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Cultural Historical Activity Theory-related research

My interest in, and my involvement with, activity theory (3rd and 4th(?) Generation CHAT in particular), stem from, and are part of, my broader interest in the practice perspective to the social and socio-technical phenomena. In the same context, beyond CHAT, my research interests are associated with Bourdieu's praxeology and Actor-Network Theory, all under a systems perspective. I have a systems background and long-time standing research and professional engagement with systems theory and practice, so my involvement with CHAT is influenced by this. I principally engage with activity theory at the organizational and inter-organizational, or institutional, levels for understanding the initiation of transitions/changes and the mechanisms that stir these transitions along particular trajectories as a learning process and a series of contradiction resolutions. Regarding methodology, I employ both action research and desk case studies.

In summary, my CHAT-related research extends along three directions, as briefly described below:

1. *Activity theory in system innovation and socio-technical transitions*

Socio-technical systems to address societal needs (health care, nutrition, mobility, etc.) are conceptualized as activity systems (in fact, networks of activity systems), and system innovations as transformations of such systems. Transformations result from resolving contradictions that develop due to technical and social change within and between the activities carried out by various agencies/institutions (firms, learning establishments, media, consumers, etc.) for fulfilling societal needs. Based on a constructivist epistemology, the explanation of system innovations focuses on identifying emerging contradictions, resolution initiatives, and their outcomes, whereas the governance of system innovations can be carried out by interactively developing policies through successive interventions to resolve contradictions. I have developed an activity-based analysis process for the specific domain and I have employed it for the construction of plausible narrative explanations for the development of the medical nutrition system, and for the evolution of the recorded music system towards streaming. As far as the governance/stirring of transitions/changes is concerned, I have demonstrated how activity-based interactive planning can be employed for stirring the transition of the olive oil-producing sector, at the regional level, towards a circular economy through the adoption of innovative waste-processing technology.

2. *Activity theory in information system development and organizational studies*

At the organizational level, in association with other colleagues, I have used CHAT for understanding and managing the complexity involved in the transition of a product-service organization from the

closed to the technology-mediated open mode of innovation. In particular, activity theory was used in an action research effort in a food and beverages sector firm to facilitate the alignment of the open innovation model adopted with the organization's dominant argumentation scheme implemented in its Information System. We concentrated on the argumentation-in-innovation activity and its context, in particular on the contradictions that arise in this activity, as well as in associated activities, when moving to a different innovation mode (e.g. innovation community). In a different project, activity theory was used to "describe" attitudes and practices of firms in five different sectors and to compar the ways they matured as result of learning by resolving successive contradictions that developed in their context (legislation, technology, attitudes of the public, etc.),

3. Innovation and entrepreneurship in transition (to sustainability) trajectories

I use activity theory for analysing the systemic transition of sectoral socio-technical systems of innovation and production to sustainability, and for identifying and characterising the opportunities for techno-entrepreneurship that this transition raises. The dynamics of change and inertia are analysed by considering the development and propagation of contradictions, within and among institutionalised production and use/consumption activities (practices), which arise as a result of the transformation of the object(ive) of the activity (e.g. introduction of sustainability in addition to profit). The resolution of contradictions is through technological and/or organisational innovations, which present opportunities for entrepreneurship. Of particular interest is to investigate how the sectoral activity dynamics and the entrepreneurial dynamics meet in the co-construction of new/expanded sectoral object(ive)s. The transition of the urban mobility sector towards sustainability through servitization provides the application domain.

In addition to the above areas, my future research and professional plans are towards developing and practicing an activity-based participative systems' intervention methodology using insights from the Change Lab and existing systems intervention methodologies, such as Soft Systems Methodology, Team Syntegrity and Critical Systems Heuristics.

References

1. E. Adamides, 2023. Activity theory for understanding and managing system innovations, International Journal of Innovation Studies, 7(2), 127-141.
2. E. Adamides, N. Karacapilidis and K. Konstantinopoulos, 2021. Argumentation schemes in technology-mediated open innovation product-service models: An activity systems perspective, Systems, 9(4), 91-98.
3. E. Adamides, 2020. Activity-based analysis of socio-technical change, Systems Research & Behavioral Science 37(2), 223-234.