

Tätigkeitstheorie

Contributions
to
Cultural-Historical
Psycholinguistics

Marie-Cécile Bertau
&
Anke Werani

2011, Heft 5

ICHHS

TÄTIGKEITSTHEORIE

Journal für tätigkeits-theoretische Forschung in Deutschland • herausgegeben von
Georg Rückriem und Hartmut Giese

Bibliografische Informationen der Deutschen Nationalbibliothek:

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der deutschen Nationalbibliografie; detaillierte bibliografische Informationen sind im Internet unter: <http://dnb.ddb.de> abrufbar.

2011 © by Tätigkeitstheorie (www.ich-sciences.de)
Herausgeber: Georg Rückriem und Hartmut Giest
Umschlagsgestaltung: Hartmut Giest

Verlag: lehmanns media
Hardenbergstraße 5 • 10623 Berlin
Published in Germany
ISSN 2191-6667
ISBN: 978-3-86541-425-0

Das Werk ist einschließlich aller seiner Teile urheberrechtlich geschützt. Jede Verwertung außerhalb der engen Grenzen des Urheberrechtsgesetzes ist ohne Zustimmung der Herausgeber unzulässig und strafbar. Das gilt insbesondere für Vervielfältigungen, Übersetzungen, Mikroverfilmungen und die Einspeicherung und Verarbeitung in elektronischen Medien.

**Contributions
to
Cultural-Historical
Psycholinguistics**

**Marie-Cécile Bertau & Anke Werani
(Eds.)**

**Tätigkeitstheorie
Heft 5
2011**

Introduction: Acknowledging Language in the Cultural-Historical Framework

Cultural-historical psychology as it was developed in the 1930s by L.S. Vygotsky, A.N. Leont'ev, and A.R. Luria addresses the psychological development and dy'namics of the societal individual. This approach understands the individual mind and psyche in relation to forms of social activity in common practices. As proposed by the theory of activity (e.g. Leont'ev 1978), human activity typically employs mediational means in order to reach the goal of an actual action. Within a complex system of actions and means we can discern one specific means pertaining to an outstanding activity pervasive in human societies: the language activity. The verbal symbol is the specific mediational means for diverse communicative and sociopsychological activities. Cultural-historical psycholinguistics focuses specifically on language activity in its relationship to social or interpsychological as well to indi'vidual or intrapsychological processes. Hence cultural-historical psycholinguistics is interested in the "work of language", in its power for social as well as individual development and dynamics, such as for instance in language acquisition, in dialogic exchanges, in writing and reading, and in problem solving via talking. The basic starting point of cultural-historical psycholinguistics is language activity.¹

It is worth noting that an explicit focus on language in the framework of activity theory is rare, and language is foremost addressed within pedagogical theories. Moreover, psycholinguistics (as founded in the 1950s in the USA) is traditionally a cognitive science (Knobloch 2003; Rehkämper 2003) in which language is seen as an *object* of cognitive processing. The prevailing method of investigation in this ap'proach is the experiment in which language is removed from social contexts. In contrast, cultural-historical psycholinguistics understands language as *means* of communicative and psychological processes; it highlights its social nature and formative power. Hence, the individual is not treated as isolated, self-contained cognition, but as a socially organized, that is, as a related and positioned individual involved in a diversity of activities (see also O'Connell & Kowal 2003). These activities are situated,

¹ "Language activity" is defined as *sprachliche Tätigkeit* in Bertau (2011), and as *Sprechttätigkeit* in Werani (2011); in both, language is understood as a process.

they are culturally and historically specific. Therefore, higher psychological functions (e.g., logical memory, voluntary attention, verbal thinking, creative imagination, foresight, see Vygotsky 1931/ 1997, p. 6-7) and consciousness emerge socially within language activity. Cultural-historical psycholinguistics claims to relate systematically theory, empirical work, and reflection on both in a cyclic process. The empirical work conducted within this framework is hereby specifically concerned with the definition of adequate units of investigation permitting “a synthetic analysis of the complex whole” (Vygotsky 1934/ 1987, p. 48) and acknowledges the basic social character of the human mind. Therefore, the unit of investigation has to be means of both social interaction as well as higher psychological functions.

The aim of the present issue is to present theoretical as well as empirical contributions to cultural-historical psycholinguistics, all recently developed at Ludwig-Maximilians-University, Munich (Germany). The authors’ common point is the dynamics of the vivid, other-addressed language activity, be it in oral or in written forms. We begin with two articles that provide the basis for a detailed notion of cultural-historical psycholinguistics. Bertau’s contribution presents a theoretical framework for cultural-historical psycholinguistics. This construction, elaborated in a historical-conceptual reflection, is organized in axioms; it addresses language as an activity of socially organized and self-other positioned individuals. As otherness and dialogicality are core notions to Bertau’s concept of language activity, she proposes a psycholinguistic approach based on alterity (Bertau 2011). Starting with foundational theoretical reflections, Werani’s contribution goes a step further into the empirical study of inner language activity in connection to higher psychological functions. Thus, Werani first outlines three primary elements of cultural-historical psycholinguistics: (1) the role of social activity, (2) the dialectical principle of development, and (3) the topic of speech and higher psychological functions. Werani then presents her empirical study on inner speech (Werani 2011), specifically addressing speech profiles in problem solving. These speech profiles are connected to what Werani calls speaking-thinking-types, hence indicating crucial differences in the way individuals use language when thinking, and highlighting the quality of problem-solving speech.

The following two contributions investigate the process of writing. Karsten starts with the specific dialogic and social perspective on language observable in Vygotsky and in three of his contemporary researchers: Jakubinskij, Bakhtin and Voloshinov. It is noteworthy that all of these authors include written language in their reflections.

In her analysis of a case study, Karsten draws specifically on Bakhtin's notion of the chronotope (Bakhtin 1937–1938/1981) that she relates to the method of autoconfrontation. The dynamics of the writing process is approximated through specific refractions, highlighting the role of language activity in writing. Surd-Büchele's investigations aim at understanding the role of writing for thinking. The point of entry for Surd-Büchele is Vygotsky's notion of 'written speech' (1934/ 1987), a notion that is understood as emphasizing the addressivity of writing on the one hand, and the genuine relationship between inner and outer forms of speech on the other hand. Based on her empirical study of paper and online diaries, Surd-Büchele develops a model of writing-thinking-relations that permits – in analogy to Werani (2011) – to differentiate between so-called writing-thinking-types.

The two closing contributions are devoted to language acquisition. Against the background of the current debate on language education for young children in Germany, Sens discusses the need for an approach in the perspective of cultural-historical psycholinguistics. This approach acknowledges the fundamental situatedness and dialogicality of any language activity, it emphasizes relations, interactions, and dialogues between the children and their caretakers, and it underscores their common practices as fundamental to children's overall development. Sens underscores that this approach demands from the childcare providers a high level of professionalism that includes a thoughtful reflection of their own language activity. Finally, Epping relates ethnological methods with cultural-historical psycholinguistics, aiming for a better understanding of child language acquisition in an institutional context, the German Kindergarten. Epping presents field observations focusing on the way in which children of different cultural and linguistic backgrounds create a basis for their shared activities. On this basis, Epping discusses different ethnological methods and concludes that the combination of fieldwork with narrative interview seems to be a promising way to enhance cultural-historical investigations of the language acquisition process.

The articles of this issue point at the broad range of psycholinguistic research questions which are addressed from a cultural-historical standpoint. In our opinion, the present contributions make it clear that language activity is of utmost importance to higher psychological functions, to their formation in ontogenesis as well as to their dynamics in microgenetic processes performed by adults. Hence, it is our hope that

this issue is a convincing plea for cultural-historical psycholinguistics: indeed, language activity is central to human activity.

Marie-Cécile Bertau and Anke Werani

References

- Bakhtin, M.M. (1937–1938/1981). Forms of time and of the chronotope in the novel. In M. Holquist (Ed.), *The dialogic imagination. Four essays by M. M. Bakhtin* (pp. 84-258). Austin: University of Texas Press.
- Bertau, M.-C. (2011). Anreden, Erwidern, Verstehen. Elemente einer Psycholinguistik der Alterität. [Addressing, replying, and understanding. Elements of a psycholinguistics of alterity.] Berlin: lehmanns media.
- Knobloch, C. (2003). Geschichte der Psycholinguistik. [A history of psycholinguistics] In G. Rickheit, T. Herrmann & W. Deutsch, *Psycholinguistik. Psycholinguistics. Ein internationales Handbuch. An international handbook*. (pp. 15–33). Berlin, New York: Walter de Gruyter.
- Leont'ev, A.N. (1978). *Activity, consciousness, personality*. Eaglewood Cliffs (NJ): Prentice Hall. [Deutsch: Tätigkeit. Bewußtsein. Persönlichkeit. Stuttgart: Klett 1977.]
- O'Connell, D. & Kowal, S. (2003). Psycholinguistics: A half century of monologism. *American Journal of Psychology* 116, 191-212.
- Rehkämper, K. (2003). Philosophische Aspekte der Psycholinguistik. [Aspects of philosophy in psycholinguistics] In G. Rickheit, T. Herrmann & W. Deutsch, *Psycholinguistik. Psycholinguistics. Ein internationales Handbuch. [An international handbook]*. (pp. 1-14). Berlin, New York: Walter de Gruyter.
- Vygotsky, L.S. (1931/1997). The history of the development of higher mental functions. In R. W. Rieber (Ed.), *The collected works of Vygotsky, Volume 4*. New York: Plenum Press. [Deutsch: Vygotskij, L.S. (1931/1992): Geschichte der höheren psychischen Funktionen. Fortschritte der Psychologie Bd. 5. Münster, Hamburg: Lit.]
- Vygotsky, L.S. (1934/1987). Thinking and speech. In R. W. Rieber & A. S. Carton (Ed.), *Problem of general psychology, Volume 1* (pp. 37-285). New York and London: Plenum. [Deutsch: Denken und Sprechen. Psychologische Untersuchungen. Weinheim und Basel: Beltz 2002.]
- Werani, A. (2001). *Inneres Sprechen – Ergebnisse einer Indziensuche*. [Inner speech – empirical evidence based on speech profiles] Berlin: lehmanns media.

Contents

Abstracts	9
Marie-Cécile Bertau	13
Language for the Other: Constructing Cultural-Historical Psycholinguistics	
Anke Werani	51
Investigating Inner Speech and Higher Psychological Functions through Speech Profiles	
Andrea Karsten	87
Chronotopes in Writing - Excerpts from a Case Study	
Stefanie Surd-Büchele	121
On the Relations Between Writing and Thinking	
Andrea Sens	143
Let's Do Language With Each Other! Looking at a Language Education Approach from a Cultural-Historical Perspective	
Clara Epping	157
Ethnological Methods in Cultural-Historical Psycholinguistics	
Autoren	175
Glossary: Concepts of Activity Theory	177

Abstracts

Marie-Cécile Bertau: Language for the Other: Constructing Cultural-Historical Psycholinguistics

Der Gegenstand der kulturhistorischen Psycholinguistik ist die sprachliche Tätigkeit in ihrer sozialen und ihrer psychologischen Funktion mit den entsprechenden verbalen Formen. Sprache ist daher angesiedelt in der Lebenstätigkeit situierter und positionierter, gegenseitig orientierter sozialer Individuen, sie ist weder von diesen Individuen noch von ihrer Tätigkeit abstrahierbar. Diese Sprachauffassung ist zentral für die vorgeschlagene "Psycholinguistik der Alterität" (Bertau 2011), die erstens über eine historisch-konzeptionelle Analyse und zweitens über eine theoretische Analyse empirischer Ergebnisse aus unterschiedlichen Feldern der Spracherforschung konstruiert wird. Ziel des Beitrags ist, die Hauptelemente dieser Konstruktion einzuführen, der Beitrag folgt daher demselben Aufbau. In einem ersten Schritt wird Humboldts Sprachphilosophie und ihre Rezeption durch russische Linguisten dargestellt. Die Dialogizität von Sprache und Denkprozessen erweist sich dabei als die Kernidee, die in Russland und der Sowjetunion aufgenommen und durch verschiedene Denker entwickelt wird. Die spezifische Sprachpsychologie Vygotskijs wird in diesem Ideenkontext gesehen, der den Rahmen für die Beziehungen von Sprache und Denken bildet. Auf der Grundlage von Humboldts Sprachphilosophie, der russischen Dialoglinguistik und der kulturhistorischen Psychologie, wie sie Vygotskij formuliert, wird in einem zweiten Schritt das theoretische System vorgestellt, das Sprache als Tätigkeit sozial organisierter und selbst-anderer positionierter Individuen zum Gegenstand hat.

Anke Werani: Investigating Inner Speech and Higher Psychological Functions through Speech Profiles

Eine Grundannahme des kulturhistorischen Ansatzes ist, dass das menschliche Bewusstsein und alle anderen höheren psychologischen Prozesse – Sprache eingeschlossen – eine soziale Genese haben. Die Fähigkeit zu Sprechen und alle anderen sprachlichen Aktivitäten sind wesentlich für das soziale und individuelle Leben des Menschen. Zunächst wird eine Einführung in die kulturhistorische Psycholinguistik

gegeben. Anschließend wird das innere Sprechen als Ausgangspunkt für viele psychologische Prozesse thematisiert: es handelt sich um eine wichtige Fähigkeit in Bezug auf das Bewusstsein (allgemein) und es ist notwendig für höhere psychologische Funktionen (speziell): inneres Sprechen verbindet kommunikative und kognitive Fähigkeiten. Die Darlegung eines Konzeptes des inneren Sprechens berücksichtigt insbesondere die intensiven Auseinandersetzungen der sowjetischen Psychologie mit dieser Thematik als auch neuere Forschungen. Dann wird eine empirische Untersuchung vorgestellt, die den Zusammenhang von Sprechprofilen mit dem Problemlösen untersucht. Es werden allgemeine Ergebnisse dieser Studie präsentiert und vier Sprech-Denk-Typen herausgearbeitet. Diese werden charakterisierend benannt als Pragmatiker, Gesprächige, Zweifler und Wortkarge, zeigen verschiedene Problemlösestrategien, und es ist offensichtlich, dass zwischen Sprechprofilen und Denkprozessen eine Verbindung besteht. Abschließend werden Möglichkeiten und Schwierigkeiten der Forschung mit Sprechprofilen hinsichtlich der Thematik Sprechen und Denken diskutiert.

Andrea Karsten: Chronotopes in Writing - Excerpts from a Case Study

Dieser Beitrag präsentiert und analysiert Auszüge aus einer Fallstudie zum Schreiben mit Elli, einer am Anfang ihres Berufslebens stehenden jungen Journalistin. Die Studie beruht auf einer dialogischen und kulturhistorischen Tradition psycholinguistischer Theorie. Sie nimmt ihren Ausgangspunkt in grundlegenden Konzepten Jakubinskijs, Vygotskijs, Bachtins und Vološinovs – ein spezieller Fokus liegt dabei auf Bachtins Begriff des Chronotopos. In den 1973 verfassten Schlussbemerkungen zum Chronotopos-Essay von 1937-38 weitet Bachtin sein ursprünglich literarisches Konzept der Raumzeit aus und gibt ihm eine sprachphilosophische Fundierung. Seine Unterscheidung zwischen dem Chronotopos des Schreibers und Lesers – der realen oder darstellenden Welt – und dem fiktiven Chronotopos des Texts – der dargestellten Welt – wird in dieser Studie aufgegriffen und ausgearbeitet. Das Forschungsdesign, eine Variation der Autokonfrontationsmethode, unterstützt das Sichtbarwerden verschiedener Chronotopoi im Schreiben. Transkripte des Autokonfrontationsgesprächs und die entsprechenden Auszüge aus Ellis Schreibepisode geben Einsichten

in die Formung von Chronotopoi im Schreiben und in ihre komplexen Beziehungen. Unter anderem spiegeln die Transkripte räumliche und zeitliche Konfigurationen der Schreibepisode, Ellis inneres Sprechen beim Schreiben, die erinnerten und imaginierten Ereignisse und Situationen, über welche geschrieben wird, den im Text präsentierten Inhalt sowie vergangene und zukünftige Schreib- und Leseepisoden wider. Die materialbasierte Analyse zeigt eine komplexe Interaktion der Chronotopoi beim Schreiben und die Rolle, welche Sprache in ihrer Formung und Bestimmung spielt.

Stefanie Surd-Büchele: On the Relations Between Writing and Thinking

Der Artikel diskutiert im Rahmen der kulturhistorischen Psycholinguistik Aspekte der Beziehung von Schreiben und Denken. Aufbauend auf einer psycholinguistischen Konzeption von Schreiben und Überlegungen zu einem kulturhistorischen Konzept von Denken werden zunächst Hypothesen zu den Beziehungen zwischen Schreiben und Denken formuliert. Anschließend wird der empirische Zugang zu diesen Prozessen diskutiert, wobei das Konzept der „Spur“ eine wichtige Rolle spielt. Im Weiteren werden Schreib-Denk-Typen und ein Modell zu Schreib-Denk-Beziehungen vorgestellt, die auf einer empirischen Studie zum Tagebuch-Schreiben basieren. Der Artikel schließt mit einer Synopse weiterer Forschungsthemen und möglicher Anknüpfungspunkte zu Fragen des Spracherwerbs und der Sprachvermittlung.

Andrea Sens: Let's Do Language With Each Other! Looking at a Language Education Approach from a Cultural-Historical Perspective

Der Artikel nimmt einen Ansatz zur sprachlichen Bildung von Kleinkindern mit kulturhistorischen Bezügen genauer in den Blick. Dieser Ansatz betont die Situiertheit und Dialogizität von Sprachentwicklung. Er begreift Sprachentwicklung als eine gemeinsame soziale Aktivität, die in tägliche Routinen und bedeutungsvolle Handlungen für Kleinkinder und ihre Bezugspersonen eingebettet ist. Dieser Ansatz zielt darauf, sprachliche Fähigkeiten in ihrer entwicklungsdynamischen und differenzierten Funktion für das kindliche Handeln und Denken sichtbar zu machen und betont die Schlüsselrolle der Betreuungspersonen. Ein Ansatz zur sprachlichen Bildung von Kleinkindern mit einer kulturhistorischen Perspektive verlangt ein hohes Maß an

professionellem Handeln in Kindertageseinrichtungen. Dies impliziert ein Konzept für die Aus-, Fort- und Weiterbildung von frühpädagogischen Fachkräften, welches neben Wissensvermittlung und Handlungsanleitung auch die Reflexion der Vorstellungen und Einstellungen (subjektive Theorien) der beteiligten Akteure mit einbezieht. Der Artikel formuliert Forschungsdesiderata im Bereich der professionellen Entwicklung von frühpädagogischen Fachkräften auf Basis einer kulturhistorischen Sichtweise.

Clara Epping: Ethnological Methods in Cultural-Historical Psycholinguistics

Ausgehend von der Komplexität des Alltags untersucht dieser Artikel, inwieweit ethnologische Methoden für kulturhistorisch fundierte psycholinguistische Forschung im Kontext der kindlichen Sprachentwicklung gewinnbringend sein können. Innerhalb einer kulturhistorischen Forschungstradition scheinen Methoden, die die Bedeutung des Kontexts und des Dialogs zwischen Forscher und Feld betonen, vielversprechend zu sein. Am Beispiel eigener Forschung in zwei deutschen Kindergärten, werden Vor- und Nachteile ethnologischer Methoden reflektiert. Der Artikel konzentriert sich dabei auf die teilnehmende Beobachtung, das narrative Interview und den generellen Einfluss des Forschers auf das Feld.

