

## Speaking in Tongues: Commentary on Cubero, de la Mata and Cubero

Tania Zittoun

University of Neuchâtel, Switzerland

**Abstract** Cubero, de la Mata and Cubero show that women who have attended some formal adult education are able to solve a task in a manner that suggests that they master conceptual thinking more than do women just starting such education. I suggest that this interpretation is based on models of learning that do not fully take into account the person actively engaged in making sense of the situation. Focusing on three theoretical issues—the language–thinking relationship, adult learning, and the transfer of knowledge in the test situation—I propose to reinstall an active person, and I consequently propose an alternative interpretation of the data.

**KeyWords** adult learning, settings, task solving

Examining how adults solve a simple task in the frame of an adult education setting, Cubero, de la Mata and Cubero (2008) propose an account of the modes of thinking that people develop in a formal educational setting. The authors admit the hypothesis that there is a heterogeneity of modes of thinking in people, despite genetic hierarchy—that is, people progressively develop different modes of thinking as they move through different settings, and these modes coexist in them; they do not simply replace each other. On this basis, the authors address two issues: what changes in different ways of thinking as adults are formally educated, and why it changes.

To address the first issue, they recall that Vygotsky distinguished *syncretic thinking*, *thinking in complexes*, *pseudoconcepts* and *genuine concepts*. They then point to Scribner's (1977/1997) distinction between *functional* and *theoretical* argumentation, and Bruner's (1986) distinction between *narrative* and *propositional* thinking. Cubero et al. more or less equate functional argumentation, narrative thinking and pseudoconcepts, on one side, and genuine concepts, theoretical argumentation and propositional thinking, on the other. The question of 'what changes' in adult education is thus answered in terms of the

development of a more general, context-detached, categorical mode of speaking and thinking.

To address the second issue, that of why adults move from one mode to the other, the authors emphasize the specificity of the settings—the sort of activities in which people are engaged, in which different semiotic tools are available, and which privilege the use of one or the other mode of thinking. They analyse how women respond to two tasks consisting in classifying images representing different types of foodstuffs. In the first task, they have to classify them as if they were composing a menu; in the second task, they have to classify them in a different manner. The authors show that educated women respond to the second task using propositional explanations and formal classification, while women who are not formally educated give narrative accounts, revealing an experience-based organization of elements. The authors thus argue that, in a formal setting, educated women come to use a formal, conceptual mode of thinking.

Although I am sympathetic with the attempt to identify coexisting modes of thinking in people, I have the impression that the authors' interpretation of the data is too mechanistic and does not allow us to see the part of the active, sense-making subject behind the production of discourse. I propose to highlight a few points in their theorization where the 'person' vanishes, and I suggest that reinstalling the person in the social situation opens the ways to alternative interpretations of the data.

## **Thinking/Speaking**

How to formulate the relationship between thinking and speaking is a difficult question, and a too rigid reading of this relationship can result in the elimination of the person.

Cubero et al. mention three theoretical distinctions made by Vygotsky, Bruner and Scribner between different modes of thinking or speaking. Their reading is that there is a strict correspondence between a given mode of speaking and a specific mode of thinking; they use the expression 'verbal thinking' to designate such a mode. In other words, the authors consider that a certain mode of externalization allows the inference that there is the corresponding thinking mode in the person. But can we make such an inference?

Complexes, pseudo- and genuine concepts identified by Vygotsky are supposed to designate mental organizations developed through the person's interactions with the world. It is the language used in interactions which, through internalization, reorganizes the child's

experiences and possibilities to express him- or herself. Vygotsky considers genuine concepts as a complex form of thinking, which might be connected to everyday thinking and might restructure it. He does not reduce conceptual thinking to the mastery of verbal concepts, or the ability to classify and develop general categories to the actual use of categorical notions in discourse. He even criticizes the naïve pedagogical enterprise that would aim at developing conceptual thinking through the acquisition of verbal concepts (Vygotsky, 1934/1986, Ch. 6). In other words, although modes of thinking and modes of expressing one's thought are mutually dependent and constrain each other, they cannot be reduced one to the other. Modes of thinking develop through social interactions, not only through language, but also through other modes of communication. Discourse is enabled by various modes of thinking; but the use of a given concept can as much be due to everyday concepts or to imitation than to real mastery of conceptual reasoning.

