# Discourse in double stimulation: Building foundations for an activity-theoretical understanding of the emergence of agency

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Vygotsky's principle of double stimulation is discussed here in connection with human agency. Contemporary literature on double stimulation examines important aspects such as concept formation and cognitive development without addressing the question of how agency emerges. This was, however, a central concern for Vygotsky and some of the unique and continuing relevance of Vygotsky's legacy largely resides in this emphasis on the relation between agency and double stimulation. We argue that in order to fully understand the concept of double stimulation it is important to pay attention also to this emphasis. We also argue that current discussions on agency may significantly benefit from this new direction.

Double stimulation is a principle of Vygotsky (1997), according to which a subject, when in a problematic situation, turns to external means for support in order to be able to act. The problem is the first stimulus, and the external means is the second stimulus. Vygotsky (1997) used the experiment of the "meaningless situation" or the "waiting experiment" conducted by Tamara Dembo, a student of Kurt Lewin, as a paradigmatic example of the principle. According to Vygotsky, with the help of a material second stimulus "The subject transformed the situation (...) The subject created a new situation for himself. (...) He transformed the meaningless situation into one that had a clear meaning." (Vygotsky, 1987, p. 356)

In this presentation, we propose a theoretical and methodological framework to understand agency, using empirical data collected in eperiments we carried out after the model of the waiting experiment described by Vygotsky. Cases from these experiments conducted with individual participants and with groups of participants are analyzed to investigate how discourse functions as second stimulus in double stimulation. The analysis leads to the conclusion that discursive stimuli function much like the material second stimulus originally described by Vygotsky. However, different discursive stimuli change the situation in different ways. While some types of discursive second stimuli seem to function as signals that legitimate closure, others create an open-ended meaningful situation in the waiting experiment. In the case in which the participants become intensely involved in a meaningful discussion, discourse as second stimulus allows "taking over" the situation and going beyond participation in the experiment in which the participants remain only peripherally involved.

The analysis leads to the identification of three agentive functions of discursive second stimuli: (1) a closure function in which the second stimulus serves a limiting or an ending purpose; (2) a prospective function in which the second stimulus serves the purpose of opening up new possibilities; and (3) an open-ended function in which the second stimulus serves the purpose of transforming and expanding the situation.

### **Metrolingual Practices, Timespace and the Other**

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Drawing on current research on language and the city (metrolingualism), this paper looks at language practices and activities (those things that we do through language), the constitutive role of time and space as part of those practices (rather than as a context and time in which they happen), and the relation to the Other (cities, from their

foundation, havebeen centrally about the proximity of difference). This brings together recent challenges to received applied linguistic ideas about multilingualism (trans-, poly-, and metrolingualism, for example), recent thinking about space, time and activity (particularly in the work of Schatzki, Thrift and others), and theneed, following Levinas, to consider not only time and being, but also time and the Other. Using examples of metrolingual interaction in restaurants, markets, workplaces and shopping streets in Sydney, this paper will discuss the challenges that such theory and data pose for applied linguistics and its thinking about language, context and diversity.

## **Reflexivity in Applied Linguistics**

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In the last decade or so, the field of applied linguistics has shown an interest in the advances made in distinct but relevant fields like critical theory (e.g., Weedon, Kristeva, Bakhtin, Bourdieu), post-modern sociolinguistics (Blommaert), and cognitive science (Lakoff, Johnson, Fauconnier & Turner) and their impact on research in SLA, bilingualism and multilingualism (see e.g., Pavlenko 2005, Kramsch 2009 for the affective and embodied aspects of multilingualism). One common thread has been a focus on reflexivity in language and the construction of identity and subjectivity through language as discourse. This paper will explore the various aspects of this reflexive trend in Applied Linguistics and how it changes the nature of our object and our methods of inquiry.

