How command of theoretical concepts contributes to the professional development of future interpreters

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Abstract

This article examines the role of theory in interpreter training. It reflects on how the conceptualization of practice through theory can be an anchor for the professional development of future interpreters.

The study firstly draws on the Vygotskian notion of praxis, which smooths the way for the integration of abstract principles with real, practical experience. Based on the sociocultural theory of learning, although experience is the starting point for all professional development, practice can only be productive if it is the object of critical reflection and of systematic examination. In that light, the systematic reflection on one's own practice is the link between theoretical concepts and personal experience.

Survey results provide initial data on the need for greater interrelation between theory and practice, as identified by trainee interpreters and their trainers, and underline the purpose of theory in eminently practical training. The article makes proposals on how to work meaningfully with theory, as well as on what theoretical content should be included in training and how to do so with theory closely linked to practice.

Keywords

Conference interpreting, interpreter training, professional development, role of theory, conceptualization of practice.

Introduction

Interpreter training syllabuses have traditionally lacked theoretical content. This is probably a consequence of the eminently practical nature of the discipline and the profile of its trainers, who have generally been accomplished professional interpreters with a wealth of practical experience but little acquaintance with studies and research. Indeed, Pöchhacker (2010) notes that many renowned interpreters forged successful careers without ever receiving any kind of training in theory or research. For years, theory was sometimes regarded as a source of distraction and confusion, and its connection with practice was even questioned. Furthermore, authors such as Sawyer (2004) and Stähle (2009) stated a few years ago that, although leading interpreter education programmes were situated in an academic environment, interpreter training had never truly left the realm of apprenticeship.

More recently, however, things seem to have changed. The Theory of Interpreting is an established scientific discipline. Theoretical content has begun to feature in some highly regarded conference interpreter training programmes, probably due to the emergence of *practisearchers* (Gile 1994). There are now research-oriented academics among the teaching staff of most university interpreter training programmes, and official master's degree students are required to write a dissertation. The European Masters in Conference Interpreting (EMCI) recommends that the curricular structure of training include aspects of the theory of interpreting, and authors like Setton (2010) have highlighted how theory can aid understanding of the problem (tasks, objectives, cognitive challenges) and the development of effective solutions, i.e., pedagogical strategies.

Despite the progress made, there is still a boundary between what students experience and observe and what they obtain from theoretical modules, which continue to be designed in such a way that their content, although closely related to what students will encounter in practice, is perceived as separate and excessively abstract (Esteve 2013). Nonetheless, students feel the need to be able to explain how interpreting works or, at least, of finding answers when facing the main obstacles in their learning process.

The objective of this article is to reflect on how the conceptualization of practice through theory can be an anchor for practical work; or, to put it another way, how theory contributes to the construction of practical knowledge in interpreter training. At present, evidence from other disciplines and from applying the sociocultural theory of learning emphasizes theory's importance to the systematization of practice: "I believe that the real key to the theory is to be found in the notion of praxis" (Lantolf 2008:13).

The first part of this article reviews theoretical contributions from the interpreting arena which have analysed theory's potential. Authors such as Setton (2010) have studied how theory and research can influence practice, and Pöchhacker (2010) has pointed out that research provides knowledge essential to the process of teaching and learning in classrooms and beyond. The article then looks at aspects of other disciplines, such as the concepts of *episteme* and *phronesis*, which reflect the different levels of theory. It also explores the Vygotskian

notion of "concept" as opposed to the term "theory". Vygotsky (1987: 305) was the first to introduce practice as an equal partner of theory: practice serves as "the supreme judge of theory, as its truth criterion". The article also underlines the importance of systematic reflection on the interpreting process as the interface between theory and practice.

The second part of the article includes the results of a survey of postgraduate conference interpreting students and their trainers about their attitudes and beliefs towards theory in interpreter training, along with an initial set of specific methodological reflections on how to integrate theory into interpreter training.

1.   Concept-based professional development of future interpreters

We could not agree more with Setton's (2010: 2) statement that training is the main justification for the development of any "theory" about interpreting. This scholar stresses training's role as the link between theory and practice. While the feedback loop between theory and practice remains very subtle, training is the most productive channel between the two, which are able to complement one another in a constant circle applied through practice. According to Setton (2010), training can benefit from theory in two ways. Firstly, theory paves the way for a better understanding of the problem (tasks, immediate objectives, cognitive challenges). Secondly, it aids the development of effective solutions, i.e. pedagogical strategies that make objectives attainable. The key, however, lies in how training is conceived. In other areas, a clear distinction between professional development and training is beginning to be established. Training, in the view of Esteve *et al.* (2019), must be geared to professional development and should not be an end in itself.