Bruner's idea is that we organize our representations of reality through the mediation of tools provided by culture. He distinguishes a logical-scientific, or propositional, organization of reality from a narrative one. As culture often favours narrative accounts of events and situation, people come to organize their memories and discourse narratively, that is, according to a narrative convention. As Bruner (1994) writes,

I shall have a great difficulty in distinguishing what may be called a narrative mode of thought from the form of narrative discourse. As with all prosthetic devices, each enables and gives form to the other just as the structure of language and the structure of thought eventually become inextricable. (p. 18)

These devices constitute thought, and vice versa; and methodologically it is hard to distinguish one from the other. Yet it does not follow that they are *the same*.

Thus, on a theoretical level, modes of thinking and modes of speaking can be said to be deeply interdependent, as Vygotsky and Bruner propose; but it cannot be said that the latter purely reveals the former. Also, psychologists face the epistemological difficulty of not being able to access mind, and have to rely on externalization to infer thinking processes; but again, this does not allow holding that one strictly resembles the other.

Thinking that a mode of expression corresponds strictly to a mode of thinking presupposes to admit a form of transparency of expression, or a one-to-one correspondence between the train of thoughts and the

train of discourse. Such ideas exclude the fact that a person is a complex being who has more parts to his mind than the link between thought and expression. It also excludes the fact that discourse is always socially located and is therefore shaped by situational demands.

First, there is always a part of personal (subjective, emotional, etc.) experience which escapes verbal externalization. Note, for example, that from Vygotsky's account to Bruner's, there is a change of scale. Vygotsky described small units of meaning, such as concepts, or the group of experiences caught by a pseudoconcept. Bruner's unit of analysis is based on wider sequences of discourse or reasoning such as a narrative, or an explanation. Narratives and explanation might be seen as made out of smaller units (concepts or pseudoconcepts); but there might still be some experiences memorised as pseudoconcepts that do not enter into a person's complex explanations or narrations. Actually, there are good reasons to believe that people have memories and modes of thinking that escape verbalization. For example, psychoanalytical studies characterize the structure of memories—semiotic traces grouped around some emotionally relevant event—and the sorts of logics which can enable thought to wander, through logics of resemblances and inclusions, from one semiotic trace to another one. These thoughts might appear as complexes, or pseudoconcepts; yet they cannot easily be turned into narrative or propositional discourse. In other words, although it is clear that people do have thoughts shaped and enabled by the properties of culturally provided semiotic devices, this statement does not support the fact that all our thoughts and representations are *either* narratively *or* propositionally organized.

Second, a person's externalization takes place in a specific setting. A mindful person is receptive to interactive, socially situated demands; she interprets them; she has intentions; and she might attempt to respond to the demands of the situation in a way that she believes satisfies, or not, these demands. Culturally speaking, the most commonly recognized forms of discourse are narratively or propositionally organized (of course there are social settings that privilege other modes of externalization: the meetings of the surrealists, the end of a drinking party, or a psychoanalyst's couch—here discourse is expected *not* to be propositional or narrative!). Therefore, speaking in a narrative form might simply suggest that a person is reacting to the demands of a situation by using a culturally available mode of expression which will be acknowledged. Narrative or propositional modes of expression might thus primarily reveal a person's attempt to get social recognition.

## How Does a Mode of Thinking Develop?

How does one develop one or the other mode of thinking or speaking? Cubero et al.'s proposition is that the fact of being active in a given setting will bring people to develop the modes of speaking and thinking promoted by that setting. Thus, adult women in an alphabetization course will develop conceptual thinking thanks to the use and the internalization of the semiotic tools provided by the environment; their verbal production will be reflecting a transformation of inner thinking processes.

Such a view hides the fact that learning is always a complex process, made out of actions and negotiations, hesitations and resistance. Work on ontogenetic development shows the complex interactive negotiations that take place when children find their place in their worlds of culture. For example, research on language acquisition shows how children progressively learn a way to understand the world and express themselves in a constantly negotiated manner, while also exploring the deviations, the limits and the possibilities of the language and cultural systems in which they enter—and so they develop their own modes of expressions (Nelson, 2007; Pinto, Accorti Gamannossi, & Cameron, 2006; Srivastava, Budwig, & Narashiman, 2005).

