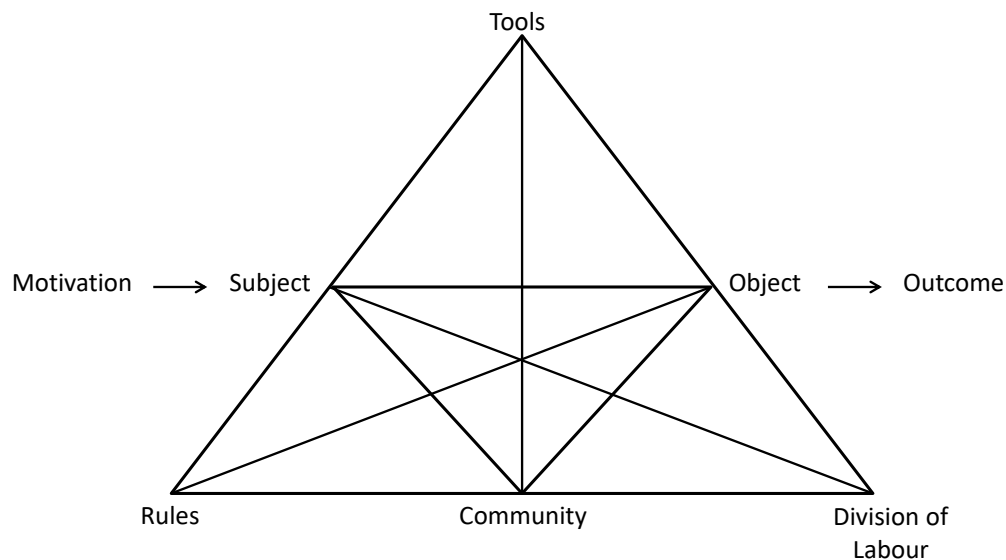


Figure 1: An activity system adapted from Engestrom (1999)

As Figure 1 illustrates, an activity system is composed of a subject, object, tools, community, rules, and division of labour. A **subject** is a person or groups engaged in an activity system while an **object** is the "objective" of the activity. The object gives the activity **motivation** and specific direction. Simply put, an activity system incorporates a subject who is motivated to achieve an

object. The object itself is not necessarily a singular goal; objects can be poly-motivational (Kaptelinin 2005). Further, the same object can be shared by more than one activity (Allen et al. 2014). Both physical artifacts (e.g., technology) and cognitive signs (e.g., memory, language, skills) form the **tools** that a subject uses to achieve an object. A **community** consists of all the people, groups or organizations that have a stake in the work surrounding an activity, while **rules** are the norms, regulations and conventions that mediate the subject-community relationship and guide the activity. Finally, **division of labour** refers to the manner in which work is allocated among various actors in an activity.

It is important to distinguish between an activity's **outcome** (results) and its **object** (objectives) because activity systems may lead to unintended results. Further, even though there often is some stability over time, objects are not static and may be transformed in the course of an activity. Changes in objects are not trivial because they can change the fundamental nature of an activity (Nardi 1996). According to Leont'ev (1981), activities have hierarchical structures where a subject's motives determine **goals** within an activity and these goals result in **actions** (i.e., an activity comprises actions). In this sense, an activity is composed of actions and each action has a goal (Nardi 2006).

A fundamental concept in Activity Theory is the notion of **contradictions** within an activity. As contradictions arise, they expose the dynamics, inefficiencies and importantly opportunities for change within an activity (Helle 2000, Engestrom 1999). Contradictions exist at four levels: i) within the elements of an activity (e.g., tools, rules, subjects); ii) between elements of an activity (e.g., between a subject and a tool); iii) between a central activity at one point in time and more advanced form of the activity at a later point in time; and iv) between co-existing or neighbouring activities (Engestrom 1999; Karanasios and Allen 2013). Contradictions are sources of change and development leading to the possibility of transformation and the re-conceptualization of the object and the motive.

Opposite to contradictions is the notion of **congruencies** (Allen et al. 2013, Karanasios and Allen 2014). Congruencies are forces within an activity that promote stability and reproduction of the activity in its current form. Drawing upon systems theory (Buckley 1967) and the work of Archer (1995), the notion of congruency is similar to the notion of morphostasis (i.e., internal forces for balance), while contradictions are similar to the notion of morphogenesis (i.e., internal forces for change). As Allen et al. (2013) suggest, congruencies are stabilizing forces within activity systems and, in a sense, counteract changes to activity systems brought about by contradictions. That is, contradictions challenge activities, while congruencies help stabilize them (Allen et al. 2013, Karanasios and Allen, 2014, Karanasios 2018).

Activity Theory has a rich tradition of being applied in many fields of study, ranging from education to ethnography to human computer interaction. It provides a holistic perspective for investigating an entire work/activity system, beyond that of one actor or user. It often serves as a conceptual framework for conducting case studies (e.g., influencing the wording of research questions, participant interview questions, qualitative data analysis, and the reporting and discussion of findings).

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