Language for the Other: Constructing Cultural-Historical Psycholinguistics

Marie-Cécile Bertau

Cultural-historical psycholinguistics addresses language activity in its social as well as in its psychological function with corresponding verbal forms. Language is thus situated within the life activity of situated and positioned, mutually oriented societal individuals, it is not abstractable from these individuals, nor from their activity. This notion of language is at the core of the proposed 'psycholinguistics of alterity' (Bertau 2011), constructed firstly through a historical and conceptual analysis, secondly in a theoretical way involving empirical results from diverse fields of language investigation. The aim of our contribution is to introduce the main elements of this construction, we will hence follow the same rationale. In a first step, Humboldt's language philosophy and its reception by Russian linguists is addressed. Dialogicality of language and thought processes is the core notion which is taken up and developed in Russia and in the Soviet Union by several thinkers. Vygotsky's specific language psychology is seen within this context of ideas, constituting the framework for considering the relation between language and thought. Building on Humboldt's philosophy of language, Russian dialogical linguistics and cultural-historical psychology as formulated by Vygotsky, the theoretical system addressing language as activity of socially organized and self-other positioned individuals is presented in a second step.

1. Introduction

Psycholinguistics was founded as discipline in the USA in the early 1950s (Osgood & Sebeok 1954) at the crossroad of three different approaches to the language process: (1) a linguistic conception as a structure; (2) a psychological conception of language as system of habits; and (3) on the grounds of information theory, a con-

ception of language as means to transmit information.¹ The scholars agreed that “one of the central problems in psycholinguistics is to make as explicit as possible relations between message events and cognitive events, both on decoding and encoding sides” (Osgood & Sebeok 1954, p. 2).² Since this unusually explicit foundation and task formulation for a discipline, several changes in the leading paradigm occurred, forming psycholinguistics to a pronounced cognitive science, where language is seen as achievement of an individual cognitive processing system. In this regard, O’Connell and Kowal (2003) speak of the “monologistic epistemology” of mainstream psycholinguistics.³ From the perspective of a cognitive processing system, language is basically looked at as an *object* of processing – be it in production or in perception. In this modern discipline of the language process, language has lost its function as *means* for the development and workings of the human psychological system with consequences for both communication and thinking. As it were, language is, in the psycholinguistic mainstream, set apart from thinking, i.e. is not supposed to have any *formative* but rather a *transmitting* function.

This view is in accordance with several basic notions of our Western culture. To be brief, the point of departure, or the taken-for-granted basic ideology, is that of the autonomous, self-contained subject who is in full power and control of himself or herself, especially of his or her cognition and thereout resulting actions, non-verbal as well as verbal ones. Further, this subject is culturally and historically ‘indifferent’, hence principally independent of any social, historical and cultural influences. We have to add that the subject is also bare of any influences by others: fellow human beings or consociates (Schütz 1967), who are sharing and co-constructing a common social space, an environment in Gibson’s (1977) understanding. Language plays only a subordinate role for the self-contained subject, it is the vehicle to transmit ready-made thoughts, conceived along the notion of information. We could trace back this package of ideas to Enlightenment, and thereby acknowledge the emancipatory power the focus on the subject had for

¹ See also the introduction to this volume.

² Note that the double quotation marks (“...”) are used to signify words by others, whereas simple ones (‘...’) signify my own wording.

³ For more details see Bertau (2011, chapter 2); Knobloch (2003).

our culture. Nonetheless, this focus has detached the subject in too deep a way from its conditions of life, to which language as transmitted and performed practice is to be counted. As such a practice, language comes from others and is for others, within social and public spaces which emerge by these very practices in specific ways. The detached subject is hence also an a-political subject, and this seems to be particularly important in the light of the current dominant politics in our globalized world, privileging precisely a detached and self-contained subject.

In the last decades, several critiques of the idea of the self-contained subject became accurately formulated within the humanities, especially by linguists and psychologists: Linell (1998, 2009) offers a linguistics based on a dialogic approach to language, thinking and cognition, following a line of thought one can find in Rommetveit (Rommetveit & Blakar 1979), and Markovà and Foppa (1990); the work by Hermans and his colleagues (Hermans, Kempen & van Loon 1992; Hermans & Dimaggio 2003; Hermans & Hermans-Konopka 2010) approaches the issue of the self-contained subject from a psychological stance: the Dialogical Self Theory holds that the self is developed in and by dialogues, and is itself dialogically structured (Hermans & Gieser 2011). Interestingly, these new approaches refer to theories from the end of the 19th and the beginning of the 20th century viewing the subject as fundamentally social, in exchange, and in a constant dialogic process (William James, George Herbert Mead, Mikhail Bakhtin, Valentin Voloshinov). Remarkably, cultural-historical psychology developed around the same time, building on the notion of activity (Leont'ev), and stressing the sociality of consciousness, and the formative power of exchanged language for the developing individual psychological system (Vygotsky). Even more interestingly, one can link the Russian, then Soviet, notion of language and its workings back to a framework that was influential for some times, but rapidly passed over by subsequent modern sciences: Wilhelm von Humboldt's philosophy of language (Bertau in press).

Reclaiming the formative function of language for communicative and psychological processes within the perspective of a cultural-historical psycholinguistics, it is our aim in Bertau (2011) to construct a notion of language which is adequate for the framework of cultural-historical psychology as well as for the notion of a related subject. This is done in two steps. First, through a historical and conceptual analysis of the core terms needed, particularly 'language', 'thinking', and 'the oth-

er'. The second, theoretical, step comprises in the first place a theory of speaking-and-thinking built up in seven axioms, in the second place a set of four elements corresponding to concrete phenomena: addressivity and positioning, form, repetition and time, voice. Historical analysis and theoretical construction are here presented according to the same rationale: Humboldt's language notion will first be sketched, followed by its influence on Russian dialogic notion of language and thinking. Vygotsky's view of language will close the historical reflections. The proposed *psycholinguistics of alterity* will then be summarized by focusing its axioms, which are briefly commented.

2. Conceiving Language: Humboldt and Russian Scholars of the 1920s-30s

2.1 The 'Formative Organ of Thought': Humboldt's Language Notion

Wilhelm von Humboldt (1767-1835) was a Prussian politician, besides an eager learner of especially non-European languages, a translator and a language philosopher. His philosophical roots can be found in the philosophy of the Enlightenment and Kant's criticism, but he rapidly went beyond this framework, orienting philosophy towards anthropology (Di Cesare 1996). Addressing human societies and cultures in their diversity, his philosophy accounted for language as a major dimension in human life. With this focus on language, Humboldt was in accordance with a new stance taken by intellectuals and artists of his time, identified as Romanticism.

Romanticism was quite a general movement in the arts and in literature which originated in the late 18th century as a reaction against the rationalism characterizing the Enlightenment, which in Germany was foremost associated with Kant's philosophy. A genuine Romantic notion of language cannot be found in the Romantic movement but rather dispersed reflections on language. Hence, there is no "Romantic language philosophy". In view of this fact, one can value Humboldt's philosophy as an impressive synthesis of traditional and new philosophical concepts, representing at the same time an independent and new philosophy (Gipper 1992). Three characteristic traits of Romantic language conception can nevertheless be singled out, all present in Humboldt, there elaborated to a conception of

speaking and thinking with the central notion of objectification. This notion, in turn, is a core one for cultural-historical language conception as found in Vygotsky (see Bertau in press).

The first trait of Romantic language thinking is affirming the relationship of language to knowledge and cognition, hence to confer language a psychological dimension. A *formative function* is attributed to language: the forms of knowledge human beings can build from their reality, including themselves, are in close relationship to language. Language has its part in the process of thinking, in the becoming of a thought. This stands in sharp contrast to a rationalistic view, where the function of language is restricted to giving already completed thought an adequate envelope in order to communicate it. With other Romantic thinkers, Humboldt turned away from Kant's rational stance, and this results in a shift of utmost importance: *from reason to language* (Di Cesare 1996). Another change in perspective took place in the Romantics, leading the philosophical discussion on language from the visible to the audible, that is, *from the eye to the ear*. In Romantic thinkers such as Johann Gottfried Herder, language is conceived as an *auditive event*, bound to a sensible perception in time and happening in a concrete space, and is not viewed as a visible structure or as a product one can fix and contemplate. The "presence of the ear" is a truly characteristic trait of the German philosophical discussion of language in the 18th century (Trabant 1990).

The shift from reason to language leads thus to a *process oriented* understanding of language. This understanding grounds Humboldt's well-known axiom that language is not a work (*ergon*), but an activity (*energeia*), hence the privileging of the spoken, addressed and replied word.⁴ This, in turn, brought in the individuals who are in exchange, and, particularly in Humboldt, the *other* as the listener of speaker's uttered word, the articulated and addressed speech. Indeed, Humboldt formulated a notion of language for which the processes of address and reply (*Anrede und Erwiderung*) are central. The addressed, listening other is the necessary condition to any speaking and also to any clear, articulated *thinking*. In his talk *On the Dual* from 1827, Humboldt refers to the "unchangeable dualism of language",

⁴ See Humboldt, GS (Gesammelte Werke) VII, p. 45-46; in English: Humboldt 1999, § 8.

describing the fundamental movement of address and reply that connects thinking and speaking.

Following Humboldt (1827/ 1994), a concept is generated by tearing it off the “moving mass of ideas”. By this movement, the concept torn off comes into a vis-à-vis position for the thinking subject. Thus, a *first separation* occurs, resulting in a first object the thinking subject can inwardly look at, or reflect. But this only leads to a “feigned object” (*Scheinobjekt*), an uncompleted object, not enough separated, not enough objectified – i.e. its objectification needs completion, and this will be found in the other. Thus, the concept formed by the first separation is exteriorized, uttered to another subject, a listening and replying one. By this second, exteriorizing movement, the thinking subject now perceives auditively his or her concept outwardly, and comes to an outward positioning with it. This corresponds to the *second separation*. Here, we can locate the socializing effect of speaking on thinking: to formulate one’s thinking is to make it understandable, it is to make it social – for others as well as for oneself, because we could not understand the ever moving mass of our ideas until the clarifying process, including the two separations, is undergone. In this way, one can understand Humboldt’s expression of language as “formative organ of thought”⁵, where process and other-orientedness are the founding aspects of the “formative organ”, and objectification is the resulting form.

A final, complementing trait is to be highlighted. Incorporating *spoken* language into the process of thinking and cognizing amounts to acknowledge *manifoldly spoken* language in its role in the processes of thinking and understanding. The plurality and manifoldness of language is also a theme of Romantic language thinking. Whilst a theme present since the 14th century (e.g. in Dante), it is treated in a new way by the Romanticists who see differences between languages lying more in their grammars – their inner architecture –, rather than in their lexicon.⁶ Thus, the view on language as a genuine plural phenomenon whose manifoldness is irreducible, can be said to be a further important trait in Romantic as well as in Humboldtian language thinking.

⁵ “Die Sprache ist das bildende Organ des Gedanken”, Humboldt in GS VII, p. 53; see Humboldt, 1999, § 9.

⁶ See Trabant (1990), Bertau (2011; 2012).

2.2 Russian Imports: Objectifying Dialogue and the Functional Forms of Language Activity

Humboldt's major work *On the Diversity of Human Language Construction and Its Influence on the Mental Development of the Human Species*⁷, representing the sum of Humboldt's thinking about language (Böhler 2007), appeared in 1839, it was translated into Russian in 1859. Humboldt's complete work was firstly edited and commented in an adequate way by Heymann Steinthal in 1883-84. This edition rendered possible a scientific discussion of Humboldt's work on language (Trabant 1990). Particularly for the Russian language thinkers around the turn of the 19th to the 20th century, Humboldt's philosophy of language had an important influence, it led to a Russian Humboldtianism (Trautmann-Waller 2006). The most important role in transmitting and developing Humboldt's language philosophy to the East was played by the linguist Aleksandr Potebnia (1835-1891), hence the founder of the Russian Humboldt tradition.⁸ Potebnia was able to read Humboldt's *On the Diversity* in the original, and his most important work, *Mysl' i jazyk (Thought and Language, 1862, edited several times until 1922)* is an "excellent adaptation" of Humboldt's *On the Diversity* (Bartschat 2006). Vygotsky's *Myšlenie i reč (Thinking and Speech, 1934)* is not the least in its title an echo of Potebnia's seminal book.⁹ Actually, as it will become clear, there is more than the title linking Vygotsky's to Potebnia's book.

Potebnia's transmission and development of Humboldt's ideas met a particularly receptive context in Russia, where linguists, dialectologists and phonologists were preoccupied by the features of *spoken* Russian language, based on a functional approach.¹⁰ Hence, Humboldt's language philosophy converges in a surpris-

⁷ In German: *Über die Verschiedenheit des menschlichen Sprachbaus und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts*, in *GS*, VI,1.

⁸ See Bartschat (2006, p. 16); Bartschat also describes how Humboldt's reception in the East differs from the one in the West. In short, the imbalance between general and historical-comparative linguistics, which rapidly developed in the West, was not present in the East. Bartschat (2006) attributes this to Potebnia's influence.

⁹ See Bronckart & Friedrich (1999, p. 38); Seifrid (2005, p. 203).

¹⁰ For more details see Bertau (2011, ch. 3); Romashko (2000); Comtet (1999).

ing and very fruitful way with Russian and then Soviet interest for language as oral and dialogic phenomenon scholars like Jakubinskij learned to listen to in the early 20th century. Two major, interrelated, notions can be followed from Humboldt to the Russian thinkers at the beginning of the 20th century: objectification of the thought in the word, and language as activity and plural phenomenon. These shall briefly be addressed, first through Potebnia's work, second through Jakubinskij's notion of verbal functional forms.

As visible from his book's title, Potebnia relates his own thinking to Humboldt's assertion that language and thought are essentially linked. Thus, "early in the work [Potebnia] declares Humboldt's key insight to have been that language is the 'organ which forms the thought' and asserts that only through words can concepts form" (Seifrid 2005, p. 32). Following the definition of language as *energeia*, Potebnia emphasizes the dynamic nature of linguistic phenomena, and his translation of this core term even intensifies Humboldt's sense of process: the Russian word *deiatel'nost* Potebnia uses means "the doing-ness of language", entailing more activity with respect to the workings of language (Seifrid 2005, p. 32). Further, Potebnia follows Humboldt "in seeing the essential workings of language taking place in the fluid cognitive moments that precede or attend the use of words without quite being identified with them", thus arguing for "a complex transmission of thought in words" (Seifrid 2005, p. 33). Hence, in Potebnia, as in Humboldt, one can see a "model of speech as cognitive interchange strongly [implying] the social basis of language" (Seifrid 2005, p. 33). The paraphrase of a passage from *Mysl' i jazyk* Seifrid then offers, seems to be conceived right in the spirit of Humboldt's *Dual*: "In being made available to others, one's own thought joins thought processes shared by the whole of humanity, the thought of an individual requiring supplementation by another if it is to avoid error and attain completion"; Seifrid ends by a citation of Potebnia, presenting him as even more radical than Humboldt: "only on the lips of another can the word become comprehensible to the speaker" (cited in Seifrid 2005, p. 33).

Process and other-orientedness as Humboldtian central aspects of language are thus clearly took over and accentuated by Potebnia, together with the model of speech leading and forming thinking. This process is precisely addressed by Poteb-

nia, asking in a book from 1910, why a human being needs the word.¹¹ Potebnia's answer is that a human being "*objectifies his thoughts*" by the word; the sound becomes "*a sign of the past thought*. In this sense, *the word objectifies the thought*".¹² Hence, the word is not "a means to express a completed thought [...]. No, the word is a means of transformation of the impression occurring in the genesis of a new thought".¹³ The idea that language is a means to generate thought is repeated throughout Potebnia's work, becoming an often cited formula (Naumova 2004). Vygotsky's own often cited statement "Thought is not expressed but completed in the word" (1934/1987, p. 250) is a clear reminder of this line of idea going back to Humboldt.

Considering that thought is generated through language, Potebnia argues against the (then, and still) widespread idea of understanding as transmission: "There exists the widespread opinion that the word *is there in order* to express a thought and *to transmit it to another*. But, is it possible to transmit another human being a thought? How should this be possible?"¹⁴ Understanding is for Potebnia an individual, constructive act, hence implying "always not understanding" – referring thereby again to Humboldt.¹⁵ According to Naumova (2004), Potebnia was the first in Russian linguistics to raise the question about the role of the word with respect to is objectification of the acts of consciousness in the uttering process; and Vygotsky's concept of speaking-thinking-process (*rečemyšlitel'naja dejatel'nost'*) is to be seen as the new scientific direction in which Potebnia's ideas found full sense and were further developed.

In the work of the phonetician and linguist Lev Jakubinskij one can clearly see how Humboldtian language thinking so vividly present in Russia converges with Russian/ Soviet interest in oral and dialogic language. *On Dialogic Speech* (1923) was a

¹¹ See Naumova (2004, p. 212), referring to *Psichologija poetičeskogo i prosaičeskogo myšlenja*.

¹² Potebnia in *Mysl' i jazyk*, cited in Naumova (2004, p. 212), emphasizes there; my translation from German into English.

¹³ Potebnia in *Psichologija poetičeskogo i prosaičeskogo myšlenja*, cited in Naumova (2004, p. 212), emphasizes there; my translation from German into English.

¹⁴ Potebnia in *Mysl' i jazyk*, cited in Naumova (2004, p. 212-213), emphasizes there; my translation from German into English.

¹⁵ See Humboldt, GS VII, p. 64: "Alles Verstehen ist daher immer zugleich ein Nicht-Verstehen;" Humboldt (1999, § 9).

seminal work for language reflection in the East, an outline of a non-Saussurian approach to the study of language (Eskin 1997; Friedrich 2005a).¹⁶ The notions of dialogue and of functional form, the last one with explicit reference to Humboldt, are the leading ideas of Jakubinskij's essay. The functional forms of language arise from "mutual interactions" which can be immediate or mediate, dialogical or monological. The immediate and dialogic form is for Jakubinskij the "universally valid" one. Quoting his teacher, the linguist Ščerba, Jakubinskij underscores this universality: "language reveals its true essence only in dialogue" (1923/ 1979, p. 329), and hence gives dialogue the status of a paradigm for the understanding of language. Thus, *On Dialogic Speech* is not just a study of a peculiar language activity, it is a study addressing language as such.

Privileging dialogue as the basic form of language, Jakubinskij from the start involves the other, the speaker's listener and his or her activities. Further, it is the 'vivid materiality of language' which is the leading notion, so that language viewed as a perceived, seen and listened to phenomenon (Jakubinskij 1923, §§17, 18, 20, 21), always shows a certain form. Here, four specific forms of mutual activities open up the possibilities of formations and performance: spoken (immediate) or written (mediate) dialogic forms; spoken or written monologic forms. Hence, the language activity is a 'pluri-form phenomenon' (Jakubinskij 1923, §1), and this diversity is consequently kept in Jakubinskij: language has not, and cannot have, one unifying form standing above all usages, which would then be secondary phenomena. With this idea connecting form and usage in a functional way, Jakubinskij laid the path for Vygotsky's theory of inner speech, being for Vygotsky one of the particular functional forms of language activity (see Friedrich 2005b; Bertau 2008a). Particularly, Vygotsky uses Jakubinskij's reflections on the processes of abbreviations observable in dialogues to describe the features of inner speech.¹⁷

Language as a dialogic activity occurring in different, specific functional forms is hence the leading notion in Russian language conceptions of the 1920s and 1930s. That this activity is fundamentally related to the thinking process is a further core

¹⁶ See the complete translation into English by Knox and Barner: Jakubinskij (1923/ 1979), and the fragmentary one by Eskin: Yakubinsky (1923/ 1997). The German translation (Jakubinskij 1923/ 2004) is also complete.

