

Title:

Polyphonic learning relations in a community with boundary crossings

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Title:

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Summary:

This study examined how expansive learning is facilitated in cross-boundary communities from the perspective of maintaining polyphony. As a means to encourage knowledge and value creation, business-to-business and industry-academia collaborations have recently gained prominence. However, the mere formation or connection of communities between organisations or individuals may facilitate knowledge sharing but does not guarantee the creation of new values. To understand how change and innovation occur, we need to examine how people and organisations construct reality in the social context of communities of practice, mediated by language, representation, and institutions, from a co-configuration (Engeström, 2008). Hence, we consider how polyphonic learning relations can be sustained in cross-boundary projects in Japan. Our results show that the maintenance of polyphony is primarily influenced by the different formative intervention approaches of multiple interveners, as actors with diverse interests are intertwined at boundary crossings.

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Introduction

This study examined the facilitation of expansive learning in cross-boundary communities by focusing on continuing polyphony.

In recent years, there has been a growing interest in collaborating with various stakeholders and other organisations to create new values, as indicated by the emergence of terms such as ‘open innovation’ (Chesbrough, 2003), ‘co-creation’ (Prahalad and Ramaswamy, 2004), and ‘boundary crossing’ (Engeström, Engeström, & Kärkkäinen, 1995). The 2021 symposium on ‘Organizing beyond organizations for the common good’ at Process Organization Studies (PROS) and the 2022 Academy of Management (AOM) conference theme ‘Creating a better world together’ also suggest strong academic interest in this area. These trends are not limited to business-to-business means alone, as the Sustainable Development Goals (SDGs) call for strengthening the means of implementation and revitalising partnerships to achieve their goals. This is because in today’s global economy, where new technologies and services are emerging rapidly, it is becoming increasingly challenging for organisations to dynamically create value or address major social challenges with their resources and capabilities.

Even if communities and places are established or links between organisations and individuals are formed, knowledge sharing, and accumulation may occur. However, new values need to be created beyond knowledge sharing and accumulation. It is also challenging to deviate from existing organisational and individual frameworks and develop new values and combinations. If these implementation methods do not work in practice or merely increase knowledge, it is necessary to consider why this is the case. To understand how change and innovation are generated, we also need to examine the micro-perspectives of how organisations and people construct reality in the social context of communities of practice, mediating language, representation, and institutions.

Considering these issues, this study focuses on the concept of cross-boundary (e.g., Engeström, Engeström, & Kärkkäinen, 1995; Suchman, 1994; Akkerman & Bakker, 2011) and examines learning processes that promote or undermine creativity and change. Specifically, this study investigates how polyphonic learning relations, which form the basis for expansive learning, can be continued in cross-boundary projects in which individuals with different ideas and from diverse backgrounds proactively participate and address social issues.

Concepts of expansive learning, cross-boundary learning, and Polyphony

Traditional views of learning (e.g., Levitt & March, 1988; March, 1991; Nonaka & Takeuchi, 1995) have held that learning is the acquisition, retention, and accumulation of knowledge, which is internalized into the organization (Lave & Wenger, 1991: 47). However, this view of learning has been criticized for separating knowledge from practice (Brown & Duguid, 1991: 47).

Wenger, McDermott, & Snyder (2002) also advocated that companies should create communities of practice to enhance knowledge creation. However, fostering communities of practice does not necessarily lead to knowledge sharing and creativity (Ueno & Sawyer, 2009: 7-8). Even if communities are formed or connected between organisations or individuals, knowledge may be shared but new values may not be generated. To understand how change and innovation emerge, we need to examine how organisations and people construct reality in the social context of communities of practice, mediated by language, representation, and institutions, from a co-configuration perspective (Engeström, 2008).