A rather generalized consensus could be reached about the nature of the activity of interpreting. It is a deliberate, highly action-oriented activity with a very clear objective: helping two or more people who do not share the same language and cultural code to communicate with each other. Interpreting is a deliberate activity in that it requires professionals to intentionally mobilize their instrumental and cultural resources (knowledge, skills, techniques, attitudes and values).

On the basis of the three characteristics in question, the very nature of interpreting makes it an activity that is inseparable from the perspective provided by theory, mainly because interpreters, especially when training, need to be aware of the consequences of the decisions they make. According to Esteve (2013), work with theoretical knowledge should lay the groundwork for trainees to understand their own experience and the experiences and proposals of others, and to be capable of analysing such experiences and proposals from a deeper perspective that helps them justify their decisions.

1.1 From *episteme* to *phronesis*

The theory of interpreting can be divided into two distinct levels. On the one hand, there is the general theory (based on research results), which explains how interpreting is performed, which does not consider specific cases. On the other hand, there is the specific theory, which deals with the specific processes of a particular situation. And there is a long tradition of developing interpreting models that, in one way or another, link the two levels. The interpreting models establish a theory whose objective is to describe or explain a complex phenomenon or process in terms of components, sub-processes or relations (Pöchhacker 2015). Thus, be they models with a more social or relational approach (Alexieva 1997; Wadensjö 1998) or cognitive process models (Moser 1978; Gile 2009), in all of them it is possible to identify the two levels of theory established by Korthagen (2010): theory with an upper-case T and theory with a lower-case t, inspired by what Aristotle called *episteme* and *phronesis*. *Episteme* refers to knowledge of different situations; it makes use of general concepts; it is based on scientific research; and it is conceptual, in that it aids understanding of different situations. *Phronesis*, in contrast, refers to specific action, in a specific situation; focuses on specific aspects of the situation (certain "signs"); is based on each individual's own experiences; and is perceptual, in that it shapes our perception of specific situations. The implicit, personal theory we develop as individuals on the basis of our own experience of teaching is theory with a lower-case t. Theory with an upper-case T is explicit theory, which could also be called scientific theory.

1.2 From theory to concepts. The Vygotskian contribution

Vygotsky (1987) advocates the creation of a kind of education developed through activity in a social context. In doing so, he rejects the traditional dichotomy between theory and practice and highlights the relationship between abstract systems of principles and cultural practice. He proposes replacing the notion of theory with that of concept, suggesting that learners establish a conscious relationship between abstract knowledge and experience of the world. Vygotsky (1986) makes a meaningful distinction between *everyday* and *scientific concepts*. As Poehner *et al.* (2018) state, spontaneous concepts emerge through the abstraction of evidence, are based on concrete experience, and lack systematicity because they are built in a piecemeal fashion. Spontaneous concepts may be partially declarative but only in relation to specific contexts, and they typically have limited recontextualizability with preferred use occurring in situations one is already familiar with. By contrast, scientific concepts start as abstractions, typically through formal instruction. Because they are based on scientific findings, they are in general systematic ways of understanding the object of study, which therefore makes them highly recontextualizable. Unlike spontaneous concepts, scientific concepts lack a relation with experience at first, but this link develops as one comes to understand how the concept plays out in the everyday world.

To become a member of a community of practice[1], a learner must understand concepts in the same way as the rest of the community's members do. Thus, according to Vygotsky (1986), the development of concepts entails gaining access to a culture's values and practices and the ability to start thinking systematically, at the same time as the culture itself develops and changes alongside its own members' understanding of concepts.

By way of example, in the interpreting arena there are various concepts shared by researchers, trainers, and professional and trainees. When a professional interpreter says (s)he had to *anticipate* (Chernov 2004) a difficult syntactic structure in the source language, every member of the community knows what that means. The same applies to concepts such as *time lag* (Paneth 1957/2002; Barik 1975/2002), *verticalism* (Rozan 1956) in note-taking, and the *segmentation* (Kirchhoff 1976/2002) of units of meaning in simultaneous interpreting.