¹⁷ For more details on the topic of predicativity and abbreviation, see Lyra and Bertau (2008).

idea of the language notion of the Russians, where the formative power of addressed language is acknowledged, understood via the process of objectification. Activity, form and formation, objectification: These dimensions of language are related to Humboldt's *energeia* and to his concept of addressed exteriorization as clarification of thoughts as expressed in the *Dual*.

2.3 Vygotsky's Development Towards Meaning: (Re)Discovering the Dynamics of Language

It is well known that Vygotsky's point of entry into psychology was art, particularly literature and theatre (van der Veer & Valsiner 1991). *The Psychology of Art* (1925/ 1971) is one of his first works, dating from the same year as an article about consciousness (1925/ 1999). Hence, we can see in Vygotsky, as in Humboldt, a primary aesthetic interest, shaping his perspective on language and its workings. Further, language is from early on linked to consciousness, to psychological functions and structures. In the following years, Vygotsky's research and writings focussed on psychological and pedagogical issues, giving language a central role for the development and workings of social and psychological forms of activity. Vygotsky lends language an instrumental function, underscoring its functioning as a tool within the semiotic mediation process taking place interpsychologically and intrapsychologically. Vygotsky developed the idea of the psychological tool in the years 1927-1929, leading, on the grounds of experiments, to the account of the development of higher psychological functions from lower ones through the mediation of psychological tools (Vygotsky 1930/ 1997; Vygotskij 1931/ 1992). The mediational process itself was thus Vygotsky's first interest, not yet the *means* of this process. At the core was a fascination for the reversible aspect of verbal mediation, allowing human beings a control over themselves, over their own thinking and activity via the verbal tool. Self-regulation is thus in the first instance conceived as self-control, and control is mastering others and oneself, and language is the master's tool.¹⁸

Remarkably, Vygotsky formulates self-control differently from the 1930s on. This crystallizes in giving up the tool metaphor for language, and it coincides with Vy-

¹⁸ On Vygotsky's conception of mediation and on the development and transformation of the self-control topic see Bertau (2011, pp. 141-147).

gotsky's increasing interest for the means of mediation, for the "meaning volume" of the word. Vygotsky realized that the psychological tool, i.e. the word, has an inner side, leading him to the basic assumption of the *developing* relationship between a sign and its meaning.¹⁹ It was this very relationship that preoccupied Vygotsky since his experiments on concept formation (1927-1929), and these reflections culminated in the chapter seven of *Thinking and Speech*, written in 1934 (Friedrich 1993). Giving up the conception of the word as tool, derived from its solely exterior consideration, and looking at its inner side, Vygotsky formulates now interiorization in a social way, no more as accomplishment of the child himself or herself, but as a social, even a dialogical, exchange between the child and his or her mother (Bertau 2011, pp. 360-368; Bertau 2008b; Keiler 2002). Thus, at the end of his life, Vygotsky turned to language in a non-instrumental way, acknowledging the social character of language in its dialogic and affective dimensions.

Addressing the development of word meaning, it is important for Vygotsky to consider what is specific for speech and for the word, what is "the unique character of the word" (Vygotsky 1934/ 1987, p. 247). For Vygotsky, "what makes the word a word" is "the generalization that is inherent in the word, this unique mode of reflecting reality in consciousness", and it is only that adequate conception that lead to the understanding "of the possibilities that exist for the development of the word and its meaning" (Vygotsky 1934/ 1987, p. 249). This development is considered by Vygotsky from an ontogenetic and from a microgenetic ("functional") perspective in chapter seven of *Thinking and Speech*, leading to the analysis of the *inner dynamics* of the word meaning. Vygotsky concludes: "the fact that the internal nature of word meaning changes implies that the relationship of thought to word changes as well" (Vygotsky 1934/ 1987, p. 249). Hence, a dynamic, processual relationship between word and meaning is to be assumed: "The relationship of thought to word is not a thing but a process, a movement from thought to word and from word to thought", so that the "movement [...] is a developmental process" itself (Vygotsky 1934/ 1987, p. 250). The changeability of the word meaning is the sign of its labor in thinking, it is the sign of the "inner movement", of the

¹⁹ This comes to clear light by notes taken by Leont'ev during a meeting with Vygotsky and Luria in 1933, see Leont'ev (2002).

course of thinking itself. This “labor of language in thinking” relates in our opinion Vygotsky’s account of the thinking process to Humboldt’s view of the thinking process as generated by an addressed, communicative act.²⁰ Hence, the uttered word – external speech in Vygotsky’s terminology – is the “materialization and objectivization” (Vygotsky, 1934/ 1987, p. 280) of thought, of that directed, addressed “labor of language in thinking”. Thinking is an interchange performed in language activity by a speaker/thinker and his or her replyer/ thinker. It is at least at this point that the tool metaphor, owned by a self-contained subject, is no more usefully used.

Actually, Seifrid (2005) establishes explicit ties between Vygotsky, Potebnia and Humboldt. There is first the title of Vygotsky’s book, an “intentional echo of Potebnia’s *Mysl’ i iazyk*” (*Thought and Language*). Further, in *Thinking and Speech* Vygotsky “invokes the authority of Potebnia more than once, such as when he approvingly cites Potebnia’s assertion (borrowed from Humboldt) that ‘language is a means to understand oneself’, or when he repeats the Humboldtian emphasis on process (“the relation of thought to the word is not a thing but a process”) together with its rejection of a purely instrumental view of language (‘thought is not expressed in a word, it completes itself in a word’)” (Seifrid 2005, p. 203; see Vygotsky 1934/ 1987, p. 250). Hence, the rejection of the tool view is coupled with a Humboldtian approach to language, echoing Romantic aspects, as explained. Again, Seifrid highlights the line relating Vygotsky to Russian Humboldtianism with respect to the core of Vygotsky’s reflection, namely the issue of thinking and speech: “[Vygotsky] also uses a largely Potebnian vocabulary to discuss the mental structure of the word, such as when he says that ‘the meaning is the word itself, viewed from its inner side,’ or speaks of the word as having an inner, sense-possessing side, and an outer, audible side” (2005, p. 203).

Thus, what can be said to be at the core of Vygotsky’s empirical research and theoretical reflections – the issue of thinking and speech – is formulated in terms echoing Humboldt and Romantic language thinking. It is at least the context to which Vygotsky came more closely in touch at the end of his life. That this is paired with a perspective acknowledging the irreducible otherness of any language act can be

²⁰ By the expression “the labor of the language (in thinking)” we allude to a formula by Humboldt (e.g. 1999, §§ 3, 8).

seen in the fact that Vygotsky ends his book with a citation by Ludwig Feuerbach: “In consciousness the word is what – in Feuerbach’s words – is absolutely impossible for one person but possible for two” (Vygotsky 1934/ 1987, p. 285).²¹ In sum, Vygotsky’s rejection of the tool metaphor for language, his accentuation of the social moment in interiorization together with the questioning of the self-controlling subject, and finally the view on the work of the socially derived word in thinking – all this makes it possible to develop Vygotsky’s fundamental notions to a cultural-historical psycholinguistics based on the notion of alterity.

3. Psycholinguistics of Alterity

As previously described, psycholinguistics is in its mainstream formulation a cognitive science, language is basically looked at as an object of processing by an individual cognitive system. On the contrary, *cultural-historical psycholinguistics*, building on the framework of cultural-historical theory, addresses language activity in its social as well as in its psychological function with corresponding verbal forms. Language is at the core of the questioning, with respect to its acquisition in ontogeny, to its functioning in communication, and to its formative function for socio-psychological processes as thinking (e.g., problem solving, memorizing, volitional processes), self, and consciousness.

With language at its centre, this kind of psycholinguistic inquiry addresses the relationships of self to other, to itself, to reality, and to language as the primary mediational means to all relations the individual must necessarily undergo. Two key concepts must then be theorized and put in adequate relation to each other: *language*, and the *individual’s self*. The historical analysis served this goal, elaborating thereby historical-conceptual links and kinships between the thinkers of the 1920s and 1930s – hence also contextualizing Vygotsky’s leading ideas and his framework.

Indeed, we see in the Humboldtian tradition and in the linguistics and language philosophy contemporary to Vygotsky (Jakubinskij, Vološinov, Bakhtin) major contributions to the question of language in a psychological perspective, and thus to

²¹ To the fact that Vygotsky developed a strong affinity to Feuerbach at the end of his life, see Keiler (1999).

the construction of a cultural-historical psycholinguistics. The Soviet context of ideas and investigations is in our view further fruitfully extended by the work of an important language psychologist of the same epoch: Karl Bühler. Bühler's *Krise der Psychologie* (*The Crisis of Psychology*, 1927) and *Sprachtheorie* (*Theory of Language*, 1934/1990) are rich reflections on language in communicational and psychological perspectives, leading to an axiomatic system (1934/ 1990). What makes Bühler's theory of language particularly interesting for our aim is the consequently kept "system of two" (Bühler 1927). Any account of language has to start with this system, hence we see in Bühler a clear rejection of the self-contained 'I', that accords with his truly pragmatic view of language.²²

Regarding the view of the individual, this has to be adequate to a cultural-historical and dialogic notion of language. Again, as noted, one can find important contributions to an interdependent notion of the individual in the 1920s and 1930s, as e.g. in Mead, and also in the Bakhtin-Medvedev-Vološinov Circle. In recent times, these non-Cartesian approaches to the individual are taken up and developed in psychology within the framework of Dialogical Self Theory (Hermans & Gieser 2011). Language is thus situated within the life activity of situated and positioned, mutually oriented societal individuals, it is not abstractable from these individuals, nor from their activity.

This notion of language is at the core of the proposed *psycholinguistics of alterity* elaborated on the historical-conceptual bases of cultural-historical psychology (Vygotsky), dialogic linguistics (Jakubinskij, Vološinov, Bakhtin), language psychology (Bühler), and language philosophy (Humboldt, Vološinov, Bakhtin). Hence, the psycholinguistics of alterity is embedded in cultural-historical psycholinguistics and belongs to this more general attempt to reformulate psycholinguistics in terms of a contextualized individual. A slight, nevertheless important, difference can be seen in that the psycholinguistics of alterity emphasizes the *dialogic* dimension of human being's sociality and culture. This dimension is related to the grounding notion of alterity, as will become clear subsequently.

²² See Bühler's organ-model (Bühler 1934/ 1990), actually, the model to which Bühler is commonly reduced in language and communication studies. To Bühler and his theory see the excellent overview by Innis (1992).

The theory of the proposed psycholinguistics is formulated in the form of axioms, however, these are not supposed to be fixed dogmas explaining definitely the whole of language-and-thinking. Rather, the axioms are to be understood as a step in the construction of cultural-historical psycholinguistics. The explicitness axioms have to display is seen as a useful heuristic device for the clarification of notions – with the possibility of discussing, rejecting, developing them.

Of course, it is here not possible to render the theoretical construction in detail. Nevertheless, basic ideas and their formulations shall be given. To start with, the understanding of alterity as the founding concept is developed, followed by the axioms of the theory underlying what we call psycholinguistics of alterity (Bertau 2011).

3.1 Alterity

Taking alterity as founding notion to a psycholinguistic approach has consequences for language, and for the individual. This twofold-ness corresponds to the simultaneous view of psycholinguistics, embracing language as well as the individual, be it as “mind”, “cognition”, “consciousness”, or “self”. With respect to language, the consequence is to explicitly reject the view of language-as-such, e.g., as independent phenomenon, principally existing apart from subjects, from historical, social and cultural contexts, and outside of time and space. Language-as-such is seen as the precondition and prerequisite to any language use, i.e. to speech which is language “put to use” in a second step.

With respect to the individual, the alterity grounded approach requires an essential shift in perspective: from the Archimedian, absolute vantage point of the “I” to the other. It is from the other’s performed activities (verbal and non-verbal ones) that the self is defined as a self, and gets access to the self-defining and developing activities, particularly to language. Hence, language as well as human beings are grounded in relatedness, they are determined by relational processes. Insisting on relational processes amounts to turn away from reifications, or “entifications” (Gergen 2009) of all sorts, but particularly of language, self, identity, and culture. This is valid for alterity, too.

Alterity is to be conceived as developmental and relational movement (Bertau 2011a). This movement follows the socio-historical development of individual self,

which sets very clearly the origin of individual psyche and consciousness in the other. Alterity is thus a movement, constituting related positions and negating a primeval, self-contained “I” by setting a clear direction, a starting point which is not located in the “I” but in the other *as related to self*. This amounts to saying that the other is in no sense the powerful one determining helpless self. But, because of the reciprocity of their positions, other and self are interdependent. Each is the giving one for the other, her/ his starting point, and at the same time a recipient of the given. This simultaneity reflects the specificity of human activity as “logical medium between activity and passivity” (Schürmann 2008), so no pure and self-controlled activity, and not possible for a sole “I”, but only for two, for a relationship – this echoes Feuerbach as cited in Vygotsky (1943/ 1987, p. 280). Hence, alterity is *performed*, it is not a possession, although human beings seem to be innately disposed to otherness (Trevarthen 2011). This performance happens in observable forms, i.e., in vividly experienced dynamics; specific, sensible forms in time, giving shape to the relationship and constructing positions: you to me and me to you within a space-time we jointly mould through the performance of a common means – spoken language. The jointly moulded space-time is a “space of language” (*Sprachraum*, Bertau 2011).

Hence, the basic position of the subject can be thought of as addressed and affected by the other. At the moment of birth (even with conception) the subject enters a world of others. It enters a world constituted in language and constituted by the language of others, performed again and again, presented, and made meaningful in these performances (Bertau 2011b).

Taking alterity as founding concept corresponds to our conviction that the formulation of an alternative framework to “individualist (behaviorist, cognitivist, or physiology-driven) and reductionist notions” has to go further than to turn to “contextual and cultural facets of human development” (Arievitch 2008, p. 38). Involving culture, context, or dialogue as aspects surpassing the individual does not automatically lead to a non-individualistic psychology, linguistics or psycholinguistics. It is perfectly possible to stay with the self-contained individual who, from time to time, and according to its own and private choice, enters dialogue, constructs contexts, and transmits culture. The decisive point is in our opinion a shift in the view of the individual as ‘active actor’, so to speak. The shift introduces the

other *in the first place*, in ontogenetic as well as existential respects (Bertau, 2011a); and it introduces passivity into activity (Schürmann 2008). Thus, alterity is the necessary notion to a genuine shift from an individualistic framework based in the ideology of the self-made, self-controlled rational/cognitive individual.

3.2 Axioms

Axiom 1 Language is seen as an activity performed by socially organized, self-other related individuals.

Axiom 2 The language activity is the medium of the individuals' sociality and self-other-relatedness, hence there is no outside standpoint to language, and the possibility of an actual instrumental relationship to it is not possible. Rather, an instrumental usage of language activity is the result of specific socio-cultural practices.

Axiom 3 The language activity generates the irreducible plurality of the phenomenon: manifoldly shaped verbal forms, which are embedded in, or refer to, non-verbal activities.

Axiom 4 The actual performance of the verbal forms leads to the emergence of a language space.

Corollary 4.1 Because the socially organized, self-other related individuals are individuals, they realize their language space not as a simple reproduction of the socioculturally scheduled and expected forms. This is impossible because the individuals are not "human beings as such". Hence, the language space is formed by the situation as well as simultaneously forming it. The relationship of forming and being formed can take several specifications.

Corollary 4.2 Since the verbal forms exist in language spaces – that is, not apart from contexts and situations, forming these as well as being formed by them – they are ideologically bound: they entail always evaluative accents.

Corollary 4.3 The evaluative accents are manifested by the formal aspects of the verbal forms. The phenomenality of language is thus composed of linguistic aspects in material as well as in structural regards.

Axiom 5 The linguistic signs of the language activity exist as addressed words (the word coming from the other, the word addressed to the other).

Corollary 5.1 The signs are located within interindividual reality, they are positioned within interaction processes.

Corollary 5.2 The signs are socially reversible: they realize the movement between other and self in communication, and achieve the reversionary movement leading from the communicative activity into the activity of the mind.

The reversibility of the words indexes their medium-ness as well as their instrumentality, where they are used as means (see axiom 2). As means, the words correspond to a functional specific forming, and hence, as stated in axiom 2, there is no outside standpoint to the language activity. Nevertheless, there is the possibility to employ language in a systematic and purposeful way.

Corollary 5.3 On the grounds of corollary 5.1, linguistic signs are experienced aesthetically-sensuously as *forms*, and as sense making, intelligible social *meanings*.

Corollary 5.4 Also on the grounds of corollary 5.1, signs are not neutral, because they exist only in the societal usage of self and other. Hence, their sensuous as well as their sense-full (meaningful) side manifest always evaluations and positions to which any further usage takes a stance, thereby adding further evaluations and positions to the linguistic sign.

Corollary 5.5 Linguistic signs relate form and meaning, where the relation is not a fixed one, but dynamic with regard to the ontogeny of language and to the specific function of an actual language activity. For this reason, signs have a peculiar volume, which is characterized by flexibility and potentiality of meaning.

This volume is a function of the conditions of receptions by an audience and of the situation: In actual, addressed performances the completion of a meaning is achieved with a specific form. This completion is constrained, it can only take place with respect to certain forms.

Corollary 5.6 The relation of form and meaning (corollary 5.5) is a psychological process entailing a mediational aspect: The thought is mediated and arrives to what is meant and what is said. The mediating instance is the inner word, which has its own meaning, it is realized towards a specific form. The inner word does not coincide with the thought, nor does it signify the thought. Its meaning is not marked in social speech; its forming obeys its directedness onto the social lan-

guage space and manifests thus always an interference with another perspective. Without social, shared (understandable) language, the inner word is not realizable.

Axiom 6 On the grounds of the simultaneously social and reversible character of the linguistic sign, two fundamental types of performance are possible, corresponding to two life situations of socially organized, self-other related individuals.

Corollary 6.1 In the first situation, different individuals are actually present, they are mutually oriented by their self-other relatedness, together they perform the language activity in a perceivable way. In the second situation, it is an individual on its own who performs the language activity, the external orientation towards an actual other is suspended by an act of interiorization.

Corollary 6.2 These two situations and their corresponding types of performances are developmentally related, they hence show certain similarities within their differences.

Corollary 6.3 Form and specification of the two situations of 6.1 are socioculturally defined. Further, for the reason that language performing individuals are co-present to each others in different ways, there are transitional forms as variances of the two basic type of performing the language activity.

Axiom 7 The language activity is realized by the correlative acts of speaking and listening. By virtue of the sign's (the other's words) sociality and reversibility, the correlative acts are directed and addressed acts of communication and understanding. Performing language is thus always a communicative act and an act of thinking, by which the individuals navigate (*steuern*) each other and themselves, thereby coming to an understanding. Then, language can be a means to get along with consociates (*Mitmenschen*), with oneself, and with the world (Bertau 2011, pp. 202-204).