If even children—for whom mastering culture is vital—negotiate their way into culture, it is quite obvious that adults will very carefully negotiate every acquisition in a new sociocultural setting. Adults in continuous education enter a new social setting with a history of past interactions and socializations, expertises and recognitions, and so on. These skills, abilities, belongings, are constitutive of who adults think they are and what they feel they are capable of. Trying to make sense of a situation, a person is mobilizing memories of similar situations, and of her past positions in them, which might be more or less adequate. Thus, an adult going back to formal education might first remobilize her experiences of primary school, and, with it, some defiance towards the instructor. Being in a new setting, adults might notice that the set of implicit rules that structure the situation, and the way people speak, are different from what they are used to. But why would they change their way of speaking and presenting themselves? It, of course, depends on what authority they confer on an adult trainer or teacher, and on what readiness they have to change—in terms of learning, as well as in terms of identity (e.g. Boutinet, 1995; Muller & Perret-Clermont, 1999; West, 2006).

A theory of learning acknowledging the person would be careful to account for the fact that adult learning is a long, fragile, hazardous,

emotionally charged, socially negotiated process. If possible, research on adult learning and development should document these processes as they occur. When it is impossible, the analysis of the production of answers in the very setting of this school acquisition should be interpreted with caution.

## Using a Mode of Speaking

Suppose that adults entering continuous education learn what is proposed to them. Does it mean that, questioned on diverse tasks in a school context for an experimental task, they will actually use the knowledge or the modes of understanding acquired in the classroom?

At school, a formal institutional setting structured by certain rules, organized around specific social relationships, with a local and an intergenerational history, people learn to use a specific way of speaking and thinking (Grossen, 2000). There is no guarantee that they will use what has been learned in a specific formal setting in any other situation (at work, in everyday life, etc.). It has thus been shown that there is no simple 'transfer' of knowledge from one sphere of experience to another one (Beach, 2003; Säljö, 2003). Rather, in each setting, people have to confer sense on the situation, respond to its demands, and negotiate relationships with present others; guided by local cues, they might mobilize past ways of thinking or doing, which can be adjusted to satisfy the local demands—there can thus be reinvention of skills and knowledge in a specific setting.

One way to formulate this is the following. Responding to a task is always engaging in an activity with its motives, and sub-goals and actions. The activity thus differs according to the sense it has for a person, or what she tries to achieve with it, towards whom (Leontyev, 1977; Rochex, 1998). Solving an equation to have a good grade is in that perspective a different activity than solving an equation for the fun of it. In other words, responding to an experimental task is not 'activating' some transversal competence; it requires a person to interpret the task in a certain way, and to engage in this or that sort of conduct. What defines an activity as being 'the same' as another one is not an objective matter identified by the researcher; it depends on the people's interpretation of the situation.

But then, is there no expertise, are there no skills which subsist beyond the situation given? If we adopt a Vygotskian perspective, we might suggest that some formal social settings, because of their organization, the rules that govern them, the sort of interpersonal relationship they promote, the reflective stance they encourage towards objects and

towards one's own thought, encourage the development of concepts organized in a systematic way (e.g. Cole, 1996; Hedegaard & Chaiklin, 2005). Knowledge can then be said to progressively develop in two directions. On the one hand, it gets distanced enough to be detached from the actual conditions of its acquisition. Most of us can add 4 and 5 without thinking of the first time our teacher wrote the addition on the black board. On the other hand, knowledge becomes also progressively more differentiated. It is this double movement which is often described as progressive hierarchization (of more or less distanced knowledge) and differentiation (Valsiner, 2000; Werner & Kaplan, 1963). Professional expertise is, for example, often the ability to identify the small specificities of a situation, or to see resemblances between unrelated situations, both enabling to produce a possible solution (Perret & Perret-Clermont, 2001).

With this in mind, we can now try to interpret what happens to the women who respond to the test situation designed by Cubero et al. Women from two groups are asked to respond to a task in a school setting. Some of them have just started adult education, while the others have some experience of it. What we do not know is how much the situation in which they are tested resembles their usual school setting or their everyday life. On the one side, we ignore whether the people who made them take the test were their usual teachers, and whether the spaces in which the test took place was the actual classroom; we neither know how much the adults who were already schooled for some time were used to classifying sets of photographs and cards. On the other hand, although the task is designed to 'look like' an everyday task, one can question such an interpretation: in everyday life, people usually do not do buy food on the basis of photos, and do not play with cards to plan their dinner. In other words, my interpretation suggests that the task is as much 'abnormal' for the two groups of participants. This has as a consequence that, in both cases, the adults would be actively trying to confer sense on the situation, using locally available cues (it is at school, the interviewer is their teacher or an unknown person, the photos are strange, it is like a game but not really, we are recorded and filmed like on the radio or on television, etc.).