As Poehner *et al.* (2018) stress, the challenge trainers face consists in selecting concepts well, so as to determine how to materialize them through reflection-oriented instruments and consequently design and implement reflective activities aimed at students analysing and understanding their own practice through concepts.

Thus, once students have seen and analysed examples of *verticalism* and practised taking notes using a vertical layout, they could reflect on verticality, read what theory says about the concept, and apply it to their own practice. The concepts of *anticipation* and *time lag* could be included in simultaneous interpreting practice in the same way.

1.3   Reflection on one's own actions: the link between theory and practice

In the light of all the above, trainee interpreters need a number of concepts that enable them to put names to the description of the process they go through while interpreting and to analyse the challenges they encounter in their training. The gradual development of such analytical skills can be regarded in relation to the different levels of progress in the interpreters' professional development process (Hoffman 1997; Moser-Mercer *et al.* 2000). The three stages investigated (the cognitive, associative and autonomous stages) represent the gradual transition from experiential, more intuitive and spontaneous knowledge to more developed levels of knowledge, through a process in which each individual constructs their own operational knowledge. Thus, while the knowledge students develop in the cognitive stage is experiential and of a more intuitive and spontaneous nature, their developing awareness takes over in the associative stage, allowing them to form a deeper understanding of their own performance and to critically observe their performance and their own representations. It is at this stage that the introduction and internalization of theoretical concepts take on greater importance.

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1   A community of practice is group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly (Wenger 1998).

This is the level at which a connection between theoretical principles and personal experiences and conceptualizations must be established.

As Esteve *et al*. (2019) stress, although experience is the starting point for all professional development, practice can only be productive if it is the object of critical reflection, of systematic examination. Thus, in interpreter training, systematic reflection on one's own practice (Arumí 2009), as reflection on action (Schön 1983), through varied tools (self-assessment grids, a portfolio, etc.), becomes the link between theoretical concepts and personal experience built up in different learning activities.

2.   The views of trainers and students on the role of theory in training

To gain an insight into the perceptions and opinions on the role of theory in interpreter training, a questionnaire was designed for second-year students of the Universitat Autònoma de Barcelona's Conference Interpreting University Master's Degree (MUIC) programme and another for their trainers. In total, six of the programme's seven training staff and nine of its ten second-year students answered the questionnaires.

Three of the programme's modules involve work with theoretical content on interpreting. "Fundamentals of Interpreting" is a first-year module in which 12 hours are allocated to an introduction to studies and research on interpreting. "Research, Deontology and Specific Knowledge" is a second-year module in which 10 hours are devoted to studying methodological issues to prepare students for their final project. Lastly, "Final Project" is a module in which students conduct research on a topic of their interest related to conference or public service interpreting.

The questionnaire for students included five questions, two of them closed and the other three open. The closed questions asked if the students agreed on the fact that some time had been set aside for teaching on theoretical aspects and if they would have liked more time to be devoted to this kind of teaching. The open questions asked them about how the programme's theoretical content had helped them, the activities in which they had found it useful, and the extent to which it had been of assistance in portfolio preparation.

Likewise, the questionnaire for trainers featured five questions, two of them closed and three open. Firstly, the trainers were asked what they understood by theory in the context of interpreter training. The two subsequent closed questions focused on whether they considered the inclusion of some theoretical training in a master's degree in interpreting necessary and how many hours they thought a two-year training programme should devote to theory. Finally, they were asked if they usually included notions of theory in their practical teaching and how they thought theoretical content could aid learning.

As regards the questionnaire for students, all the respondents felt that the inclusion of several hours of teaching on theoretical aspects unequivocally geared to professional practice was positive. However, when asked if they would have liked more time to be devoted to theoretical content, only two of them said yes and seven openly said no.

When the students were asked how they thought the programme's theoretical content had helped them, four said it had played a part in broadening their general cultural knowledge and two considered it directly applicable to carrying out their final project. Three students felt it had helped them understand the interpreting profession better; one of the three mentioned theory's contribution to understanding why certain errors are made in interpreting and to being able to establish strategies for improving technique.

The next question directly referred to whether the students had found the programme's theoretical content useful in relation to individual or group autonomous practical work, self-assessment or peer assessment. Four of them said yes, four said no, and one did not express an opinion. The views of two of the students, set out below, are representative of the four positive replies:

"When performing simultaneous interpreting, on my own or with other students, I understand there are theoretical bases that explain what happens to us when we do this type of interpreting, what happens in our brain and how we should apply the technique."