3.3 Commentaries to the Axioms

In the following, we will briefly comment the axioms and their corollaries.²³ It has to borne in mind that the proposed axiomatic system in Bertau (2011) is not only developed through the commentaries. Rather, and importantly, the theoretic sys-

²³ This is a summary of the extended commentaries in Bertau (2011).

tem must be supplied by the four elements as central terms emerging from this theoretic frame: (1) addressivity and positioning, (2) form, (3) repetition and time, and (4) voice. These elements correspond to the second dimension in the construction of the psycholinguistics of alterity, transferring the first one – the axiomatic system itself – to concrete phenomena of language activity as given for instance in language acquisition and dialogic exchanges.

Axiom 1 *Language is seen as an activity performed by socially organized, self-other related individuals.*

The first axiom follows clearly Humboldt's so-called energetic principle, saying that language is not abstractable from the activity generating it: language is a process, a becoming (cf. section 1.1). Language is a commonly, in the course of time performed activity and exists as that reciprocally shaped dynamic. This means that language cannot be produced by an individual alone, but is necessarily produced in a dialogic way. Importantly, starting with dialogic performance leads to a specific understanding of activity itself. Following Schürmann (2008), tracing the specificity of activity theory, human activity is characterized by its medium status between activity and passivity. This is a clear rejection of the 'doer', the self-contained, fully active, controlling and controlled I. It is an acknowledgement of the 'richness of the realized activity' that is ever beyond the individual's intention.²⁴ Axiom 1 further underlines the necessity to understand language from the perspective of socially organized individuals (Bühler 1934/ 1990; Vološinov 1929/ 1986); address and reply, the dialogue with its exchange of positions and turns, can hence be seen as the grounding form of language activity (Jakubinskij 1923/ 1979).

Axiom 2 *The language activity is the medium of the individuals' sociality and self-other-relatedness, hence there is no outside standpoint to language, and the possibility of an actual instrumental relationship to it is not possible. Rather, an instrumental usage of language activity is the result of specific socio-cultural practices.*

This axiom supplies a decisive distinction to the understanding of language, that between medium and means. Viewing language as medium introduces a differ-

²⁴ An allusion to Leont'ev's (1978) words that the realized activity is more rich and more true than consciousness preceding it.

ence in the widespread notion of language as mediational means, thereby stating clearly that language is more than an optional tool for the self. It is also a critique of the tool-ness view of language, which is to my opinion a reductionism that is particularly misleading in the context of a dialogical point of view. It belongs, I assume, to a monological view of the self. In this view, language is a tool used and put away optionally by an individual – which is in this case not a self-other related individual. Hence, the starting point for the difference between medium and means is the basic notion of the individual.

In social theories it is beyond dispute that human beings need other human beings as consociates (*Mitmenschen*). But there is a relevant distinction with regard to the conception of this need: is the other *optional*, or *obligatory* for the self (Schürmann 2010). The notion of the optional other corresponds to a setting where an individual moves towards another individual in order to construct sociality. In this model, sociality is thus *the result* of individuals relating to each other in an explicit (and thus optional) act – making a clear step. Further, individuals are conceived as atomistic entities, that is, as independent elementary components undertaking relations: these are hence resulting as secondary.

An alternative model conceives relatedness not departing from atomistic individuals, but from an in-between (*Zwischen*). It is within and by virtue of this in-between that individuals are always and already related, that they are consociates to each other. The in-between is the medium of their expressive possibilities: insofar it permits these specific expressive possibilities and insofar it always puts itself between the individual and his/her world (self, other). The medium thus gives access to the world and at the same time it constrains this access to a certain form. Thus, relations can build up at all *as* social relations by virtue of this medium, and individuals can construct each other and themselves as individualized and as positioned selves.²⁵ This conception shifts the defining weight from the independent selves to what exists between them. Individuals cannot be self-contained and atomistic, and the other is obligatory for self to be self. There is thus no choice and no free step towards the other. In this sense, the medium is necessary to the individuals insofar they are social (or socialized, or societal) individuals.

²⁵ This corresponds to the thinking of, for instance, Rousseau, Hegel and Plessner, see Schürmann (2010).

The notion of medium-as-necessary is distinct from the notion of medium as tool, that mediates a relationship between two entities – as is the case of artefacts. Artefacts are *made use of* in order to reach a specific aim, and afterwards they are put aside. This kind of means is thus optional, under control of the individual – this is indicated by his/her taking them at hand and putting them aside. Finally, the individual has an outer and distanced relationship to these mediational means. Thus, controllable means, or tools, as mediators to the world belong to the model of the optional other and thus to the notion of self-contained, autonomous individual.

In contrast to this, the alternative model I advocate, views the medium as a necessary element of living and activity, defining individuals *as individuals to each other*. The relational power of the necessary medium is crystallized in language activity. Language activity constitutes the necessary medium for human beings to be individuals in the sense put forth here, that is: positioned within a movement from self to other, from other to self. Further, tool-ness of language is the result of particular societal language practices, by which the individuals can construct an outside position to their language and use it *as* a means.²⁶ The language activity is the element of human beings in the sense of a life element (like water for water beings). As such it is not suspendable, it cannot be subtracted without the individuals dissociating into a-social atoms: neither socially organized, nor being self-other positioned and related. This also means that one cannot choose to step out of and back into language, language cannot freely be taken and put away. As human beings we are in language.²⁷

Axiom 3 *The language activity generates the irreducible plurality of the phenomenon: manifoldly shaped verbal forms, which are embedded in, or refer to, non-verbal activities.*

This axiom follows Jakubinskij's notion of the functional verbal forms (1923/ 1979). These forms are manifold because they are conditioned by the "intricate diversity" of the "psychological and sociological factors" characteristic for human life form

²⁶ Specific language activities are related to the tool-use: writing, reading, metalinguistic analysis. This may lead to the so-called Written Language Bias: Linell (1998).

²⁷ See for a similar approach in linguistics the model formulated by Weigand (2009, p. 79). The tool-ness view of language is criticized from a philosophical stance by Gadamer (1966/ 1986).

(Jakubinskij 1923/ 1979, p. 321). With Jakubinskij, the plurality of language is kept and not dissolved into a unifying *langue*; the plurality of language activity belongs to the human plurality as manifested in different kinds of cultures (at micro and macro levels). Language activity of socially organized individuals is thus bound to and embedded in social activities; it is functional with regard to these activities, its actors, and its situation (in the broadest sense). Nevertheless, within plurality there are recognizable forms, patterns, habits of usages, genres of language activity (Bakhtin 1986) which can be observed. All these forms show different degrees of fixedness and flexibility, they also allow the refracting of an individual style and stance in different ways (Bakhtin 1986). These forms belong to the way a community of speakers functionally solve communicative problems within activity.

Axiom 4 *The actual performance of the verbal forms leads to the emergence of a language space.*

The term 'language space' designates the forming of the in-between of mutually oriented individuals in language activity. This space is a dynamic evolving across time, its forms are hence perceived as performances under several aspects: as linguistic forms (specific words, word order, intonations), with their chronotopology (locus and direction of utterance within physical space, moment, tempo, rhythmicity, dynamic structures of addressivity), and the roles and positionings of the performers (self as-whom to other as-whom).

With respect to the linguistic forms as language specific aspects, the specificity of language functioning for the actors is described by Bühler's (1934/ 1990) term of displacement (*Versetzung*). This term allows to link indexing (showing) and representing as forms of presentation (to make present) and to assume that it is not the (representing) symbol alone that has the privilege to build up a language space: this is already possible by simple indexing means as a fully situated "I am there!". The effect of displacement explains its functioning: generating sharedness for the interacting individuals that goes beyond the actual, sensitive contact of for instance a touching hand. The individuals share a common affective and cognitive world – more precisely: they *assume* that they share common meanings and con-

cepts, common feelings and evaluations, common intentions.²⁸ Clearly then, displacement does not automatically occur and function by language activity, rather, it can well fail when interactors are not able to generate and hold affective and cognitive relations or attachments.

Following and expanding Bühler, a system of displacement is constructed involving deictic, anaphoric, symbolic, and so-called lectic displacement. The *deictic* mode displaces within the interactors' common here-and-now, as "she is here!"; *anaphoric* displacement orients and navigates within the order of language itself, i.e. within the uttered text, as in "as mentioned above, this concept..."; *symbolic* displacement introduces a new quality, for its basis is no more physical space and time (no matter if actual or imagined), but a conceptual world. Finally, with the so-called *lectic* displacement it is no more the world which is presented (made present), but speakers present themselves or others as speakers.²⁹ This is done in "constructed dialogues" and reported talk (Tannen 1989; Holt & Clift 2007).

Axiom 5 *The linguistic signs of the language activity exist as addressed words (the word coming from the other, the word addressed to the other).*

The linguistic signs are viewed as uttered words, which are independent wholes that can function as own utterances ("tomorrow") or as part of utterances ("he will come tomorrow"), they are performed in the language space. The fact that these signs can be combined to complex wholes is an important condition to the generation of functional verbal forms and genres. Hence, linguistic signs are inherent to the language space, they belong to this space in a *material way*;³⁰ they occur in different linguistic environments, in which they are formed by grammatical and syntactical techniques. They are the formed and forming aspects of the language space with its specific partners as well as its situatedness in time, space, and

²⁸ The grounds of this kind of assumptions is given by two kinds of "idealizations" (Schütz 1971): the idealization of the exchangeability of the individual stand points, and the idealization of the congruence of the individual's systems of relevance.

²⁹ The term "lectic" is derived from Greek *lexis*, meaning in rhetorical contexts the way of speaking, the expression (see e.g. Aristotle's *Art of Rhetoric*, 1408b).

³⁰ The notion of the material sign is build with Vološinov (1929/ 1986); in Bertau (2007) we develop the notion of "vivid" or dynamic materiality in regard to the couple of form and substance following Aristotle's concept of *hylemorphism*.

culture: the linguistic forming happens within the framing of speech and voice formations. Hence, linguistic signs are *experienced*. Further, linguistic signs, as they are performed – addressed and replied to – in the language space between self and other, are positioned within the interaction process (with Vygotsky 1925/1999; Papadopoulos 1998).

A feature of utmost importance in the linguistic sign is its ability to be reversed (Vygotsky 1925/1999). In this movement, the sign is no more directed to the actual other, but to oneself: its other-directedness is conversed into a self-directedness, and this is precisely used for cognitive operations (e.g. remembering, problem-solving). Through the reversion, the linguistic sign becomes a “psychic tool” (Vygotsky 1930/1997) in one’s own psychological functions, the uttered word becomes an inner word. In Bertau (2008b), we labeled the reversion a *deviation* in order to signify the kind of abstraction from the other-oriented verbal communication that is done in reversing the linguistic sign, as well as to highlight its specificity: the reversion takes its way to self *through* other. This way owes thus a specific quality to the resulting self-orientedness, and to the workings of the mind and of the self – processes which are constructed onto the other as an *absent* one. It is by this very abstraction from actual other that an outside position to language and the usage of language as tool becomes possible for self, accessible as socio-cultural tool for specific genres of activities (e.g. writing a diary or a scientific article, solving problems of different kinds, working through one’s emotional and self processes).

Starting with a language space and locating the linguistic sign as experienced, “vivid materiality” (Vološinov 1927/1986) within the interaction of the partners, the sign-words are understood with regard to form and meaning. Form is the realized, sensorily perceivable forming of the words, hence no static and neutral envelope for a meaning to be transmitted; rather, form is indissociable from meaning, and has a part in the construction of the actual meaning in its specific way. Further, the meaning construction is to be viewed in regard to the listening-replying other. Several strands of ideas which cannot be developed here (foremost Humboldt 1990, 1994; Friedrich 1993) are bound together in order to surpass a referential notion of the sign: only then it is possible for the word-sign to become a formative, generating means of thoughts – thus linking Humboldt’s *Dual* (1827/1994) to

Vygotsky's *Thinking and Speech* (1934/ 1987). Again, a dynamic notion of form is the basic condition to this theory of the relationship between articulated words and thoughts; this is mainly constructed with Aristotle's so-called Hylemorphism (*hyle* meaning matter, *morphe* meaning form; see Bertau 2007).

A last point to be mentioned in regard to the sign and its linking of form and meaning is the fact that it is not understood as fixed unity of form and meaning. On the contrary, form and meaning, although indissociable, are in a dynamic, transformable relationship, developing in the course of ontogeny as well as in actual thinking and communicative processes. Hence, meaning is foremost a potentiality, it is mobile and functionally related to the conditions of the language space. Its concrete completion through the performance of sensory forms is not arbitrary, but constrained by usages and habits giving validity and adequacy to certain meaning-forms. Finally, the relationship of meaning and form is seen as a psychological activity which is mediated by the so-called inner word. The inner word is seen as an independent (not belonging to thinking, nor to social speaking), structurally mixed element (oscillating between conceptual and sensory processes).

Axiom 6 *On the grounds of the simultaneously social and reversible character of the linguistic sign, two fundamental types of performance are possible, corresponding to two life situations of socially organized, self-other related individuals.*

This axiom formulates and develops the relationship of thinking and speech as stated by Vygotsky (1934, p. 987), and thus underscores the *psycholinguistic* understanding of the language activity. The axiom avoids container terms (“in” and “inner”, “out” and “outer”) by purpose, because they are assumed to be misleading in understanding how language functions for the individual.³¹ Rather, we try to formulate the types of language usages according to their functionality for self-other related socialized individuals, and in regard to the other as the starting point for any conception of language and its workings. Hence, we speak of two fundamental types of performance, corresponding to two life situations. The basic difference of these performances and situations lies in the presence *versus* absence

³¹ The most negative effect of locating verbal processes *in* psyche or *in* communication is the resulting opposition between individual and social, paving the way for the a-social, self-contained I.

of the other. As briefly mentioned in the commentary to axiom 5, a different function emerges with the sign being reversed to oneself, a movement that is deepened and further developed in the absence of the other. Here, different stages in the capacity of handling the word-sign as psychological tool can be observed, for instance in children's symbolic play, in egocentric or private speech, in specific writing genres. What happens here is a transposition of an actual language space to an imagined one: from the child's actual room to a castle with fighting chevaliers, from a laboratory room to a problem space made out of pictures and rules to discover (as given by Raven's Matrices, see Werani 2011), or from one's own room and desk to the remembered spaces of activities with others and to the imagined space of a reading other (generic or significant) with his/her quality of reply (as in Karsten, this volume; Surd-Büchle, this volume).

Axiom 7 *The language activity is realized by the correlative acts of speaking and listening. By virtue of the sign's (the other's words) sociality and reversibility, the correlative acts are directed and addressed acts of communication and understanding. Performing language is thus always a communicative act and an act of thinking, by which the individuals navigate (steuern) each other and themselves, thereby coming to an understanding. Then, language can be a means to get along with consociates (Mitmenschen), with oneself, and with the world.*

The final axiom states once again the mutuality of language performance, as manifested by the partners' acts of speaking and listening within the language space. These acts are correlative because they are necessarily referred to each other, hence forming each other. Any language performance by an individual is to be understood as a correlative act calling for the corresponding act, and as being itself already called for by a previous act. The acts correspond to positions of the partners, they are prototypically labelled "address" and "reply". Hence, each utterance is a reply and seeks for a reply, how distant in space and time it may be.

The correlativity of speaking and listening is understood along the line of arguments found in Jakubinskij (1923/ 1979), Bakhtin (1986), and Vološinov (1929/ 1986): Jakubinskij is the one who first stated the interdependence of utterances, a notion taken up and developed by Bakhtin and Vološinov. Putting the focus of interdependence *not* on the related individuals performing language acts, but on the utterances themselves – as the Russians do – is important, because it shows

the functioning of the language activity in clear light: it is in detaching, in emancipating the utterance from a speaking body that the spoken and listened-to word gets its communicative-cognitive power; it is by this detachment that different voices can interfere and merge in one speaker, hence, that the polyphony of speaking and thinking is possible – a play of communicative voices and positions, of cognitive and metacognitive perspectives (Bertau 2011a).

Further, the correlativity of the acts is not only related to the interdependence of utterances but also to the reversibility of the verbal sign. It is by the reversion to oneself that the other's utterance can have a part in one's thinking and speaking. This reversion also guarantees that individual acts of speaking are indeed individual ones and not mere echoes or 'parrot utterances' of previously heard words. As a consequence, understanding cannot be conceived in symmetry to the said.³² Rather, understanding is autonomous, it is directed and oriented by the said, but it does not duplicate the said. Thus, verbal communication is the performance of difference, and this difference is the base of and the reason for a reply, of an answer called for.³³ Because of this, speaking can serve self-understanding (as for Linell 1998), where the speaker works in his/her thinking with the two different positions and perspectives given by address and reply. Viewing speaking as self-understanding relates closely to Humboldt's *Dual* (1827/ 1994) and to the concept of objectification: performing language amounts to a possibility of thinking which is determined on the one hand by the displacements – foremost by the symbolic one –, and on the other hand by the orientation to an other who *is* different: who is another.

On these grounds it is stated that the performance of language activity is a communicative act and an act of thinking. The function of this performance is given by the term 'navigation' (*Steuerung*) which is seen as a mutual act as well as an act oriented towards oneself, because any language performance is assumed to affect the speakers themselves, too. Importantly, the notion of navigation is not modelled according to an instrumental understanding of the sign serving information

³² See also Hörmann (1976, 1983) from the standpoint of language psychology.

³³ "[The speaker] does not expect passive understanding, that, so to speak, only duplicates his own idea in someone else's mind. Rather, he expects response, agreement, sympathy, objection, execution, and so forth" (Bakhtin 1986, p. 69).

transmission and the regulation of a system. Rather, it is Bühler's (1927) notion that is taken as starting point because it explicitly involves *and keeps* the intersubjective activity of a "system of two" (*Zweiersystem*). This notion thus entails *mutual* navigation, and – again – allows the possibility of self-navigation as happening in self-understanding; the speaker is not the powerful manipulator of the listener, nor is he/she exempt from the navigating activity. Given the activity of mutual navigating, the workings of the sign lies beyond reference, it lies in representing as presenting. Hence, the sign always involves an evaluative positioning towards the presented content, the addressee of the presentation, and oneself as presenter of this certain content for this certain other. Here lies the potency of language, closer to interested ravishment than to neutral, un-positioned information.³⁴ In language spaces, individuals create by linguistic displacements specific forms of relatedness to each other, to themselves, and to their world, thus coming to an understanding and getting along with their fellows, with themselves, and with the world.

4. Conclusion

From a viewpoint explicitly devoted to the "work of language" in mind and activity, developing a cultural-historical psycholinguistics within the framework of activity theory is viewed as a need. Basic ideas and concepts are seen in the works of Humboldt and of the Russian scholars of the 1920s and 1930s who are related to Humboldt and further develop his ideas in linguistics and psychology. It is the *dynamics of language* as communicative as well as psychological means that can be said to be at the centre of Humboldt's and the Russian's interest – and it is the basic notion for a cultural-historical psycholinguistics. On this ground, a specific version of cultural-historical psycholinguistics is here proposed: the psycholinguistics of alterity.