On this basis, I would agree with the authors when they consider that, in order to respond to the first task—compose a menu—the adults draw on everyday knowledge. Yet I would suggest that it is not because they think that it is *like* a daily task, and that they don't answer like in everyday life. It rather seems to me that they are not answering *like* in everyday life, but they are *playing* at it, not in order to make a

menu, but by using everyday knowledge *in order to satisfy the task set by the researcher*. Consequently, I would be very careful when interpreting the discourse of the women. If the activity in which they are engaged is properly playing the game of making *as-if* they were making a menu, in order to show the researcher that they can respond to the task, then they have to use whatever resources they have to sort out this strange situation. Also, the comments with which they accompany the task ('I'd serve some fruit . . . which is more filling') might correspond to the need of the women to justify their choices to the researcher in this strange situation, more than to their mode of thinking. Depending on how they interpret the situation, they would thus use what their personal culture offers them—common-sense explanation, TV show-like talk, or perhaps their mothers' discourses (e.g. Zittoun, Cornish, Gillespie, & Aveling, 2008). From this it cannot be deduced that they think narratively when they solve an everyday task, or when they do anything similar outside the testing situation.

In the second situation, the women are asked to classify the task according to *another* criterion than the one used so far. The women with some schooling understand that they have to answer differently than in the first task, and they seem to be able to reinterpret the situation as being a school-like task. It is possible that they answer to this task *as-if* they were doing something like in the classroom: for example, if the researchers are also their teachers, the sense they confer on the activity might be to answer 'as they usually do with them'. However, the difference between the schooled women and the others is that only the former are able to use a different mode of justification, or different sorts of resources. Their ability to change modes of justification might thus be due to, first, an ability to distinguish nuances in the demands of a situation; second, their mastery of different discourse modes; and, consequently, their possibility to 'switch mode' if the social settings demands it. As the authors suggest, it might be that these women can 'privilege' (Wertsch, 1991, p. 124) one mode of speaking—but they can do so only if they have access to more than one speaking mode. Data enable us to think that the more educated women are able to take some distance towards one mode of discourse, and distinguish it from another; but is this due to the fact that they attended a formal school setting? It might simply designate the fact that these women become socialized *in more than one* social setting. That is, the unschooled women remain in the same mode of discourse and classification because they master no other, not because they do not master the school-like one. What would thus be the difference between these women as they respond to these tests is less the fact that they are

formally educated, than the fact that through their socialization into a new setting, they become expert in being 'bi-cultural' and reflexive about the different demands of the different spheres of activity in which they are daily acting and interacting.

## Concluding Words

Sociocultural research has proposed to see human activity as always enabled by, and located in, a given context. Consequently, there is no such thing as a context-free competence or skill. However, the setting is not everything; every activity is also undertaken by a person, actively making sense of the situation, of its whereabouts, its goals and its resemblances with other situations met by her—these processes being in large part not conscious.

Cubero et al., who take seriously the first of these propositions, offer a very consistent analysis which can show the effect of schooling on people's expanding modes of expressing themselves. In this comment, I have emphasized the second of these propositions, and on this basis, I have questioned the interpretation we should give to people's externalization as they engage in activities of task solving. When they do so, their answer might resemble what we expect; but their reasons for doing so might differ from the one we infer. My suggestion is that it might be fruitful to question what they do and why they do it—and this especially if the results are satisfying our expectations.

At the end, this discussion might question what can be learned from an analysis that confirms the research hypothesis. The pessimistic answer would be that we do not learn much, because such research is tautological: we can show that schooled adults answer formally to questions because school teaches them to answer formally. The optimistic answer would be that we can thus actually show how deeply adult education can modify and develop people's modes of expressing themselves and understanding their environment. And the sceptical answer—that of the researcher—would be that it is not from these final results, but from the process, the ambiguous meanings and the possible interpretations, that we might learn.

## References

- Beach, K.D. (2003). Consequential transitions: A developmental view of knowledge propagation through social organization. In T. Tuomi-Gröhn & Y. Engeström (Eds.), *Between school and work: New perspectives on transfer and boundary-crossing* (pp. 39–62). New York: Pergamon.