"It has helped me to improve and, when working with other students, to give good feedback based on the theory we have learned in class."

The four students who answered no to the question felt that theory had not helped them improve their practical work.

During the two years of training, each of the students had compiled a digital portfolio of evidence of what they had learned, as well as self-assessment documents and reflections on classroom exercises and individual and group practical work. When asked if theory had helped them with the reflections in their portfolios, six students answered affirmatively:

"It has helped me a great deal in understanding what mistakes I was making, why I was making them, and how to solve the problems I was having, enabling me to gradually improve."

"When analysing my performance, I had a clearer idea about my mistakes and also about things I was getting right but would never have understood without theory classes."

The other three students did not feel that theory had helped them in any way as far as the reflections in their portfolios were concerned.

As regards the questionnaire for trainers, five out of the six respondents considered some theoretical training in a master's degree in interpreting essential, although the sixth did not agree. When asked how many hours a two-year master's degree programme should devote to theory, three opted for a maximum of 10 hours and three for between 15 and 20 hours. Five of the six said they included notions of theory in the practical training.

In relation to the trainer's understanding of theory, there were three aspects common to every answer: the opinion that there must be a relationship between theory and practice; the opinion that theory must enable students to see the use-

fulness of the type of practical activities they are set; and the view of theory as a framework that explains the cognitive processes required for interpreting and how learning can be optimized on the basis of those processes.

The five trainers who said they included notions of theory were asked how often they did so. Their answers varied, with one trainer reporting dealing with theoretical issues in every class, two saying that they placed greater emphasis on theory in the first few weeks, and two replying that they talked about theory whenever they introduced a new skill or a new type of exercise.

All the trainers were asked how they thought theoretical content could aid learning. Four of them felt that theory provides students with notions for breaking down a process that would otherwise be difficult to understand. There was also mention of theory making students more aware of the skills essential to interpreting and how to learn to develop them. One of the trainers even compared the process of interpreting to the activity of climbing, referring to theory as a means of making the goal of the process more achievable:

> "Theory helps students realize that they are not making the ascent alone and that they have crampons to keep them from slipping."

One trainer felt that theory enables students to understand the reasoning behind the approach taken to their training. She was also of the opinion that theory makes students curious to learn more about the profession of interpreting and confirms the need for rigorous training to exercise the profession. Another trainer was in doubt as to whether theoretical content could actually aid learning.

As for if trainers believed that theoretical content could contribute to improving individual or group autonomous practical work, self-assessment or peer assessment, all but one of them, who felt she did not have enough theoretical knowledge to answer, thought that awareness of the theoretical reasoning behind particular approaches or exercises enables students to tackle practical work and assessment correctly from the outset. One trainer emphasized the important role trainers play in establishing a clear connection between theory and practice. Another mentioned the advisability of introducing theoretical concepts once students have undertaken enough practical work to be able to draw on theory to solve some of the difficulties that arise in practice.

In a space for open-ended comments, one of the trainers mentioned the need for practical learning to be interspersed with theory so that the latter can underpin trainers' approaches and aid students' evolution during their training process. Another trainer said that, in general, interpreter trainers still lack theoretical knowledge that would be very useful for organizing the approach to be taken to training, which, in some cases, remains excessively intuitive and based on personal experience.

3.   Discussion. Towards the conceptualization of practice through theory

As the answers show, students and trainers felt that theory must be supported by practice. The main objective is to create a framework that enables students

to acquire interpreting skills and in which concepts help them understand the challenges involved in learning. Another goal is to relate the cognitive aspects of tasks with the general purpose of interpreting as an act of communication, with a view to analysing when and why communication is successful and when and why it is not. In that regard, as some of the trainers mentioned, trainers play a key role in helping students find anchor points that allow them to connect their experiences with theoretical knowledge and, thus, to embark on a process of "guided knowledge construction" (Mercer 1995, 2001).

While we agree with Vygotsky's notion of concepts as ideas for organizing knowledge, it is necessary to come up with a formula for the categorization of concepts in the specific field of interpreting and to reach a consensus on what are the basic concepts that interpreting students must fully grasp and apply. To date, only general recommendations regarding incorporating theoretical modules into training have been made, but there is undoubtedly a need to advance towards a shared collective decision as to what the theory with an upper-case T of interpreting should encompass, i.e. what aspects of the Theory of Interpreting form the basic, cross-cutting training that students must fully master; and what concepts (or theory with a lower-case t) ought to be included in interpreter training, in what order and, above all, for what purposes.