The theory of this psycholinguistics is constructed at the crossroad of a historical and conceptual reflection of the notion of language, and of the basic notion of

³⁴ With the notion of ravishment we link our language notion to the logos notion of the Sophists, particularly to Gorgias from Leontini and his concept of *apate*, meaning an artful deceit. For us, language, with respect to its power on other and self, is indeed ambivalent: it can have positive as well as negative effects. Principally, language activity oscillates between regulation and ravishment (see Bertau 2010a).

activity (Leont'ev). As is worth noting, both these roads pave the way to a non-Cartesian view of human beings as self-other related individuals, a view which is seen as grounding paradigm. Linking itself to a tradition interested in the power of language (Gorgias), in its formative function for communicative and psychological processes (Humboldt, Potebnia, Vygotsky) the theoretical framework constructs a notion of language and of the individual self where what we call the *phenomenonality* of the individuals' verbal activity is at the centre.³⁵ Hence, how *forms* of activity appear and develop, how they are conditioned in terms of environment as common social space and positioned-positioning partners, are relevant questions for the proposed framework. There is one aspect here to mention, which is for us of utmost importance, although not yet elaborated.³⁶ This aspect is given by the term of the third, pointing to the fact that self-other related individuals necessarily need a third component to be related at all. This component can be associated to the aforementioned language-as-medium, its concrete manifestation can be seen in the audience, understood as a necessary witness for any language activity. The point is that "two is not enough", that two individuals do not make a dialogic theory, even not three or more individuals. For a dialogic theory, a multitude turning into a community where audiences and solo speakers-and-listeners are discernible positions is necessary and sufficient. The qualitatively different third term is in our view the necessary condition for a genuine non-Cartesian view of language, of activity, and of the individuals as passive-active performers.

The proposed psycholinguistics of alterity, which integrates itself in other similar approaches in linguistics (e.g. Linell 1998, 2009; Weigand 2009) and psychology (e.g. Hermans & Gieser 2011; Fuchs, Sattel & Henningsen 2010), can hence be seen as a plea for a change in perspective in the human sciences. This change would lead from a notion of the individual grounding in its self-contained 'I-ness' (*Ichigkeit*) – a notion corresponding to Western conventions about the subject – to the notion of a relational individual, determined by alterity. This change corre-

³⁵ "Phenomenality" refers to the actual unfolding, the presence and the givenness of the individual's language activity. The term echoes the notion of language space and refers to the complex sensitive experience we have of language activity. A quite interesting crosslink regarding phenomenality as term and notion is to be seen in Fuchs, Sattel & Henningsen (2010).

³⁶ A first formulation is given in Bertau (2010b), a paper presented at the 6th International Conference on the Dialogical Self, Athens, October 2010.

sponds to a shift from an isolated and a-historical individual to a related one who lives together with fellows in common spaces and times. This alternative notion is assumed to be a promising way to investigate and understand the complex dynamics of human life.

References

- Arievitch, I.M. (2008). Exploring the links between external and internal activity from a cultural-historical perspective. In B. van Oers, W. Wardekker, E. Elbers & R. van der Veer (Eds.), *The transformation of learning. Advances in cultural-historical activity theory* (pp. 38-57). Cambridge: Cambridge University Press.
- Bakhtin, M.M. (1986). *Speech genres & other late essays*. Tansl. by V.W. McGee, ed. by C. Emerson & M. Holquist. Austin: University of Texas Press.
- Bartschat, B. (2006). La réception de Humboldt dans la pensée linguistique russe, de Potebnja à Vygotskij [The reception of Humboldt in Russian thinking, from Potebnja to Vygotsky]. *Revue Germanique Internationale* 3, 13–23.
- Bertau, M.-C. (in press). Inner form as a notion migrating from West to East: Acknowledging the Humboldtian tradition in cultural-historical psychology. In A. Yasnitsky, R. van der Veer & M. Ferrari (Eds.), *Handbook of cultural-historical theory*. Cambridge: Cambridge University Press.
- Bertau, M.-C. (2011a). Voices of others for self, voices of others in self. Polyphony as means and resource for constructing and reconstructing social reality. In M. Riemsdagh, A. Liégeois, J. Corveleyn and R. Burggraeve (Eds.), *'After You': The ethics of the pastoral counselling process*. Leuven: Peeters.
- Bertau, M.-C. (2011b). Developmental origins of the dialogical self: early childhood years. In H. J. M. Hermans & Th. Gieser (Eds.), *Handbook on the dialogical self*. Cambridge: Cambridge University Press.
- Bertau, M.-C. (2011). *Anreden, Erwidern, Verstehen. Elemente einer Psycholinguistik der Alterität [Addressing, replying, and understanding. Elements of a psycholinguistics of alterity]*. Berlin: Lehmanns media.
- Bertau, M.-C. (2010a). *Jenseits der Sprecherhoheit: Sprachliche Tätigkeit zwischen Entführung und Regulierung [Beyond the Speaker's Territory: Language Activity Between Ravishment and Regulation]*. <http://epub.ub.uni-muenchen.de/12116/>.
- Bertau, M.-C. (2010b). *Alter, ego and polis: Witnessed self formations*. Paper presented at the 6th International Conference on the Dialogical Self, Athens (Greece), October, 2010.
- Bertau, M.-C. (2008a). Pour une notion de forme linguistique comme forme vécue. Une approche avec Jakubinskij, Vološinov et Vygotskij [For a notion of linguistic form as lived form. An approach with Jakubinskij, Vygotskij, and Vološinov]. *Cahiers de L'ILSL*, 24, 5-28.
- Bertau, M.-C. (2008b). Voice: A pathway to consciousness as 'social contact to oneself'. *International Psychological and Behavioral Science*, 42(1), 92-113.
- Bertau, M.-C. (2007). Die Stimme: Erkundung eines Konzepts und eines Phänomens [Voice: Investigating the concept and the phenomenon]. *Paragrana*, 16(2), 136-148.

- Böhler (2007). Textauswahl, Textvorlagen und Textgestalt [Text selection, originals and text form]. In W. von Humboldt, *Schriften zur Sprache*. Ed. by M. Böhler (pp. 211-217). Stuttgart: Philipp Reclam jun.
- Bronckart, J.-P. & Friedrich, J. (1999). Présentation [Introduction]. In L. S. Vygotsky, *La signification historique de la crise en psychologie* (pp. 15-69). Delachaux et Nestlé: Paris.
- Bühler, K. (1934/1990). *Theory of language. The representational function of language*. Amsterdam: John Benjamins.
- Bühler, K. (1927). *Die Krise der Psychologie [The crisis of psychology]*. Jena: Gustav Fischer.
- Comtet, R. (1999). Norme graphique et orthographique dans la réflexion linguistique russe au XVIIIe siècle [Graphic and orthographic norms within Russian linguistic reflection in the 18th century]. *Histoire Épistémologie Langage* 21(1), 5–25.
- Di Cesare, D. (1996). Wilhelm von Humboldt (1767-1835). In T. Borsche (Ed.), *Klassiker der Sprachphilosophie. Von Platon bis Noam Chomsky* (pp. 275-289). München: C. H. Beck.
- Eskin, M. (1997). Translator's introduction [to L. Yakubinsky, *On Dialogic Speech*]. PMLA, 112, 243-248.
- Friedrich, J. (1993). *Der Gehalt der Sprachform [The content of the form of language. Paradigms from Bakhtin to Vygotsky]*. Berlin: Akademie Verlag.
- Friedrich, J. (2005a). The use and function of the notion of dialogue in the Soviet-Russian discourse of the 1920s, especially with Yakubinsky and Vygotsky. In Bertau, M.-C. & Friedrich, J. (Eds.), *Think about language dialogically – Understand action dialogically*. Interdisciplinary conference, summer 2005, University of Munich, <http://epub.ub.uni-muenchen.de/2020/>
- Friedrich, J. (2005b). Die Apperzeptionsgebundenheit des Sprechens. Ein historischer Exkurs in die Diskussion um die innere Sprache [The dependence of speech on apperception. A historical detour into the discussion on inner speech]. In M.-C. Bertau, A. Werani & G. Kegel (Eds.), *Psycholinguistische Studien* 2 (pp. 27-59). Aachen: Shaker.
- Fuchs, Th., Sattel, H. C. & Henningsen, P. (2010). *The embodied self. Dimensions, coherence and disorders*. Stuttgart: Schattauer.
- Gadamer, H.-G. (1966/1986). Mensch und Sprache [Man and language]. In H.-G. Gadamer, *Wahrheit und Methode, Band 2* (pp. 146-154). Tübingen: J. C. B. Mohr.
- Gergen, K. (2009). Dialogue as collaborative action. *Journal für Psychologie*, 17(2), <http://www.journal-fuer-psychologie.de/jfp-2-2009-02.html>
- Gibson, J.J. (1977). The theory of affordances. In R. Shaw & J. Bransford, *Perceiving, acting, and knowing. Toward ecological psychology*. New York, Toronto, London, Sidney: Lawrence Erlbaum.
- Gipper, H. (1992). Sprachphilosophie in der Romantik [Language philosophy of Romanticism]. In M. Dascal, D. Gerhardus, K. Lorenz & G. Meggle, *Sprachphilosophie. Philosophy of language. La philosophie du langage. Ein internationales Handbuch zeitgenössischer Forschung. An international handbook of contemporary research. Manuel international de recherches contemporaines* (pp. 197-233). Berlin, New York: Walter de Gruyter.
- Hermans, H.J.M. & Dimaggio, G. (2003). *The dialogical self in psychotherapy*. Hove and New York: Brunner-Routledge.
- Hermans, H.J.M. & Gieser, Th. (2011, in press). *Handbook on the dialogical self*. Cambridge: Cambridge University Press.
- Hermans, H.J.M. & Hermans-Konopka, A. (2010). *Dialogical self theory. Positioning and counter-positioning in a globalizing society*. Cambridge: Cambridge University Press.

- Hermans, H.J.M., Kempen, H.G. & van Loon, R. (1992). The dialogical self. Beyond individualism and rationalism. *American Psychologist* 47(1), 23–33.
- Hörmann, H. (1976). The concept of sense constancy. *Lingua* 39, 269-280.
- Hörmann, H. (1983): Über einige Aspekte des Begriffs "Verstehen" [On some aspects of the notion of „understanding“]. In L. Montada, K. Reusser & G. Steiner (Eds.), *Kognition und Handeln* (pp. 13-22). Stuttgart: Klett-Cotta.
- Holt, E. & Clift, R. (2007). *Reporting talk. Reported speech in interaction*. Cambridge: Cambridge University Press.
- Humboldt, W. von (1903-1936). *Gesammelte Schriften [Collected works]* (17 volumes). A. Leitzmann (Ed.). Berlin: B. Behr's Verlag.
- Humboldt, W. von (1994). Ueber den Dualis (1827) [On the dual]. In W. von Humboldt, *Über die Sprache. Reden vor der Akademie*. Ed. by J. Trabant. Tübingen and Basel: Francke.
- Humboldt, W. von (1999). *On Language: On the diversity of human language construction and its influence on the mental development of the human species*. Ed. by M. Lonsosky, transl. by P. Heath. Cambridge: Cambridge University Press. Partly online:
<http://www.marxists.org/reference/subject/philosophy/works/ge/vhumboldt-wilhelm.htm>
- Innis, R.E. (1992). Karl Bühler (1879-1963). In M. Dascal, D. Gerhardus, K. Lorenz & G. Meggle (Eds.), *Sprachphilosophie. Philosophy of language. La philosophie du langage* (pp. 550-562). Berlin, New York: de Gruyter.
- Jakubinskij, L.P. (1923/1979). On verbal dialogue. Transl. by J. E. Knox & L. Barner. *dispositio. Revista Hispánica de Semiótica Literaria* IV, 11-12, 321-335.
- Jakubinskij, L.P. (1923/2004). Über die dialogische Rede. Transl. by K. Hommel & K. Meng. In K. Ehlich & K. Meng (Eds.), *Die Aktualität des Verdrängten. Studien zur Geschichte der Sprachwissenschaft im 20. Jahrhundert* (pp. 383-433). Heidelberg: Synchron.
- Karsten, A. (2011). *Chronotopes in writing – Excerpts form a case study*. This volume.
- Keiler, P. (1999). *Feuerbach, Vygotski & Co. Studien zur Grundlegung einer Psychologie des gesellschaftlichen Menschen [Feuerbach, Vygotsky, and Company. Studies for the foundation of a psychology of societal man]*. Berlin, Hamburg: Argument.
- Keiler, P. (2002). *Lev Vygotskij – ein Leben für die Psychologie*. [Lev Vygotsky – a life for psychology] Weinheim und Basel: Beltz.
- Knobloch, C. (2003). Geschichte der Psycholinguistik [A history of psycholinguistics]. In M. Dascal, D. Gerhardus, K. Lorenz & G. Meggle, *Sprachphilosophie. Philosophy of language. La philosophie du langage. Ein internationales Handbuch zeitgenössischer Forschung. An international handbook of contemporary research. Manuel international de recherches contemporaines* (pp. 15-33). Berlin, New York: Walter de Gruyter.
- Léontiev, A.N. (2002). Le problème de la conscience. Note sur les thèses principales du rapport de L.S. Vygotskij (1933) prise par A.N. Léontiev [The problem of consciousness. Note on the principal theses in the report by L. S. Vygotskij (1933), taken by A.N. Leont'ev]. In Y. Clot (Ed.), *Avec Vygotski. Sui-ivi d'une note de Léontiev sur un séminaire de Vygotski* (pp. 305-322). Paris: La Dispute.
- Leontev, A.N. (1978). *Activity, consciousness, and personality*. Upper Saddle River (NJ): Prentice Hall. [Deutsch: A.N. Leontew (1982). *Tätigkeit, Bewußtsein, Persönlichkeit*. Köln: Pahl-Rugenstein]
- Linell, P. (1998). *Approaching dialogue. Talk, interaction and contexts in dialogical perspectives*. Amsterdam/Philadelphia: John Benjamins.

- Linell, P. (2009). *Rethinking language, mind, and world dialogically*. Charlotte (NC): Information Age.
- Lyra, M.D.C.P. & Bertau, M.-C. (2008). Dialogical practices as basis for self. *Studia Psychologica* 8, 173-193
- Marková, I. & Foppa, K. (1990). *The dynamics of dialogue*. New York, London, Toronto, Tokyo, Singapore: Harvester Wheatsheaf.
- Naumova, I. (2004). Das Problem des Dialogs: A.A. Potebnja, L.P. Jakubinskij, L.S. Vygotskij, M.M. Bachtin [The problem of dialogue: A.A. Potebnja, L.P. Jakubinskij, L.S. Vygotskij, M.M. Bachtin]. In K. Ehlich & K. Meng (Eds.), *Die Aktualität des Verdrängten. Studien zur Geschichte der Sprachwissenschaft im 20. Jahrhundert* (pp. 211–225). Heidelberg: Synchron Publishers.
- O’Connell, D. & Kowal, S. (2003). Psycholinguistics. A half century of monologism. *American Journal of Psychology*, 116(2), 191-212.
- Osgood, C.E. & Sebeok, Th.A. (1954). *Psycholinguistics. A survey of theory and research problems. Report of the 1953 summer seminar sponsored by the Committee on Linguistics and Psychology of the Social Science Research Council*. Baltimore: Waverly Press.
- Papadopoulos, D. (1998). *Lev Wygotski – Werk und Wirkung [Lev Vygotsky – Work and impact]*. Frankfurt am Main/New York: Campus.
- Romashko, S.A. (2000). Vers l’analyse du dialogue en Russie [Towards the analysis of dialogue in Russia]. *Histoire Épistémologie Langage* 21(1), 83-98.
- Rommetveit, R. & Blakar, R.M. (1979). *Studies of language, thought, and communication*. London, New York, San Francisco: Academic Press
- Seifrid, T. (2005). *The world made self. Russian writings on language, 1860-1930*. Ithaca: Cornell University Press.
- Schürmann, V. (2008). Prozess und Tätigkeit. Zur Spezifik der Tätigkeitstheorie [Process and activity. On the specificity of activity theory]. *Behindertenpädagogik* 47(1), 21-30.
- Schürmann, V. (2010). Vermittlung/Unmittelbarkeit [Mediation/Unmediatedness]. In H.-J. Sandkühler (Ed.), *Enzyklopädie Philosophie* (pp. 2886-2891). Hamburg: Meiner.
- Schütz, A. (1971). Über die mannigfaltigen Wirklichkeiten [On the manifold realities]. In A. Schütz, *Gesammelte Werke, Band 1: Das Problem der sozialen Wirklichkeit* (pp. 237-269). Den Haag: Nijhoff.
- Schütz, A. (1967). *The phenomenology of the social world*. Evanston (IL): Northwestern University Press.
- Surd-Büchle, S. (2011). *On the relations between writing and thinking*. This volume.
- Tannen, D. (1989). *Talking voices. Repetition, dialogue, and imagery in conversational discourse*. Cambridge: Cambridge University Press.
- Trabant, J. (1990). *Traditionen Humboldts [Traditions of Humboldt]*. Frankfurt am Main: Suhrkamp.
- Trautmann-Waller, C. (2006). Introduction. *Revue Germanique Internationale* 3, 5–9.
- Trevarthen, C. (in press). The infant’s voice grows in intimate dialogue: How musicality of expression inspires shared meaning. In M.-C. Bertau, M. M. Gonçalves & P. T. F. Raggatt (Eds.), *Dialogic formations: Investigations into the origins and development of the dialogical self*. Charlotte (NC): Information Age.
- Van der Veer, R. & Valsiner, J. (1991). *Understanding Vygotsky. A quest for synthesis*. Oxford (UK) and Cambridge (MA): Blackwell.
- Vološinov, V.N. (1929/1986). *Marxism and the philosophy of language*. Translated by L. Matejka and R. Titunik. Cambridge (MA), London (UK): Harvard University Press.

- Vygotskij, L.S. (1931/1992). *Geschichte der höheren psychischen Funktionen [History of higher psychological functions]*. Edited by A. Métraux, transl. by R. Kämper. Hamburg: Lit.
- Vygotsky, L.S. (1925/1971). *Psychology of art (Psychologija iskusstva)*. Cambridge (MA): M.I.T. Press. [Deutsch: L. S. Wygotski ((1925/1980). *Psychologie der Kunst*. Dresden: VEB Verlag der Kunst]
- Vygotsky, L.S. (1925/1999). Consciousness as a problem in the psychology of behavior. In N. Veresov, *Undiscovered Vygotsky. Etudes on the pre-history of cultural-historical psychology* (pp. 256-281). Frankfurt am Main, Berlin, Bern: Peter Lang. [Deutsch: L. S. Vygotskij (1925/2003). Das Bewußtsein als Problem der Psychologie des Verhaltens. In J. Lompscher (Hrsg.), *Lev Vygotskij. Ausgewählte Schriften, Band 1* (S. 279-308). Berlin: lehmanns media.
- Vygotsky, L.S. (1930/1997). The instrumental method in psychology. In R. W. Rieber, J. Wollock (Eds.), *The collected works of L. S. Vygotsky, Volume 3, Problems of the theory and history of psychology* (pp. 85-89). New York and London: Plenum. [Deutsch: L. S. Vygotskij (1925/2003). Die instrumentelle Methode in der Pscyhologie. In J. Lompscher (Hrsg.), *Lev Vygotskij. Ausgewählte Schriften, Band 1* (S. 309-317). Berlin: lehmanns media.
- Weigand, E. (2009). *Language as dialogue*. Amsterdam/Philadelphia: John Benjamins.
- Werani, A. (2011). *Investigating inner speech and higher psychological functions through speech profiles*. This volume.
- Yakubinsky, L. (1923/1997). On dialogic speech. Edited and transl. by M. Eskin, *Papers of the Modern Language Association of America (PMLA)*, 112, 343-356.