- Boutinet, J.-P. (1995). *Psychologie de la vie adulte*. Paris: Presses Universitaires de France.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1994). The narrative construction of reality. In M. Ammaniti & D.N. Stern (Eds.), *Psychoanalysis and development. Representations and narratives* (pp. 15–38). New York/London: New York University Press.
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA/London: Belknap Press of Harvard University Press.
- Cubero, M., de la Mata, M., & Cubero, R. (2008). Activity settings, discourse modes and ways of understanding: On the heterogeneity of verbal thinking. *Culture & Psychology*, 14, 403–430.
- Grossen, M. (2000). Institutional framings in thinking, learning and teaching. In H. Cowie, D. Van der Aalsvoort, & N. Mercer (Eds.), *Social interaction in learning and instruction : The meaning of discourse for the construction of knowledge* (pp. 21–34). Oxford: Pergamon.
- Hedegaard, M., & Chaiklin, S. (2005). *Radical-local teaching and learning*. Aarhus: Aarhus University Press.
- Leontyev, A.N. (1977). Activity and consciousness. In *Philosophy in the USSR: Problems of dialectical materialism*. Moscow: Progress.
- Nelson, K. (2007). *Young minds in social worlds. Experience, meaning, and memory*. Cambridge, MA/London: Harvard University Press.
- Muller, N., & Perret-Clermont, A.-N. (1999). Negotiating identities and meanings in the transmission of knowledge: Analysis of interactions in the context of a knowledge exchange network. In J. Bliss, R. Säljö, & P. Light (Eds.), *Learning sites: Social and technological resources for learning* (pp. 47–60). New York : Elsevier.
- Perret, J.-F., & Perret-Clermont, A.-N. (2001). *Apprendre un métier technique dans un contexte de mutations technologiques*. Fribourg: Éditions Universitaires de Fribourg.
- Pinto, G., Accorti Gamannossi, B., & Cameron, C.A. (2006). Joint book reading: Socialization of literacy in cultural perspective. *International Journal of Ideographic Science*, 4. Retrieved from <http://www.valsiner.com/>.
- Rochex, J.-Y. (1998). *Le sens de l'expérience scolaire*. Paris: Presses Univesitaires de France.
- Säljö, R. (2003). From transfer to boundary crossing. In T. Tuomi-Gröhn & Y. Engeström (Eds.), *Between school and work: New perspectives on transfer and boundary crossing* (pp. 311–321). Oxford: Pergamon.
- Scribner, S. (1997). Modes of thinking and ways of speaking. In P.N. Johnson-Laird & P.C. Wason (Eds.), *Thinking: Readings in cognitive science* (pp. 483–500). New York: Cambridge University Press. (Original work published 1977)
- Srivastava, S., Budwig, N., & Narasimhan, B. (2005). A case study of the development of verb usage in a three-year-old Hindi-speaking child: A developmental-functionalist approach. *International Journal of Ideographic Science*, 2. Retrieved from <http://www.valsiner.com/>.
- Valsiner, J. (2000). *Culture and human development*. Thousand Oaks, CA: Sage.

- Vygotsky, L. (1986). *Thought and language*. Cambridge, MA: MIT Press. (Original work published 1934.)
- Werner, H., & Kaplan, B. (1963). *Symbol formation. An organismic-developmental approach to language and the expression of thought*. New York: Wiley.
- Wertsch, J.V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Hemel Hempstead: Harvester Wheatsheaf.
- West, L. (2006). Managing change and transition: A psychosocial perspective on lifelong learning. In P. Sutherland & J. Crowther (Eds.), *Lifelong learning: Concepts and contexts* (pp. 39–47). London/New York: Routledge.
- Zittoun, T., Cornish, F., Gillespie, A., & Aveling, E.-L. (2008). Using social knowledge: A case study of a diarist's meaning making during World War II. In W. Wagner, T. Sugiman, & K. Gergen (Eds.), *Meaning in action: Constructions, narratives and representations* (pp. 163–179). New York: Springer.

## Biography

TANIA ZITTOUN is Professor of Education at the University of Neuchâtel, Switzerland. She is interested in people's active uses of available cultural means in a variety of challenging settings, and in how these uses can participate in learning and development. She is the author of: *Donner la vie, choisir un nom* (L'Harmattan, 2005), on the transition to parenthood; *Insertions* (Peter Lang, 2006), on supportive school settings for the school-to-work transition; and *Transitions* (InfoAge, 2006), which examines young people's uses of symbolic resources. ADDRESS: Tania Zittoun, Institut de psychologie et éducation, FLSH, Université de Neuchâtel, Esp. Louis Agassiz 1, CH-2000 Neuchâtel, Switzerland. [email: tania.zittoun@unine.ch]