Based on the trainers' responses, we have gathered together some ideas so as to how the relationship between theory and practice in interpreter training could be improved:

– theory must enable students to see the usefulness of the type of practical exercises they are set;
– it is important to make a connection with theory whenever a new skill or type of exercise is introduced;
– it is important that theory becomes systematized through practice;
– it is important that theoretical concepts (which could range from research results to interpreting models and concepts such as anticipation, segmentation, etc.) are introduced once students have carried out enough practical work to be able to draw on theory to solve some of the difficulties that arise in practice.

The merits of enhancing students' capacity for reflection are nowadays unquestioned. To achieve that, however, students need tools that allow them to reflect effectively. Most of the trainers mentioned theory providing students with notions that can help them break down a process that would otherwise be difficult to understand. They also stressed that theory can help make students more aware of the skills essential to interpreting and how to learn to develop them. The students described how, when retrospectively reflecting on their interpreting activity, theory explains many of their errors and enables them to establish strategies for improvement.

Constructive feedback is necessary for effective interpreter training. Personal experience and observation of interpreter training have repeatedly shown cases of students failing to grasp feedback, even when it is clear and well constructed, sometimes because they and their trainer do not share the same metalanguage or the same understanding of concepts.

We suggest two specific measures that could be taken in interpreter training. Firstly, we propose including theory more systematically and ensuring that the theoretical concepts dealt with in more theory-oriented modules subsequently feature in practical interpreting sessions, with a view to students becoming familiar with and mastering them. Secondly, it is essential that reflective practice activities be included on a regular basis (be it through self-assessment, peer assessment or portfolios) and that reflection be given a key role in improving learning. However, to be capable of such reflection, whether written or spoken, learners must be able to mobilize theoretical concepts that allow them to describe their practical activity.

4.   Final reflections

While this article is a first exploration of the role of theory in interpreter training, both theoretical research and the results of the questionnaires suggest that in interpreting, as has been shown in other fields (Esteve *et al.* 2018; Johnson/Golombek 2016; Lantolf/Poehner 2014), theory could be crucial for the systematization of practice and in the professional development of future interpreters.

This study paves the way for future pedagogical reflections on the importance attributed to theory in current interpreter training courses and, in particular, on how to introduce meaningful work with theory, as well as on what theoretical content should be included in training and how to do so with theory closely linked to practice.

Current trends in education and the results of years of research are moving towards a conception of theory that is meaningless if it is not associated with practice, because all professional development is oriented to practical activity (Esteve *et al*. 2019). This is leading to a scenario in which trainers can apply the theoretical concepts that explain the processes students observe and experience in their exercises to practice. Building up hours of experience in booths is vital to becoming an interpreter, but practice in itself does not guarantee professional development, because it is insufficient as a foundation for such development.

It is important that interpreter trainers do not reject theory in the belief that it has very little to do with the reality of practice. As Korthaghen (2010) states, with reference to the field of pedagogy, it is necessary to teach theory that arises from practice, theory that is based on empirical research and helps students understand the practice of interpreting in all its aspects and complexity.

It is also necessary to make students aware of the value of concepts that contribute to their reflection process. Reflection will enable them to gradually develop the skills and strategies they need to become conscious of the competences required by the profession and to monitor their own progress.

References

Alexieva B. (1997) "A typology of interpreter-mediated events", *The Translator* 3/2, 153-174.

Arumí M. (2009) "Nuevos retos en la formación de intérpretes: la integración del componente metacognitivo en el aula", *Trans. Revista de Traductología* 13, 149-162.

Barik H.F. (1975/2002) "Simultaneous interpretation: qualitative and linguistic data" in F. Pöchhacker / M. Shlesinger (eds) *The Interpreting Studies Reader*, London/New York, Routledge, 79-91.

Chernov G. V. (2004) *Inference and Anticipation in Simultaneous Interpreting: A Probability-Prediction Model*, Amsterdam/Philadelphia, John Benjamins.

Esteve O. (2013) "Entre la práctica y la teoría. Comprender para actuar", *Ikastaria* 19, 13-36.

Esteve O. / Bes A. / Fernandez F. (2018) "Pre-service teacher education from a sociocultural perspective: a case-study on teaching learning through conceptual mediation", *Language and Sociocultural Theory* 5/2, 83-107.