Keywords

Addressivity
Alterity
Dialogue
Form
Psycholinguistics
Voice

Name index

Bakhtin, M.M.
Bertau, M.-C.
Bühler, K.
Friedrich, J.
Gadamer, H.-G.
Hermans, H.J.M.
Hörmann, H.
Humboldt, W.von
Jakubinskij, L.P.
Keiler, P.
Leont'ev, A.N.
Linell, P.
Potebnia, A.A.
Schürmann, V.
Schütz, A.
Trabant, J.
Trevarthen, C.
Vološinov, V.N.
Vygotsky, L.S.
Yakubinsky, L.P.

Investigating Inner Speech and Higher Psychological Functions through Speech Profiles

Anke Werani

The starting point of the cultural-historical view is that individual consciousness and all other higher mental processes – speech included – have a social genesis. The ability to speak and all language activity are central to social and individual life. First, an introduction to cultural-historical psycholinguistics is given. Second, inner speech is stated as reference point for many mental processes: it is an important ability central to our consciousness (generally) as well as necessary for higher psychological functions (specifically). Inner speech combines communicative and cognitive skills. Therefore, an extended concept of inner speech is drawn up, which takes into account the intensive examination of inner speech in Soviet psychology as well as the latest discussions. Third, speech profiles are used as point of entry for empirical research into the relationship between speaking and thinking. General results from a study of this kind are presented, dealing with speech profiles in problem solving. Four Speaking-Thinking-Types are introduced. They are characterised as pragmatic type, talkative type, doubting type, and taciturn type. These different types show different problem solving strategies. The connection between speech profile and thinking is obvious. Fourth, possibilities and difficulties to work with speech profiles are discussed.

1. Introduction

Since the discipline of psycholinguistics was founded 1954 in the U.S. (Osgood & Sebeok 1954), there are manifold topics in which psycholinguists are engaged, all focusing on the object of research: how to come up to language and speech. Psycholinguistics is an interdisciplinary science which was developed out of philosophy of language, psychology, linguistics, sociology, mathematics, computer sciences to name just the most important ones. As young discipline psycholinguistics oscillated between psychological and linguistic issues; one consequence was that psycholinguistics was partly seen as an auxiliary science of both linguistics and

psychology.¹ Furthermore, the development of psycholinguistic theory was mainly influenced by structural linguistic approaches. The main topic of the latter is the study and description of language structures, encompassing, for example, phonology, morphology, syntax, semantics, and pragmatics. Fundamental questions include what is universal to language. With this interest language is understood as an abstract phenomenon, mostly described without regarding the context. On the side of psychology the main influence on psycholinguistics is the cognitivist paradigm. Both of these theoretical foundations isolate the individual from sociality (Knobloch, 2003). This is for us the principal point to think differently, because language and speech are exclusive preserve of speaking human beings. To use language and speech is a fundamental social process, it is socially based. Furthermore, speaking is always a directed process – directed to someone else or to oneself - and it takes place in a specific context, which is constitutive for meaning. Thus, speaking is a central phenomenon in constructing oneself at each moment.

Cultural-historical theory is therefore used as point of entry with human sociality as a basic moment of all human activity, speech activity included. Embedding language and speech in cultural-historical theory leads to the construction of cultural-historical psycholinguistics. In the tradition of Humboldt (1827/ 1995, 1830-35/ 1995) and Steinthal (1851, 1881/ 1972, 1970) the discussion about language and speech in respect of psychological functions intensified in the 1920s and 1930s (e.g. Bühler 1934/ 1990; Vygotsky 1934/1987). Following this tradition, it is an attempt to found psycholinguistics at the border passage between linguistics and psychology. Following Sappok (1999) Vygotsky is the founding father of cultural-historical psycholinguistics. Vygotsky focuses on research into higher psychological functions as specific human abilities, always embedding these abilities in sociality. He highlights the important role of speech in higher psychological functions, and thus it is the core of cultural-historical psycholinguistics. Referring to the important role of speech he pointed out that „speech is not only a means to understand others, but also a means to understand oneself“ (Vygotsky 1930/ 1997, p. 95). By way of summary, I will outline three primary elements of cultural-historical psycholinguistics. It is (1) The role of social activity, (2) The dialectical principle of develop-

¹ The history of psycholinguistics is summarised for example by Knobloch (2003) and Hörmann (1981).

ment, (3) The topic of speech and higher psychological functions; all three cornerstones are connected to each other.

(1) *The role of social activity.* The starting point of Vygotsky's basic assumptions is social activity. He assumes that each higher form of behaviour and therefore all higher psychological functions develop out of collective, social behaviour. From this point of view, psychological study has to be extended from one subject to at least two subjects sharing psychological abilities (Vygotsky, 1930a/ 1985, 1931/ 1987). All culture is therefore a result of common social life and human activity (Keiler 1997). To use speech signs is a specific and central source of social behaviour. The origin of each higher psychological function is a collective, social, inter-psychological function. Children share these processes with others (e.g. joint attention) and they need time in order to take on the role of some other and to adapt the complex system of processes to themselves (Vygotsky 1930a/ 1997). This process, by which shared activity turns inside and grows into psychological functions, is called interiorization. All interiorized social connections construct the social structure of personality. What is actually interiorised and how this process functions is a very complex issue and needs further research (Valsiner & van der Veer 2000).

In short, higher psychological functions are fundamentally social. Each psychological function was at first a social relationship between two subjects. Focus is not an individualized human being (cf. the aspect of 'I-ness', *Ichigkeit*, Bertau, this volume) but always human beings in their social environment.

(2) *The dialectical principle of development.* Vygotsky's historical method includes both phylogenetic and ontogenetic views of human's development and especially their higher psychological functions. Evolution changes dramatically with the use of tools: using tools results in social-historical development improving the standard of living, not only technological tools are used but also psychological tools, such as language. Language becomes a useful tool for thinking; there is an analogy to technical tools (directed at material production). Vygotsky describes this perspective as follows:

"The most essential feature distinguishing the psychological tool from the technical one is that it is meant to act upon mind and behaviour, whereas the technical tool, which is also inserted as a middle term between the activity of

man and the external object, is meant to cause changes in the object itself. The psychological tool changes nothing in the object. It is a means of influencing one's own mind or behaviour or another's. It is not a means of influencing the object. Therefore, in the instrumental act we see activity toward oneself, and not toward the object" (Vygotsky 1930b/ 1997, p. 87).

Vygotsky extends this description by considering 'psychological tools' as an essential means of control and regulation of behaviour and psychological functions (cf. Vygotsky 1930b/ 1997; Keiler 2002). Speech is seen in its mediating function. Regarding the dialectical principles development is a continuous dynamic process accompanied by developmental leaps; this process leads to new qualities in behavior and psychological functions. Concerning the different functions Vygotsky is convinced that the change of the links between the functions is important for the change of each function itself. Therefore, on new levels of development groupings occur that never existed before.

The starting point for this dialectical notion is the unity of physical and psychological processes. This unity is the basic assumption for consciousness and behavior, and in regard of this consideration, consciousness is not entirely an intrapsychological function, and behavior is not entirely an extrinsic, interpsychological function. Consciousness and behavior alternate and interfuse each other and lead to continuous changes of the individual and of society. From this point of view, development is not restricted to childhood and adolescence; it is a process, which spans the whole life of individuals.

(3) The topic of speech and higher psychological functions. Against the mainstream of behaviorism in the 1920s, Vygotsky reintroduces the study of consciousness to psychology; he was convinced that consciousness is an undeniable fact of psychological processes and that psychological research is bound to the study of consciousness. At that time, Vygotsky was turning against reductionistic, biological views and against behaviorism. In his opinion, linguistically mediated processes, i.e. speech processes, are the basic principle for development of consciousness. They become essential for example in voluntary awareness or voluntary memory, but also in all other aspects of thinking (Hildebrand-Nilshon, 2004). The sophisticated functions of speech are important for the mediation of psychological functions. The ability to speak allows two directions, the first is directed towards the

outside to someone else and serves especially for communication; and the second it is directed to oneself, and provides particularly psychological processes. It is an extraordinary fact that speech can be directed to others and to oneself. A distinction is thus 'speaking for others' from 'speaking for me'. According to Vygotsky the development of higher psychological processes are possible through the mediating function of language (signs). Therefore he called these processes higher psychological processes (in opposition to lower psychological processes, which are not culturally mediated).

According to Wertsch (1985), Vygotsky distinguishes higher psychological processes by four characteristics: (1) internal instead of external regulation (arbitrary), (2) consciousness, (3) social origin and social nature, (4) semiotic mediation. The relatively autonomous cognitive system of an adult in a civilized society is created by the collective regulation of acting. One fundamental tool for higher psychological processes is inner speech. It is obvious that investigations concerning consciousness and abstract thinking are closely related to language research. Vygotsky (1934/ 1987) gave, as follows, a metaphorical impression about the relationship between speaking and consciousness:

"Consciousness is reflected in the word like the sun is reflected in a droplet of water. The word is a microcosm of consciousness, related to consciousness like a living cell is related to an organism, like an atom is related to the cosmos. The meaningful word is a microcosm of human consciousness" (Vygotsky 1934/ 1987, p. 285).

To sum up the essentials for cultural-historical psycholinguistics the focus on language and speech in the development of higher psychological processes links the cultural-historical approach to psycholinguistics. The starting point is the socio-cultural context, which includes naturally a 'speaking context'. Speech is addressed to somebody else or to oneself, so it is supposed to be dialogical. The specifically human way of acting, thinking and communicating with others can only be shaped by interactions; starting with interactions with children, who learn to think and act and communicate (Jones 2008). Individuals do not exist outside of speech; they act and evaluate (which is associated with emotions). Speech is thus not conceived as a psychological phenomenon, but rather as a social process. Furthermore, it is stated that language and speech are necessary for mediating higher psychological

processes. In conclusion, explanations of consciousness and abstract thinking must be analyzed in close connection to linguistic abilities.

2. A concept of inner speech

Inner speech is a central issue of cultural-historical psycholinguistics. It is an essential process that interrelates speaking and thinking, and therefore speech with higher mental functions; it is fundamental for both communicative and cognitive functions. There is an intensive examination of inner speech in Soviet psychology, introduced by Vygotsky. Vygotsky was concerned with the genesis of inner speech as well as its structure and function. His concept constitutes the background for all research, and therefore is basic and groundbreaking for all psycholinguistic investigations. A detailed description of the phenomenon of inner speech in the Vygotsky tradition can be found in Werani (2011; in press).

A basic assumption especially for *genesis* is that all higher psychological functions are originally shared between two people. The starting point is the mutual interpsychological process that is social at the beginning. Interiorization is a kind of generic term for all processes, which get "inside" the individual. It is to be pointed out that interiorization is not an internal copy of the external world; it is a dynamic process, which leads to a "quasi-social" inner level of consciousness (cf. Wertsch 1985). How the interiorization process works and what actually is interiorized still remains to be established (Valsiner & van der Veer 2000). In regard to inner speech the general consensus is that inner speech is interiorized speech; central is the transition of interpsychological and intrapsychological functions.

Concerning the *structure* of inner speech, Vygotsky (1934/ 1987, p. 266) assumes that "[inner speech] has its own syntax", hence, inner speech is understood by Vygotsky as an independent form of language. Vygotsky ascribes syntactic, phonological and semantic features to inner speech. The most important characteristic of the special syntax is "fragmentation and abbreviation" (Vygotsky 1934/ 1987, p. 266). He was convinced that inner speech is mostly predicative, and used in a syntactically predicative manner. Apart from this characteristic Vygotsky describes the reduction of phonetic features of speech. Inner speech is shortened – compared to external speech – to such an extent that it could reach wordlessness. Vygotsky summarizes: "In inner speech, the syntactic and phonetic aspects of speech are

reduced to a minimum. They are maximally simplified and condensed" (1934/1987, p. 275). Beside these characteristics Vygotsky also considers semantic features in detail; accordingly, he is interested in word meaning both as a linguistic as well as an intellectual phenomenon; following Vygotsky word meaning establishes the unity of speaking and thinking.

The *functions* of inner speech are attached different weights by several Soviet scholars, depending on the authors' main research interests. In general, the functions of inner speech relate to two areas, speaking for others and speaking for oneself. In the first area speech is directed outwards, the communicative aspect is focused, and thus speech regulates social interaction as one main function. Inner speech is ascribed a decisive role in the production and reception of language (Anan'ev 1963; Sokolov 1972). The functions of inner speech in language processing are treated more deeply by A. A. Leont'ev (1975; 1984) and Achutina (1978; 2004). In the second area speech is directed to oneself in a recursive way; thus these functions of inner speech are connected with higher mental functions (cf. Vygotsky 1934/1987). Basic functions ascribed to inner speech are regulative and control functions (for an overview see Werani in press). Depending on the research interest of different authors the different functions are named differently. Vygotsky for example stresses mental orientation (orientation is connected with perception and the direction of attention), the attainment of an awareness of facts to surmount difficulties and to get mental relief. Then, inner speech is described as being necessary for thinking, in that sense, as a means (instrument) of thought (Vygotsky 1934/1987; Galperin 1957/1972; Sokolov 1972). Consequently it can be understood as a means of reflection. Luria (1982) assumes that inner speech is the highest stage of self-regulation. Self-regulation by inner speech does not only serve to control external actions, but also internal actions (Galperin). Furthermore, Anan'ev extends the assumptions of inner speech claiming that inner speech is a form of verbal-logical memory, which is determined by special convictions, conceptions of the world and by moral awareness (Anan'ev 1963). Therefore, inner speech is seen close to our consciousness, which is connected with the development of volitional acts and of personality (Luria 1982; Anan'ev 1963). In general, Anan'ev sees inner speech as an essential means of the development and construction of the personality.

To sum up, inner speech with its genesis and structure described in Soviet Psychology points to an independent form of language. Main functions of inner speech are regulation and control, related to the areas speaking and thinking, formation of personality, self-communication as well as language processing.

Inner speech is seen here from a new point of view. Inner speech is, in contrast to Vygotsky's (1934/ 1987) assumption, not understood as an independent form of speech with a multitude of functions. Rather, inner speech is a *possible manifestation of speech*, as is external speech and written speech. It is assumed that this internal manifestation is the richest, most common and most intimate one, since it also contains everything which is left unsaid.

Any research into inner speech is hence confronted with speech in general. Interiorization is therefore a key topic, because it stands for the transitional stage which is an interaction of interpsychological and intrapsychological processes. Of particular interest is the transitional process between inside and outside processes. The main issue is the process, and the fact that neither the interpsychological nor the intrapsychological processes are static. Furthermore, *awareness* is involved in inner speech, for example the imagination of an object always is a matter of becoming aware of the way of imagining the object. The consequence of highlighting this transitional process implies that not at all interiorization but also exteriorization are necessary for the development of inner speech. Hence, not only the (exteriorized) utterance of the actual other is important for the child to interiorize them. It is also important that the child learns to utter interiorized processes orally or in writing. In the following, three central functions of speech are mentioned, which can be regarded as most relevant to all manifestations of speech (external speech, inner speech, and writing). These three aspects are now outlined briefly, for a detailed version see (Werani 2011; Werani in press).

First, the thought is stabilized in the word by speech. According to Vygotsky the thought is not the word and the word not the thought. Though, the process to perform thought within words is highlighted. Vygotsky supposes „that thought is not expressed but completed in the word“ (Vygotsky 1934/ 1987, p. 282). We assume that speech orders thoughts, and thoughts become conscious through speech. These thoughts can be reflected on. As one might expect, the process of interiorization of speech is central to this topic. In order to fulfill the completion of

the thought the word must be well developed as inner speech. The more differentiated speaking and writing are, the more the quality of inner speech develops. A high quality of inner speech exerts a favourable influence on the interaction of higher mental functions and speech abilities (Rojas-Drummond, Gómez & Vélez 2008; Mercer & Littleton 2007). In fact, speaking is not only used in the conventional communicative sense; above all it is an instrument linking speech to higher psychological functions. Hence, (inner) speech acquires a mediating function. Inner speech is seen as a rich and personal (intimate) manifestation of speech: it admits differentiation in thinking, it is important to the display of personality (Ananév 1963), and to the construction of the self (Bertau 2011; 2008).

Second, as the thought is stabilized in the word, it can be reflected on. The thought has to be clarified; this basis of objectivation then enables reflection, precisely the possibility to reflect on. Therefore, speaking turns out to be an important instrument of thinking. The processes which provide thinking are processes of orientation, ordering, control and reflection. However, this is not a deterministic view such that inner speech determines thought. But it is obvious that inner speech exerts a considerable influence on thought.

Third, because the word relates a human being to his or her socio-cultural environment, neither thought nor word appear in isolation. Speaking is embedded in specific socio-cultural contexts, and therefore thoughts are, too. It is not only speech which is interiorized, but equally the experiences with the environment, and the different valuations and attributions. In this dimension, personality and consciousness are expressed and reflected in speech. The role of inner speech increases, because it is obvious that inner speech becomes a mediator of thinking, speaking and acting. In summary, the whole society shapes an individual's speech, thoughts and actions. It is precisely the societal use of language that informs inner speech.

3. Empirical evidence: An analysis of Speaking-Thinking-Types

Werani (2011) addresses the problem of approaching research on inner speech empirically and introduces a study of inner speech which uses the method of thinking aloud. The results of this study highlight the fact that speech processes

and higher psychological functions are interwoven, and that the quality of speech influences the solution process in different ways. In the following the method is described, general results are presented, and afterwards one analysis (out of seven), which deals with the aspect of speaking-thinking-types, is illustrated.

Method

The method of thinking aloud (MTA) was used to collect the speech data. Subjects were instructed to do the Matrices of Raven (Kratzmeier & Horn 1988), and they were briefed to speak out aloud what they are thinking while solving the problems. The instruction was open for all utterances, meaning that there were no constraints to only speak about relevant aspects for the problem solving process. Because the main interest was on the process of problem solving there was no time limit given to the subjects. Raven's Matrices is a language-free intelligence test. In Werani (2011) they are used as problem solving tasks, precisely because in the literature they are generally assumed to be independent of world knowledge; moreover, they are seen as *language free* tasks. Hence, it was interesting to test if the tasks could actually be solved without any language/speech. The tasks consist of rectangular figures (called matrices) with one part missing; the subjects have to identify the correct supplement in a set of several complementary choices (see Figure 1).

Raven's Matrices consist of five sets (set A to set E) that are increasingly difficult; Set A is the easiest, and set E includes the most difficult tasks. For this exploration it is necessary to use an established research instrument, whose increasing difficulty is confirmed, for the interpretation of the results.

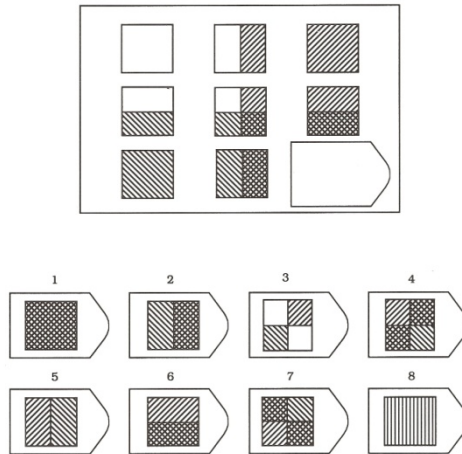


Figure 1: C8, an example out of Raven's Matrices

The investigation includes three samples: (1) The first sample ($n = 22$) was investigated with the method of thinking aloud. For the evaluation 22 verbal thinking-aloud protocols are available as data; also time duration and quality of the solution were measured. The sample consisted of 11 men and 11 women, the median age was about 31 years. The utterances of these problem solving subjects were taped and then transcribed. The recording times ranged from 20 to 70 minutes. (2) The control sample ($n=22$) was not investigated with the method of thinking aloud. These subjects were only instructed to solve the tasks. For the measurement of time duration and quality of the solution they were instructed to utter the number of the task and their solution. This sample was matched to the first sample, hence 11 men and 11 women were investigated (median age 27 years). For the further analysis time duration and quality of solution were available. (3) For exploration a third sample ($n=10$) was added involving aphasic patients (4 slight, and 6 medium severe aphasics). Because of the language impairment these patients were not investigated with the method of thinking aloud. The aim was to examine the assumption that the test is language free and that the patient should therefore be able to solve the problems with a visual strategy.