## The principle of non-locality: humanising applied linguistics

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Steffensen and Cowley (2010) invoke the principle of non-locality to affirm that entities are always in a state of becoming –even if we experience 'objects' as fixed. Since human agency is ever changing it cannot be fully captured by models invoking experience, bodies or brains: acting and perceiving depend on coordinating with others. Persons do not (completely) inhabit a local space-time zone. It is thus a mereological error to trace human agency to bodily function. Given social embeddedness, language and cognition are radically distributed. What we achieve – what we become – depends on more than our *sense* of agency (conscious experience) and individual acts: *personhood* arises as we encounter a physical-cultural ecology of people, artifacts, institutions and selves. The results of activity are situated *and* non-local or, for Linell (2009), doubly dialogical. As bodies engage, movements enact social practices that are anchored by both material entities and what is and can be said. Sign-making and construal set off languaging whose effects, invariably, call up past and possible events.

Linguists often reify language-systems as internalized, taught, learned, acquired and/or constructed. Organism-centred views invoke competencies, mental models, and neural states that give us patterns, routines and conformity. Conversely, on the distributed view, living beings develop techniques for concerting action as, together, we perceive. As first-order activity, languaging is irreducibly dialogical. Although children use local standards in learning to move, talk, think and use written signs, their skills are grounded in double dialogicality. Encounters arise as, in concert, circumstances prompt us to coordinate while also using language. The approach allows applied linguistics to focus on how educators and learners work together in communities to enact and simulate linguistic events. Learners depend on sensitising to affordances by developing techniques that link stance taking, interactivity and verbal patterns. In abandoning organism-centrism, SLA can be reconceived as

skilled linguistic action. Learning to talk or sign in familiar settings is thus quite different from readying one's body and self for projects that may (and will) arise in 'second language' environments.

### References

Linell, P. (2009). *Rethinking Language, Mind and World Dialogically: Interactional and Contextual Theories of Sense Making*. Charlotte, NC: Information Age Publishing.

Steffensen, S. & Cowley, S.J. (2010). Signifying bodies and health: the aftermath. In Cowley, S.J., Steffensen, S. & J.C. Major, *Signifying Bodies: Biosemiosis, Interaction and Health*, pp. 331-355. Braga: Portuguese Catholic University Press.

## Evolution of co-operation, consciousness, and language

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Evolution of co-operation, consciousness, and language is examined from the point of view of systemic psychology based on the theory of the organism-environment system which starts with the postulate of a unitary organism-environment system (Järvilehto, 2000). In this framework, the advent of consciousness is regarded as a result of co-operation of organism-environment systems. The evolution of consciousness started with the development of co-operation of individual organism-environment systems for the achievement of *common results*. Thus, consciousness is the characteristic of the structure of the co-operative system (*general consciousness*) and, therefore, it is not possible to regard it as some sort of "inner" property of the individual.

However, consciousness is not only something general, but every individual also has his personal consciousness. This *personal consciousness* is not something residing "inside", but means the personal participation of the individual in the results of common action. Every participating individual realizes some aspect of the general consciousness through his own action. The different individual aspects culminate in the common result, and the participation in the common results widens the action possibilities and the personal consciousness of the individual. The development of the personal consciousness is therefore in direct relation to the possibility of using the common results in one's own action.

Common results were originally made possible by creating co-operative organization with the help of different forms of communication (e.g., gestures, vocalizations) that later developed to more complex language. Language, thus, is originally more related to the type of the co-operative system and intended common results than to any symbolic representation of the world. Language is not a means for creating "inner pictures" or "representations" by "information transmission" or "coding", but the tool for the formation of the co-operative organization.

As language is related to the form of the co-operative system, its evolution could be traced by examining different forms of co-operation. Some important phases of the evolution of co-operation and language could be the following:

1." *Totalitarian*" organization based on fixed specialization. This is the earliest organization in the evolutionary sense. Co-operation is not directed towards any specific result, but the common result appears if the individuals

rigidly fit together in the formation of the common result. Consciousness exists here only in its general form; minimal personal consciousness exists. Language exists in the form of simple gestures or orders.