Engeström's cultural-historical activity theory, which seeks to complement the challenges left behind by these traditional learning studies, questions the emergence of new forms of human learning that are purpose-oriented and transform or create institutions and practices. In other words, it highlights how working with communities from different backgrounds and being exposed to various ideas changes systems of activity rather than individuals and generates new ideas and activities. Based on this theoretical framework, learning (i.e., expansive learning) produces new activities that connect individually disparate tasks, problems, and actions in the context of systemic activity, transforming them into contradictions demanding creative solutions, expanding and generalizing them into new activity structures with productive societal practice (Engeström, 2015: 99). Expansive learning is an activity that is not a passive form of learning but an extension that goes beyond the given context (Engeström, 2015: 4). Expansive learning asserts the possibility of finding or creating new contexts from learning (Engeström, 2015: 2), in which disparate, internally contradictory learning activities are woven together to generate new structures (including new objects, new tools, etc.) of social activity.

Engeström, Engeström, & Kärkkäinen (1995) focused on the learning that occurs during boundary crossing. Crossing boundary refers to value creation across organisational, sectoral, and interprofessional boundaries. It involves encountering difference, entering

onto territory in which we are unfamiliar and, to some significant extent therefore, unqualified (Suchman, 1994: 25). In cross-boundary learning, working with heterogeneous communities in that formed multiple actors representing different cultures and various works, the previous assumption is questioned, assumptions are challenged, and horizontal learning occurs (Engeström, 1996). Cross-boundary forms are diverse and difficult to function when operating without a specific problem set. It is not always necessary for both practitioners to accept the interpretation, but recognising the differences is significant (Engeström, Engeström, & Kärkkäinen, 1995). The key to the emergent generation of new ideas and artefacts through interactive cross-boundary action is 'polyphony' in dialogue among practitioners, who work with the voices of people from all groups and hierarchies.

Just as Bohm (1996) defines dialogue as a form of communication where something new emerges, in recent years, researchers and practitioners have focused on the potential of dialogue to create or transform the social world (e.g., Bushe & Marshak, 2015).

'Polyphony', a concept first proposed by Mikhail Bakhtin, rooted in Greek words meaning 'many' and 'voice', 'polyphonic' is defined as 'many-voiced' and 'producing many sounds' (Hazen, 1993: 17). Bakhtin (1984: 208) presented that the novel is polyphonically structured when each of the independent, unmerged voices and the multiplicity of consciousness becomes unified as a single event, with parallel rights and its own world, but without fusion. This means a state in which the words of the author and the main characters interact on equal terms without being reduced to the consciousness of a single author. In organisational studies, polyphony has also been used to understand organisations as spaces of discourse shaped by a multiplicity of dominant and peripheral voices (Beliva, King, & Sliwa, 2008: 495). Polyphonic narratives introduce the voices of others, preventing any one voice from dominating the narrative and determining its meaning (Keenoy & Oswick 2004). Engeström (2016) argued that expanding learning is a polyphonic process. Under activity systems, voices from different groups and hierarchies conflict and complement each other (Engeström, 2015: 315-316).

Polyphony does not mean many voices (multiple voices), but polyphonic. In other words, it is not merely an increase in number, but a generative polyphony, in which a single word has two voices with two opposing meanings, and even when the same word is spoken, there is conflict, reversal, and dissimulation due to multiple meanings (Yamada, 2021: 334). Each participant is considered involved in the community by position and different

roles (Yamada, 2021: 334). Division and catabolism are likely to occur in a polyphonic, heterogeneous, conflict-ridden, and racially melting pot-like place. Still, when polyphonic narratives are active, a master narrative or core narrative is also expected to be generated to oversee them (Yamada, 2021: 337).

While polyphony in dialogue may allow the conversational process to move from one style or form to another (Hazen, 1993), the effectiveness of dialogue is historically and culturally situated (Gergen, Gergen & Barrett, 2004: 43-44). Therefore, with this in mind, it is necessary to understand what elements contribute to the dialogue in a community with boundary crossing to generate new ones.