For the quantitative analysis as well as for the qualitative analysis the speaking-thinking-protocols were operationalized by being categorized. The chosen categories cover all examined features so that all phrases of the speaking-thinking-protocols can be assigned. Each category is defined precisely such that unambiguous assignment can be made, and double assignments are almost impossible (reliability of study $r=0,99$). A basic distinction of the categorization is between a material level and a modality level: (A) The material level contains statements related to the formal aspect of the task and the problem solving process itself; (B) The modality level subsumes all those expressions that are more about the situation and how to cope with the situation, or other associations.

On the material level (A) two broad categories can be distinguished: (1) Formal expressions are related to the formal procedure, including expressions which emerge from the instruction. All subjects had to name the task at the beginning and the chosen figure at the end of each task. Therefore, categories for formal procedures (e.g. "I am going to C10"), naming the solution (e.g. "solution is number one"), or to cancel the solution process (e.g. "I will go the next one") are distinguished. (2) Problem solving speech includes all statements which are directly related to the problem solving process. Here, four subcategories are differentiated: (a) problem representation (the subject names or describes the considered figures of the matrices), (b) questions (the subject interviews itself in the context of the solution process), (c) conjunctions (the subject identifies the goal of the action or the intention (final conjunction), the subject refers to conditions or draws conclusions (conditional conjunctions), or the subject highlights inconsistencies or contradictions (adversative conjunctions), (d) solution control (the subject confirms or constitutes the decision, or the subject only considers a solution, which is followed by a new problem solving sequence).

On modality level (B) three categories are distinguished: (1) situational relations, (2) creative relations, and (3) hesitations. The situational relations do not relate directly to the material, but to the current situation of the subject; the subject evaluates the action and reflects the situation; typical examples are common exclamations like "Uh, now it gets difficult" or expressions of uncertainty. The creative relations mirror personal preferences in vocabulary and expression (the man-

ner can be just phonemic as well as semantic). Finally, the hesitations contain delays and breaks.

Seven analyses and their general results

The results of the analyses of the protocols show clearly the interweaving of speech processes and higher mental functions (problem solving processes). In a *first analysis* quantitative factors like time and correct results were investigated. In all three samples the time duration rises from Set A (easy) to Set E (difficult), while the number of correct results falls. Sample one (with MTA) needs significantly more time than sample two (without MTA); most time is used by the aphasic sample. The most mistakes were made by the aphasics, sample one obtained the best results. In more detail, the use of word and phrases in sample one increases with the difficulty of the tasks. The more difficult the tasks are, the more the subjects speak; analyzing the categories it is obvious that problem solving speech is most frequent.

The *second analysis* focuses on correlations between time, correct solutions, and problem solving speech. Partial correlations were done, because for example the factor time could be responsible for better results. The results were two significant correlations between problem solving speech and correct solutions ($p=0,043$) as well as between problem solving speech and time ($p=0,000$). The correlation between time duration and correct solutions was not significant ($p=0,920$). To conclude, problem solving speech and good results in problem solving are connected. Time is thus not a factor contributing to improved problem solving results.

The *third analysis* focused on differences between good and bad problem solvers. The categories "good" and "bad" depend on the results (extreme groups). These two groups were investigated with respect to the language categories. The general result is that the good problem solvers use significantly more problem solving speech than the bad problem solvers. The bad problem solvers in contrast use significantly more formal utterances.

Investigating the speech style in *analysis four* shows no differences between good and bad problem solvers. Interestingly, the analysis of speech style in relation to the problem solving process of each subject shows differences (*analysis five*). Hence, speech style states something about the individual and the problem solving

process; speech style is an indicator for individual difficulties in problem solving processes but it does not differentiate between individuals.

The *sixth analysis* revealed four different speaking-thinking types; this analysis is explained below, because it is important for speech profiles. The *seventh analysis* concerned mistakes in tasks and raised the question as to what happens with speech when the problem is solved incorrectly. The results of this analysis showed that speaking is also able to disturb the problem solving process.

To sum up, all these analyses show that the quality of speech influences the solution process in different ways. Above all it becomes obvious that speech can have a favourable or unfavourable effect on the problem solving processes – depending on the quality of speech. Good problem solvers differ markedly from bad ones in their use of language (see also e.g. Bartl & Dörner 1998).

An analysis of four Speaking-Thinking-Types

The following analysis (analysis six) presents four speaking-thinking types based on a visual data exploration of the individual speech profiles (cf. VisMaster 2011). Each individual profile includes frequent linguistic categories of the utterances for each set. Therefore, the speech profiles charted as line plots include the formal expressions (A1), problem solving speech (A2), and situational relations (B1) (creative relations (B2) and hesitations (B3) were not frequent and therefore not included in the analysis). All 22 profiles based on characteristic features of the line plots can be classified into four groups. Strikingly, these four groups can be represented in a 2 by 2 table: on the one hand, there is the quality of the solution (there are good or bad problem solvers), and, on the other hand, there is the speech extent (there are sparsely speaking speakers or verbose speakers). The four types are named in a characterizing way: (1) pragmatic type, (2) talkative type, (3) doubting type, (4) taciturn type.

Figure 2 shows the group's distribution in a 2 by 2 table. The group number reflects the results of the test, thus, type 1 is the best one, and type 4 is the worst one.

	Sparsely speaking Speakers	Verbose Speakers
Good problem solvers	(1) pragmatic type	(2) talkative type
Bad problem solvers	(4) taciturn type	(3) doubting type

Figure 2: The distribution of the speaking-thinking-types

From the point of view of these results, it is obvious that the quantity of speech is only one factor in good problem solving results; however, other qualitative factors of speech must be involved. Figure 3 shows the typical profile of each type. The different length of each profile illustrates the proportion of the average of utterances of each type. Most utterances are produced by type 2; fewest utterances by type 4, type 1 and 2 are in between.

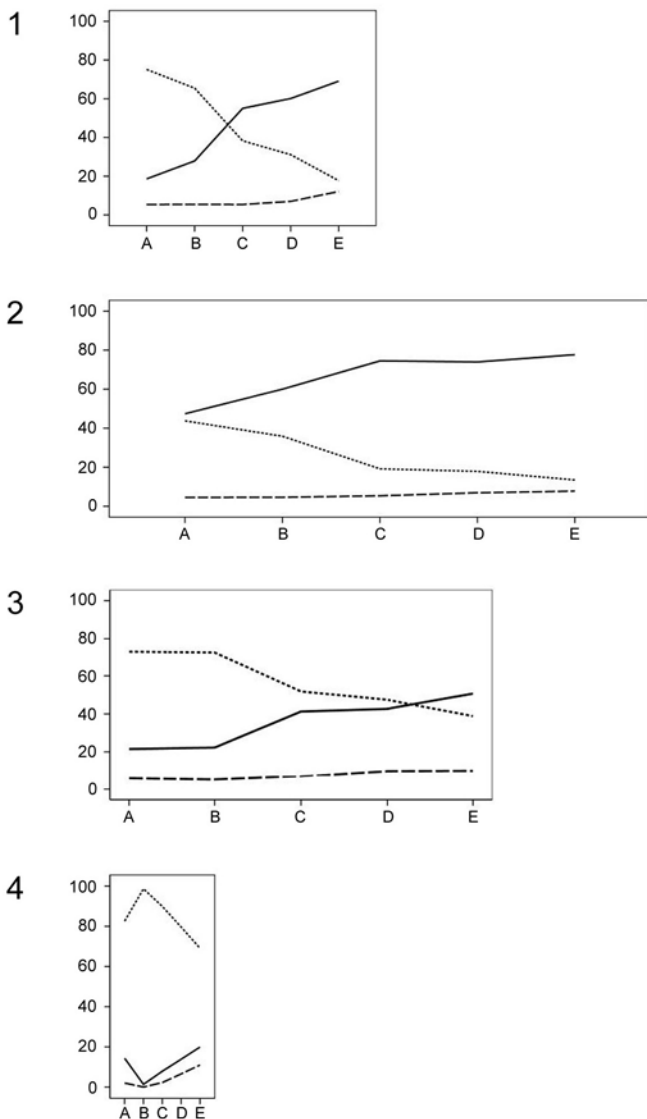


Figure 3: Profiles of the four types (dotted = formal expressions, black = problem solving speech, dashed = situational relations): (1) pragmatic type, (2) talkative type, (3) doubting type, (4) taciturn type.

The analysis of variance showed significant main effects for quantity of speech and for quality of problem solving. The significant effects for the quantity of speech were between type1-type4 ($p = 0.023$), type 2-type 4 ($p = 0.029$), type 3-type4 ($p = 0.024$). With regard to the quality of problem solving it is interesting that only two main groups can be distinguished: good and bad problem solvers (type1 and 2 – type 3 and 4: $p=0.000$). There were no significant effects between the good problem solvers type 1 and 2 ($p=0.846$), and between the bad problem solvers type 3 and type 4 ($p = 0.065$).

In the following we will describe each of the four types using the speaking-thinking-protocols. To compare the subjects of each group and to draw up the characteristic features for each type task C8 (figure 1) was chosen out of the Matrices. Of particular interest are the different problem solving strategies.

(1) Pragmatic type

Figure 3(1) shows the typical speech profile of the pragmatic types. An obvious feature is the opposite direction of the profile: Formal expressions reduce from set A to set E, while the problem solving speech rises continuously; especially in set C there is an abrupt rise. Thus, set E shows the most problem solving speech. There are two interpretations possible: first, it is an indication of subjective increasing difficulty, and second, it is an adaptation of speech to the increasing complexity of the problems. In example 1, the pragmatic type subject 02 produces in C8 only little speech; starting with the obligatory formal expression and orientating oneself subject 02 gets into the problem solving process (see the square bracket in the example), aspects of reasoning, asking questions, and self-controlling lead to the solution of the problem and the final formal utterance. Regarding the percentages of the different categories it is clear that problem solving speech is predominate. In other words, subject 02 adapts his speech to the difficulty of the problem.² Typical for an orientation towards the problem solving process is reasoning or asking.

In summary, the pragmatic type produces problem solving speech. When he perceives a problem then he handles it; this is typical for these profiles. Speech is par-

² In this investigation were no gender differences. Nevertheless the subjects are seen in their gender; gender is labelled by using correct language forms.

ticularly used for problem solving, it is short, analytical, and a lot of questions are asked; to be more precise, speech is used in its mediating function. The mediating function occurs in two functions as mentioned above: first, a thought must be stabilized in a word, and then it is possible to reflect on the word. Questions, for example, can be understood as a means of reflection, the problem solver supports the solution process by urging himself to think about diverse aspects of the solution aspect. Furthermore, the use of conjunctions points to the possibility of analysis. Conjunctions embody the reflection process. This use of reflection distinguishes good from bad problem solvers.

Example 1: Pragmatic type, subject 02

(37", correctly solved, number of phrases: 10)

English translation

C8 / [formal expression]

aha / .. / .. / [orientation, self-initiation] /

it must be hatched diagonally/ [problem solving process, reasoning] /

aha / [affirmation, self-initiation] /

left hatched or hatched to the right? / [problem solving process, request by questions to specify the reasoning] /

so, all hatched / [problem solving process, again reasoning] /

where's that? / [problem solving process, request by questions] /

.. / this is- this is not- not logical / [orientation, self-control] /

after all / now I see the figure / [problem solving process: affirmation of the problem solution] /

that's number one in C8 [formal expression: naming the solution]

(2) Talkative type

The talkative type is characterized by the use of problem solving speech all the time, so that problem solving speech takes up the largest part of verbal utterances (see figure 3(2)). That seems like a strategy to counter possible problems by using problem solving speech so to say to avoid problems. In contrast to the pragmatic type this kind of use seems not to be economical, because problem solving speech is not only used when it is needed. Nevertheless, the talkative type shows problem solving results as good as those of the pragmatic type.

It would be interesting in a further investigation to distinguish these two types; for example by adding a time limit. Although it was shown that time did not influence the results both groups could react in different ways when they have to solve the

problems as quickly as possible. We would expect no change in the first three sets of the Raven Matrices for the pragmatic type, because here they produce little speech. For the talkative type two assumptions can be made: (1) the subjects get along well talking little and to a certain extent when it is needed, (2) subjects become worse, because due to the time constraint they are not able to solve the problems successfully through (enough) speech.

The following example 2 is for the talkative type. The first and obvious difference in contrast to the pragmatic type is the higher number of phrases in the same task. After the first obligatory formal expression subject 22 also gets into the problem solving process immediately while doing a first analysis with reasoning. She comes relatively quickly to the solution, but then she performs a fairly extensive solution control. She also expresses herself situationally, when she regards the possible solutions under the aspect of whether they are nice or not; that reflection does not bear problem solving power in a classical cognitive meaning.

The characteristic feature of the talkative type profile is that these subjects use plenty of problem solving speech all the time. For this reason it can be supposed that the talkative type is aware of the power of (inner) speech, and, therefore, they use speech in an extensive and rich way as a basic strategy for problem solving. The use of situational relations also tends to be positive so that speech is additionally used in a positive, motivating manner. In view of these facts the influence of speech on the problem solving process is obvious. The point at issue is that not only problem solving speech is relevant (according to cognitive problem solving theory) but also the whole attitude to the problem, especially in a motivating and positive manner. It would appear that for the talkative type it is necessary to speak more generally to perceive the problem as an entire figure (as proposed in Gestaltpsychology). We need further insight to differentiate what is necessary for the talkative type for the problem solving process. Thus far we can conclude that not everything we speak does have an intended purpose, but it is still needed for the solution process with respect to its *attitude and attribution*. It should be stressed again that it is characteristic of the talkative type to maintain a positive attitude and attribution to him/ herself and to the problem.

Example 2: Talkative Type, Subject 22

(1'19", correctly solved, number of phrases: 23)

English translation

C8 / .. / C8 / .. / [formal expression] /

again such a rhythm / which is above . these things across / mhm / thus empty / filled in then / and then . down / there is once more / .. / .. / Mh / .. / right . joined with somewhat else / and it then gives this netting wire / [problem solving process: first analysis] / .. / and that's also completely filled / puts it over the other / and below it is completely filled / and then it lies down over the whole thing / so I need a completed netting wire / [problem solving process: reasoning] /

that is number one / [formal expression: naming the solution]

.. / mhm / the others are also quite nice / .. / but you could also use the number five / because this is like a window, which you can open / that would be anyway nice / but it does not fit naturally / so well / that was the number one / [situational relations]

that was the number one / [formal expression: naming the solution]

(3) Doubting type

At first sight, the doubting type shows a profile similar to that of the pragmatic type (see figure 3(3)): formal expressions reduce over the sets, while the problem solving speech increases. But two main differences can be observed: first, the intersection of the frequency of formal expressions and problem solving speech in the doubting type profile is considerably later than in the pragmatic type, and the percentage of problem solving speech is lower with the doubting type. Second, the bulk of the situational relations has a demotivating content, which could have an extensive impact on problem solving processes. The profile shows that situational relations increase with the complexity of the problems: there is a maximum in set E. Also in few talkers in this group the situational relations accumulate.

The typical characteristics for a doubting type are illustrated in example 3. The problem solving process starts in a manner similar to examples 1 and 2: first the formal expression is uttered then subject 21 enters into the problem solving process. The main difference is that the first problem solving expression involves a negative evaluation (see squared brackets). It follows an alternation between problem solving sequences and negative evaluations. At the end she finds the correct solution which is still commented negatively. An actual problem is that these situational relations have real negative self-influence, such as the expressions in

subject 21 like: "oh, I notice that somehow my concentration is getting worse / .. / .. / . mh shit / I do not manage that ." The quality of subject 21's results is worse than other subjects, and in my opinion it is the qualitative aspect of her inner speech which is responsible for the solution process. In short, negative self-influence through negative self-evaluations in inner speech leads to bad problem solving processes. Therefore, as a consequence of these results an intense discussion about interiorization must follow. The question to be stressed is how speech can be interiorized to lead to an efficient quality. Speech patterns and especially negative evaluations in the context of the interaction processes appear within the interiorization at a later stage as a negative impact on the problem solving process.

Example 3: Doubting type, subject 21

(3'42", correctly solved, number of phrases: 33)

English translation

at C8 / [formal expression] /

.. / .. / I do not somehow tap the systematic immediately / [problem solving process: negative evaluation] /

and I only see some strips in front of me / [problem solving process: presentation] /

notice that somehow my concentration is getting worse / .. / .. / mh shit / I do not manage that / [situational relation, negative evaluation] /

.. / mh / what's the systematic? / [problem solving process: initiating question] /

I must now proceed somehow concentrated / [situational relation: motivational request] /

le. half there is somewhat over it / then this there that then this / [problem solving process: problem representation] /

.. / mh / .. / my eyes are running somehow confused over the paper / .. / and I feel I did not manage what to put in / that cannot be true / [situational relation: negative evaluation] /

.. / all so so / .. / mh / .. / this is complete / [problem solving process: again representation] /

.. / mh / .. / it is somehow ambiguous what to put in now / and I do not manage / and I'll get somehow visibly nervous / because I think that's beyond the time frame here, themselves / .. / and I cannot see anything anymore between these grids and strips and I I do not perceive the systematic / and I think to myself it cannot be so difficult, really not / .. / I do not cotton on that just do not know what it is / [situational terms: negative evaluation] /

the square above is not filled somehow / on the right with lines left / there so there so / [problem solving process: presentation] /

there must be a connection between the figures / [problem solving process: initiating request] /

.. / .. / mh / .. / .. / hm / .. / .. / this this this / [problem solving process: presentation] /

and then it may be, oh well, maybe it is empty now / there is still something about it and pulls it up / [problem solving process: reasoning] /

.. / .. / I simply take the . one / [formal expression: naming solution] /

good / wonderful / [Situational relation: positive evaluation with an ironic intonation]

The general profile of the doubting type is similar to the pragmatic type. One might think that a doubting type could change easily into a pragmatic type. But the use of speech and especially the influence of inner speech seem to prevent this change. A typical feature for the doubting type is that he realizes the problems to late. When he notices the problem he reacts with situational relations instead of intense use of problem solving speech. Therefore, inner speech as a mediating activity for problem solving is obviously not used for the problem solving process but for evaluating the situation; the reason is that especially negative evaluating speech disturbs the problem solving process. It can be assumed that the doubting type shows poorer results than the pragmatic type because doubting subjects do

not focus on the problem at the decisive point, but lose themselves in situational and personal mental states. Therefore, it is clear now that speech may have a negative influence on the problem solving process. This result can be seen in contrast to cognitive problem solving theory, because the doubting type is able to use relevant problem solving strategies. Thus, the modality level interferes with the problem solving process. We have to go a step further by highlighting the interiorization process, because not only the interiorization of language skills has to be under consideration but rather attitudes, evaluations, norms, and values.