Esteve O. / López S. / Urbán J. / Ferrer A. / Verdía E. (2019) *Indagación y reflexión sobre la propia práctica docente. Herramientas para el desarrollo profesional*, Biblioteca Edinumen.

Gile D. (1994) "Opening up in interpretation studies", in M. Snell-Hornby / F. Pöchhacker / K. Kaindl (eds) *Translation Studies. An Interdiscipline*, Amsterdam/Philadelphia, John Benjamins, 149-158.

Gile D. (2009) *Basic Concepts and Models for Interpreter and Translator Training*, Amsterdam/Philadelphia, John Benjamins.

Hoffman R. (1997) "The cognitive psychology of expertise and the domain of interpreting", *Interpreting* 2/1-2, 189-230.

Johnson K. E. / Golombek P. R. (2016) *Mindful L2 Teacher Education*, New York, Routledge.

Kirchhoff H. (1976/2002) "Simultaneous interpreting: interdependence of variables in the interpreting process, interpreting models and interpreting strategies" in F. Pöchhacker / M. Shlesinger (eds) *The Interpreting Studies Reader*, London/New York, Routledge, 110-119.

Korthagen F.A.J. (2010) "La práctica, la teoría y la persona en la formación del profesorado", *Revista Interuniversitaria de Formación del Profesorado* 24/2, 83-101.

Lantolf J. P. (2008) "Praxis and classroom L2 development", *ELIA* 8, 13-44.

Lantolf J. P. / Poehner M.E. (2014) *Sociocultural Theory and the Pedagogical Imperative in L2 Education: Vygotskian Praxis and Research/Practice Divide*, New York/London, Routledge.

Moser B. (1978) "Simultaneous interpretation: a hypothetical model and its practical application", in D. Gerver / H.W. Sinaiko (eds) *Language Interpretation and Communication*. New York/London: Plenum Press, 353-368.

Moser-Mercer B. / Frauenfelder U.H. / Casado B. / Künzli A. (2000) "Searching to define expertise in interpreting", in K. Hyltenstam / B. Englund-Dimitrova (eds) *Language Processing and Interpreting*, Amsterdam/Philadelphia, John Benjamins, 1-21.

Mercer N. (1995) *La construcción guiada del conocimiento*, Barcelona, Paidós.

Mercer N. (2001) *Palabras y mentes*, Barcelona, Paidós.

Paneth E. (1957/2002) "An investigation into conference interpreting" in F. Pöchhacker / M. Shlesinger (eds) *The Interpreting Studies Reader*, London/New York, Routledge, 31-40.

Pöchhacker F. (2010) "The role of research in interpreter education", *The International Journal for Translation and Interpreting Research* 2/1, 1-10.

Pöchhacker F. (2015) "Models", in F. Pöchhacker (ed.) *Routledge Encyclopedia of Interpreting Studies*, Routledge, 263-269.

Poehner M.E. / Compernolle R. A. / Esteve O. / Lantolf J.P. (2018) "A Vygotskian developmental approach to second language education", *Journal of Cognitive Education and Psychology* 17/3, 238-259.

Rozan J.F. (1956) *La prise de Notes en Interprétation Consécutive*, Geneva, Georg.

Sawyer D. B. (2004) *Fundamental Aspects of Interpreter Education: Curriculum and Assessment*, Amsterdam/Philadelphia, John Benjamins.

Setton R. (2010) "From practice to theory and back in interpreting: the pivotal role of training", *The Interpreters' Newsletter* 15, 1-18.

Schön D.A. (1983) *The Reflective Practitioner: How Professionals Think in Action*, New York, Basic Books.

Stähle J. (2009) "Vom Übersetzen zum Simultandolmetschen: Handwerk und Kunst des zweitältesten Gewerbes der Welt", Stuttgart, Franz Steine

Vygotsky L. (1986) *Thought and Language*, Cambridge, MA and London, The MiT Press.

Vygotsky L. (1987) "Thinking and speech", in R. Rieber / A. Carton (eds) *The Collected Works of Lev Vygotsky*, vol.1, (trans. N. Minick), New York, Plenum.

Wadensjö C. (1998) *Interpreting as Interaction*, London/New York, Longman.

Wenger E. (1998) "Communities of practice and social learning systems: the career of a concept", in C. Blackmore (ed.) *Social Learning Systems and Communities of Practice*, Springer, 179-198.