Case overview

Drawing on the aforementioned theoretical framework, this study employs the modified grounded theory approach (M-GTA: Kinoshita, 2003) of Grounded Theory (Glaser and Strauss, 1967) as an approach that relies on social constructivism and the linguistic and pragmatic turn to view the practice of the parties in terms of the relationships with other actors.

M-GTA address the issue of how to simultaneously overcome Glaser's consistent epistemological position (objectivism) and the epistemological position (constructionism) that was originally Strauss' position (Kinoshita, 2003). M-GTA (1) satisfies the basic characteristics of the grounded theory approach and the four content characteristics (compatibility with reality, understandability, generality, and control), (2) does not intercept data, (3) control the process of analysis by implements methodological limitations in determining the scope of data, the setting of analytical themes, and theoretical saturation, (4) an original coding method by creating an analytical worksheet, (5) an emphasis on the "human researcher" perspective, (6) an effective analytical method for interview surveys, and (7) multiple concurrent interpretations (Kinoshita, 2003). In particular, no interception is a major difference from other GTAs.

The subject of a survey for this study is members who have participated to date in the cross-border community called 'The Yokohama30'. The survey was conducted via Zoom from February 22 to June 8, 2023, with two members from the first period (January to June 2021) and two from the second period (October 2021 to June 2022). Interviews were conducted using a semi-structured interview method, including an explanation of the purpose and ethics of the survey, and lasted approximately one hour for each person. The

interviews were recorded via Zoom with prior approval and then text coded. The interviews, texting, and coding were reviewed with the other authors after they had been conducted by an author who was not involved with the cross-border community under study due to concerns about the risk of increasing bias.

In Japan, business-to-business and industry-academia collaborations are increasingly being promoted as a way of fostering knowledge and value creation, the locations of which are diffused throughout the country. In 2019, the City of Yokohama, located in the greater Tokyo area in Japan, proclaimed itself the 'Innovation City Yokohama'. In 2020, a cross-boundary project called 'The Yokohama30' was launched as a program that brings together people from diverse backgrounds from industry, non-profit, academia, and the public sector to envision and implement the future of Yokohama City.

In this project, approximately 30 individuals committed to Yokohama connected across sectors were gathered through an open application process. The Yokohama30 participants formed project teams through dialogue and ran them for approximately six months to create innovations for the betterment of their communities in Yokohama. The founders were two faculty members from Yokohama City University who specialised in business administration. Some participants also joined the project management team. The participants included local government officials, company subordinates and managers, NPO staff, university faculty staff, and university students, all of whom were proactive individuals whose interests aligned with the objectives of this project. However, their belongingness to organisations has remained intact, enabling them to utilise their organisational resources for team activities in some situations.

Discussion

This study generated six categories consisting of 49 concepts and 12 subcategories based on the analysis worksheet. These concepts and categories were then compared, generating a results diagram (see Figure 1). Due to the word count limitation in the paper submission guideline, the story line was omitted. The result of this M-GTA analysis first revealed the existence of polyphony, which is the premise of this study. It was also shown that different and complementary methods of formative intervention, a well-designed system, and a team influenced by the characteristics of the participants and the relationships based within the community created a psychologically safe community, which led to the continuation of polyphony.

Conclusion

This study examines how polyphony, which underlies expansive learning, is continued in cross-boundary projects aimed to solve social issues. Our results show that different and mutually complementary formative interventions with dialogic, continuous, and practical approaches, a well-designed community system, and psychological safety influence the continuation of polyphony with diverse interests intertwined at the boundary crossing.

However, in theoretical sampling, the amount of data collected in this paper does not represent a state of theoretical saturation. Therefore, creating a state where new concepts and interpretations do not emerge.

This study promotes change and creativity in cross-boundary activities. However, it is equally important to explore why these activities do not change or emerge. Therefore, for future research, we would like to compare the activities of each team in this project.

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Figure 1: Result Diagram