- 2. "Corporate" organization based on relative specialization of participants, but the common result is pre-set by goals or laws formed earlier. Personal consciousness is present, but the organization does not allow its optimal development, because the formation of the common result involves resistance from the participants, and the participants do not authentically share the common results. Language exists mainly in the form of complex orders and instructions.
- 3. "Communicative" organization based on unspecialized individuals who may flexibly take the roles of others. The common result is not predetermined, but achieved by communication in the process of fitting together the organizations of the individuals in an optimal way. The common results are new and even surprising. This organization is the basis for the authentic development of consciousness because, through common results, the participants learn new aspects of the world and increase their action possibilities. Language is rich and based on dialogue.

It is suggested that, on this basis, the characteristics and evolution of consciousness and co-operation may be further studied by examining the linguistic forms typical in the community.

#### Reference

Järvilehto, T. (2000) Integrative Physiological and Behavioral Science, 35: 35-57.

## Green Grammar: From the Ecology of Learning to the Ecology of the Classroom

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This paper looks at the nitty-gritty, down-and-dirty end of applied linguistics: the teaching of grammar in thousands upon thousands of classrooms all over the world, classrooms in which the ills of "grammarrhea" and "grammaphobia" appear to be endemic.

One of the perennial problems in applied linguistics is the apparent split between form and function, a dualism that, as time-honored practices tell us, can only be "healed" by teaching form-function mapping, metalinguistic rule-based instruction, and all the rest of the well-known correction-driven arsenal of approaches. Thus, researchers and teachers alike struggle to find the perfect way to address both content and form in their classes. There is no solution to this, since the premise underlying a pedagogized version of language that separates language into formal and functional subsystems is false.

Developments in ecological psychology and linguistics have the potential to change grammar teaching in fundamental ways. Most current teaching either neglects grammar or addresses it in a traditional "focus on form" way, often added on to a content, task, or project-based curriculum. By conceptualizing both language and cognition as distributed, embodied and dialogical, a range of options become available to teachers and learners that allow for a transformation of form-function – based teaching into action-and-process – oriented teaching and learning. As a result grammar teaching is no longer correction-driven but becomes success-driven. Teaching is based on Peirce's notion of abduction, from which processes of induction and deduction are cyclically derived.

The presentation will illustrate how teaching grammar can be transformed from being rule-driven to becoming choice-based, with several practical examples of tasks and activities. A number of advantages of this way of working will be shown, for example, improvements in the linguistic environment, as imported and commodified grammar books, textbooks and tests are superseded by local grammars that roam freely in the learners' environment. Having been heavy with structure, the linguistic landscape now becomes light with possibility.

## Languaging phenomenologies of time, place, and space

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Supported by research informed by cultural-historical and ecological approaches to development (Engeström & Sannino, 2010; van Lier, 2004), extended and embodied cognition (Atkinson, 2010; Clark, 2008), the relations between human and non-human actants (Latour, 2005), and recent scholarship produced by the "distributed language group" (e.g., Cowley, 2007; Thibault, 2011), this paper explores the topologies of place, space, and time across three diverse and linguistically complex settings. The first project outlines the spatial and temporal dynamics of event-driven communication as well as engagement with attendant discourses that comprise the semiotic ecology of massively multiplayer online gaming environments. The second case examines a Yup'ik immersion education project in the Kuskokwim-Yukon delta region of Alaska. Here, the focus is on curriculum development and pedagogical innovation occurring at the intersection of remembered and contemporary cultural practices. The third case study reports on an experimental and currently in progress plurilingual augmented reality game project in the Portland metro area, the primary objective of which is to semiotically remediate (e.g., Prior, 2010) local places and embed language learning resources in phenomenologically rich and embodied experience in the world. These diverse empirical contexts reveal the complexities of languaging activity at the intersection of time, place, and space, and also suggest the need for time, place, and space transcendent awareness, which suggests that the superordinate goals of additional language education are to catalyze anticipatory dispositions, build recipient-aware interactional capacities, and more broadly, to cultivate semiotic agility.