(4) Taciturn type

Finally, the main characteristic of the taciturn type (figure 3(4)) is the extensive production of formal expressions; this kind of expression is dominant over all five sets. In other words, problem solving speech is never given the opportunity to influence the problem solving process in a positive manner. The contention that problem solving speech is needed to solve these non-verbal problems is clearly supported by the findings of this study. Subjects of this type show the worst results, which confirms the fact that inner speech supports the problem solving process and promotes positive results.

Example 4a: Taciturn type, subject 14

(59'', correctly solved, number of phrases: 4)

English translation

C8 / [formal expression]

.. / .. / .. / .. / .. / .. / hm? / [problem solving process: unspecific question] /

.. / I have to look at that exactly / [problem solving process: initiating]

.. / [break] /

Is it symbol one? / [formal expression: naming solution in form of a question]

Example 4b: taciturn type, subject 17

(10'', correctly solved, number of phrases: 2)

English translation

C . 8 / [formal expression]

.. / .. / eins / [formal expression]

The examples 4a and 4b of taciturn types are self-explanatory: subject 14 enters the task with the formal expression and then produces an interjection which can

be interpreted as a question and therefore as a minimal form of problem solving speech. Finally she states the solution in the form of a question. Subject 17 does not produce any problem solving speech; he utters only the two necessary formal expressions. It is not the case that using speech assures good problem solving solution; it is not an all-or-none law. Rather, the manner and quality of speech are responsible for good problem solving results. The taciturn type is able to solve some problems, but nevertheless these subjects are the worst of all. This result should provide an indicator of a correlation between wordlessness and bad results. Correct solutions in the taciturn type appear by chance, and it seems that these subjects are not able to use speech in its mediating function to come to a thinking strategy. Hence, although this task (C8) was solved correctly, the not-speaking-strategy in a problem solving task is a disadvantage for them in the long run.

In short, the taciturn type is characterized by sparing use of words. This raises the question of whether these subjects did not want to apply problem solving speech in its mediating function, or whether they cannot. Like the conclusion above this question leads to an intense debate about the quality of interiorization. The consequences become clear of not using speech in its mediating function. Once again, if thought are not stabilized in the word, there will not be a basis for reflection process. The taciturn type is not able to solve problems because he does not construct a basis for reflection through speech.

This analysis shows that there are different speaking-thinking types with various speech patterns and corresponding problem solving strategies. These strategies become evident through speech. The pragmatic and talkative types show a positive speech strategy, whereas the doubting type shows that speech with negative evaluation leads to weak solutions. Not to use speech is the worst strategy as shown by the taciturn type. Empirically it is a challenge to investigate the connection between speech profiles and higher psychological functions.

We observed a huge variation of speech profiles from silent to verbose speakers. To waste speech or to use negative speech impulses leads to weak problem solving results. In contrast, good problem solving results are connected with pragmatic speech or a lot of speech with positive evaluations and stimulations.

4. Conclusion: Perspectives of Speaking-Thinking-Types

Theoretically, the role of speech and inner speech in relation to higher psychological functions is of utmost importance. In Soviet Psychology the genesis, structure, and function of inner speech are well established. Inner speech is speech for myself; it is a manifestation of speech in the same way as external and written speech are. This internal manifestation is in my opinion the richest, most common and most intimate one, and it is possible with inner speech to leave much unsaid. Inner speech is relevant to stabilization (of thoughts in words), self-regulation, and cooperation.

It is still challenging to find further empirical evidence for the relationship between speech processes and problem solving. Speech and problem solving processes are clearly interwoven, i.e. speech is a means in mediating thinking processes. Furthermore, the quality of speech plays an important role in relation to good or bad problem solving strategies. The analysis of speaking-thinking protocols in Werani (2011) leads to different speaking-thinking types. These four types show different speech profiles and use different strategies for problem solving. Interestingly, the quantity of speech is not a prediction for good problem solving. The main factor for good problem solving is the quality of speech. Therefore, one of the results is that speech could be both advantage and disadvantage for problem solving. Especially the situational relations influence the solution process in a positive or negative way. Hence, the problem solving process depends on the quality of speech in terms of problem-related speech and positive stimulation and evaluation. Both attitude and attribution are key aspects of problem solving processes; their importance can hardly be exaggerated.

It has been claimed that speech profiles allow investigation of higher psychological functions. A fundamental question for a further analysis of speech profiles is what exactly can be inferred from them. Can speech profiles be used as a window into specific higher psychological processes? What kind of statement is possible on the basis of speech profiles? Speaking is due to inter- and intrapsychological processes, and it is a dynamic and variable process. Therefore, to enter into a discussion about speech profiles brings up the question of whether speech profiles are meaningful and how they can be investigated.

First of all the *concept of higher psychological functions* must be further clarified. The presented analysis refers to a relation between speech profiles and problem solving strategies. Problem solving is only one example of the thinking processes and hence it is only a part of the connection between speech profiles and higher psychological functions. Therefore, it only can be interpreted as a detail and all other considerations about speech influence in thinking remain speculative.

In Soviet psychology the study of personality in relation to speech is also a focus of higher psychological functions (Anan'ev 1963). The investigation of the self can be seen as an extension of this tradition; it is for example part of dialogical self theory (e.g. Bertaux 2004; Hermans 2001) as well as social psychology (Kraus 2000). Whether (inner) speech is attributed to the development of personality also raises the question to what extent personality profiles are mediated by speech.

The following three factors have to be clarified in further investigations about the relation between speech and higher psychological functions: (1) positioning of the speaker, (2) genre of speech/of language activity, and (3) investigation method.

(1) The first factor considers the *positioning of the speaker*, which is manifested and performed in sociocultural conditions for example, speech community, linguistic repertoire and style, and various registers (Harré & van Langenhove 1999). Furthermore, the speaker's class and role must be considered just as attitude, motives and attributions. In applied linguistics, especially in forensic linguistics for example, voice, language and manner of speaking are used for speaker identification (Schall 2011). But speech is ambiguous, it is a highly dynamic process newly constructed in each situation and itself constructing the situation; hence the search for a linguistic fingerprint is without effect. For example, the register of style is very diverse between subjects and it is also diverse between specific positionings of one subject. Speech profiles in relation to positioning hence only can be understood as dynamic processes. In short, speech profiles are specific depending on positioning. It is assumed that these aspects influence speech profiles significantly. Discursive action is therefore a main topic of the analysis, and there is special interest in how individuals build and represent their speech profiles through speaking interactions (Lucius-Hoene & Deppermann 2004). In the broader sense, speech profiles are involved in production and representation of identity.

(2) The second factor concerns the choice of the higher psychological functions to be investigated. Which speech/linguistic *genre* (Bakhtin 1986) is suitable for an investigation of a specific higher psychological function? Vygotsky gives only a few examples for higher psychological functions such as verbal thinking, logical memory, attention, volition (Vygotsky 1931/ 1997). This list must be expanded, because it is assumed that speech processes are involved in further functions like autobiographical memory, problem solving, perception and visual-spatial functions. To draw nearer to each function a specific genre needs to be selected. The speech/ linguistic genre represents the condition for each speech profile. Especially for research into the relationship between speaking and thinking self-reflexive genres are preferred, e.g. thinking about a special theme about oneself, seeing oneself solving a specific problem, talking about a problematic theme in general or specific to oneself.

(3) The third factor deals how speech profiles are influenced by the choice of method. Essentially, process-oriented and result-oriented methods must be distinguished. Whereas result-orientated methods focus on a result, process-oriented methods are interested in dynamic processes, as for example the actual process of speech and its linking to higher psychological functions. Therefore, process-oriented methods are preferred. This could be done by combining methods like thinking aloud with auto-confrontation techniques and interviewing (e.g. Clot 2005; Flick 2010).

Finally, the investigation of the relation between speech and higher psychological functions is challenging. It must be pointed out that this analysis is quite difficult, but very fruitful and important for understanding higher psychological functions. The positioning of the speaker is as important as the specific genre is, and the investigation method which the analysis involves. It is shown in Werani (2011) that the relation between speech and higher psychological processes is dynamic. The expected results in further investigations will be extensive and concern to language acquisition as well as to speech pathological aspects. Ultimately, the results should clarify the relation between speech and higher psychological function over a wide range of speakers.

References

- Achutina, T.V. (2004). Vygotskijs „Innere Rede“: zum Schicksal eines Konzepts. [Vygotsky's „Inner Speech“: the destiny of a concept] In K. Ehlich & K. Meng (Hrsg.). *Die Aktualität des Verdrängten* (pp. 93-108). Heidelberg: Synchron Publishers.
- Achutina, T.V. (1978). The role of inner speech in the construction of an utterance. In *Soviet psychology* 16, 3, 3-31.
- [Ananev, B.G.] Ananjew, B.G. (1963). *Psychologie der sinnlichen Erkenntnis*. [Psychology of sensorial cognition] Berlin: VEB Deutscher Verlag der Wissenschaften.
- Bakhtin, M. M. (1986). *Speech genres & other late essays*. Austin (TX): University of Texas Press.
- Bartl, C. & Dörner, D. (1998). Sprachlos beim Denken – zum Einfluss von Sprache auf die Problemlöse- und Gedächtnisleistung bei der Bearbeitung eines nicht-sprachlichen Problems. [Speechless when thinking – about the role of speech for problem solving] *Sprache und Kognition*, 17(4), 224-238.
- Bertau, M.-C. (2011). *Anreden, Erwidern, Verstehen. Elemente einer Psycholinguistik der Alterität*. [Addressing, replying, and understanding. Elements of a psycholinguistics of alterity.] Berlin: lehmanns media.
- Bertau, M.-C. (2008). Voice: A pathway to consciousness as ‘social contact to oneself’. *International Psychological and Behavioral Science*, 42(1), 93-113.
- Bertau, M.-C. (2004). *Aspects of the dialogical self*. Berlin: Lehmanns Media.
- Bühler, K. (1934/1990). *Theory of Language: the representational function of language*. Amsterdam u.a.: John Benjamins Pub Co.
- Clot, Y. (2005). L'autoconfrontation croisée en analyse du travail - l'apport de la théorie bakhtinienne du dialogue [Crossed autoconfrontation in analysis of work – the contribution of Bakhtin's theory of dialogue]. In L. Filletaz & J. P. Bronckart (Eds.), *L'analyse des actions et des discours en situation de travail. Concepts, méthodes et applications* (pp. 37-55). Leuven: Peeters.
- Flick, U. (2010). *Qualitative Sozialforschung*. [Qualitative social research] Reinbek bei Hamburg: Rowohlt.
- Friedrich, J. (1993). *Der Gehalt der Sprachform. Paradigmen von Bachtin bis Vygotskij*. [The content of the form of language. Paradigms from Bakhtin to Vygotsky] Berlin: Akademie.
- [Gal'perin, P.] Galperin, P.J. (1957/1972). Die geistige Handlung als Grundlage für die Bildung von Gedanken und Vorstellungen. [Mental action as a basis for the formation of thought and imagination] In P.J. Galperin & A.N. Leontjew (Eds.), *Probleme der Lerntheorie* (pp. 33-49). Berlin: Volk und Wissen.
- Harré, R. & van Langenhove, L. (1999). *Positioning theory: Moral contexts of intentional action*. Oxford (UK): Blackwell.
- Hermans, H. J. M. (2001). The dialogical self: Toward a theory of personal and cultural positioning. *Culture & Psychology*, 3, 243–281.
- Hildebrand-Nilshon, M. (2004): Zum Kontext von Sprache und Kommunikation in den Arbeiten von L.S. Vygotskij und A.N. Leont'ev. [The context of language and communication in the work of L.S. Vygotsky and A.N. Leont'ev] In K. Ehlich & K. Meng (Eds.), *Die Aktualität des Verdrängten* (pp. 227-253). Heidelberg: Synchron Publishers.
- Hörmann, H. (1981). *Einführung in die Psycholinguistik*. [Introduction to psycholinguistics] Darmstadt: Wissenschaftliche Buchgesellschaft.

- Humboldt, W.v. (1827/1995): Über den Dualis. [On the dua] In M. Böhler (Ed.), *Wilhelm von Humboldt. Schriften zur Sprache* (pp. 21-29). Stuttgart: Reclam.
- Humboldt, W.v. (1830-35/1995). Einleitung zum Kawi-Werk. [Introduction to the Kawi] In M. Böhler (Ed.), *Wilhelm von Humboldt. Schriften zur Sprache* (pp. 30-207). Stuttgart: Reclam.
- Keiler, P. (2002). *Lev Vygotskij – ein Leben für die Psychologie*. [Lev Vygotsky – a life for psychology] Weinheim und Basel: Beltz.
- Keiler, P. (1997). *Feuerbach, Wygotski und Co.* [Feuerbach, Vygotsky, and Company] Berlin, Hamburg: Argument.
- Knobloch, C. (2003). Geschichte der Psycholinguistik. [A history of psycholinguistics] In G. Rickheit, Th. Hermann & W. Deutsch (Eds.), *Psycholinguistik ein internationales Handbuch* (pp. 15-33). Berlin, New York: de Gruyter.
- Kratzmeier, H. & Horn, R. (1988). *Standard Progressive Matrices (SPM) manual*. Weinheim: Beltz Test Gesellschaft.
- Leont'ev, A.A. (1984). Sprachliche Tätigkeit. [Language activity] In A.A. Leont'ev; A.N. Leont'ev & E.G. Judin (Eds.), *Grundfragen einer Theorie der sprachlichen Tätigkeit* (pp. 31-44). Berlin: Akademie.
- [Leont'ev, A.A.] Leontjew, A.A. (1975). *Psycholinguistische Einheiten und die Erzeugung sprachlicher Äusserungen*. [Psycholinguistic units and the production of language utterances] Berlin: Akademie.
- Lucius-Hoene, G.; Deppermann, A. (2004). Narrative Identität und Positionierung. [Narrative identity and positioning] *Gesprächsforschung – Online-Zeitschrift zur verbalen Interaktion*, 5, 166-183 (www.gespraechsforschung-ozs.de).
- Luria, A. R. (1982). *Language and cognition*. New York u.a.: John Wiley and Sons.
- Mercer, N. & Littleton, K. (2007) *Dialogue and the development of children's Thinking: a sociocultural approach*. London: Routledge.
- Osgood, C. & Sebeok, T.A. (1954, Eds.). *Psycholinguistics: A survey of theory and research problems*. Baltimore, MD.
- Rojas-Drummond, S., Gómez, L. & Vélez, M. (2008). Dialogue for reasoning. Promoting exploratory talk and problemsolving in the primary classroom. In B. van Oers, W. Wardekker, E. Elbers, R. van der Veer (Eds.), *The transformation of learning. Advances in cultural-historical activity theory* (pp. 319-341). New York: Cambridge University Press.
- Sappok, Ch. (1999). Zur Psycholinguistik in Russland. [Psycholinguistics in Russia] In H. Jachnow, & K.D. Seemann, (Eds.), *Handbuch der sprachwissenschaftlichen Russistik und ihrer Grenzdisziplinen* (pp. 1191-1214). Wiesbaden: Harrassowitz.
- Schall, S. (2011). Forensische Linguistik. [Forensic linguistics] In K. Knapp, G. Antos, M. Becker-Mrotzek, A. Deppermann, S. Göpferich, J. Grabowski, M. Klemm & C. Villiger (Eds.), *Angewandte Linguistik* (pp. 600-618). Tübingen und Basel: Franck.
- Sokolov, A.N. (1972). *Inner speech and thought*. New York: Plenum Press.
- Steinthal, H. (1970) *Kleine sprachtheoretische Schriften*. [Small works on language theory] Bumann, W. (Ed.). Hildesheim, New York, VII-XII: Olms.
- Steinthal, H. (1881/1972). Einleitung in die Psychologie und Sprachwissenschaft.² [Introduction to psychology and linguistics] Berlin. In W. Bumann (Hrsg.), *Heymann Steinthal. Abriss der Sprachwissenschaft. Bd. 1*. Hildesheim, New York: Georg Olms.
- Steinthal, H. (1851): *Der Ursprung der Sprache, im Zusammenhang mit den letzten Fragen alles Wissens*. [Genesis of language in relation to the final questions of all knowledge] Berlin: Dümmler.

- Valsiner, J. & Van der Veer, R. (2000). *The social mind. Construction of the idea*. Cambridge: University Press.
- VisMaster (2011). *Visual Analytics Process*. <http://www.vismaster.eu/faq/the-visual-analytics-process>. Version 03 2011.
- Vygotsky, L.S. (1934/1987). Thinking and speech. In R. W. Rieber & A. S. Carton (Ed.), *The collected works of Vygotsky, Problems of general psychology, Volume 1* (pp. 37-285). New York and London: Plenum. [Deutsch: Vygotskij, L.S. (1934/2002): Denken und Sprechen. Weinheim und Basel: Beltz.]
- Vygotsky, L. S. (1931/1997). The history of the development of higher mental functions In R. W. Rieber (Ed.), *The collected works of Vygotsky, The history of the development of higher mental functions, Volume 4*. New York: Plenum Press. [Deutsch: Vygotskij, L.S. (1931/1992): Geschichte der höheren psychischen Funktionen. Fortschritte der Psychologie Bd. 5. Münster, Hamburg: Lit.]
- Vygotsky, L.S. (1931/1998). Dynamics and structure of the adolescent's personality (Ch. 5). In R.W. Rieber (Ed.), *The collected works of L.S. Vygotsky. Volume 5* (pp. 167-184). Child Psychology. New York and London, Plenum Press. [Deutsch: [Vygotskij, L.S.] Wygotski, L.S. (1931/1987): Pädologie des frühen Jugendalters. In J. Lompscher (Hrsg.), Lew Wygotski. Ausgewählte Schriften. Band 2 (S. 307-658). Köln: Pahl-Rugenstein.]
- Vygotsky, L.S. (1930a/1997). On psychological systems (Ch. 6). In R.W. Rieber & J. Wollock (Eds.), *The collected works of L.S. Vygotsky. Vol. 3. Problems of the theory and history of psychology* (pp. 91-107). New York and London, Plenum Press. [Deutsch: [Vygotskij, L.S.] Wygotski, L.S. (1930a/1985): Psychische Systeme. In J. Lompscher (Hrsg.), Lew Wygotski. Ausgewählte Schriften. Band 1 (S. 319-352). Köln: Pahl-Rugenstein.]
- Vygotsky, L.S. (1930b/1997). The instrumental method in psychology (Ch. 5). In R.W. Rieber & J. Wollock (Eds.), *The collected works of L.S. Vygotsky. Vol. 3. Problems of the theory and history of psychology* (pp. 85-89). New York and London, Plenum Press. [Deutsch: [Vygotskij, L.S.] Wygotski, L.S. (1930b/1985): Die instrumentelle Methode in der Psychologie. In J. Lompscher (Hrsg.), Lew Wygotski. Ausgewählte Schriften. Band 1 (S. 309-317). Köln: Pahl-Rugenstein.]
- Werani, A. (2011). *Inneres Sprechen – Ergebnisse einer Indizienuche*. [Inner speech – empirical evidence based on speech profiles] Berlin: Lehmanns Media.
- Werani, A. (2012, in press). A review of inner speech in the cultural-historical tradition In A. Yasnitsky, R. van der Veer & R. Ferrari, M. (Eds.), *Handbook of cultural-historical theory*. Cambridge: Cambridge University Press.
- Wertsch, J.V. (1985). *Vygotsky and the social formation of mind*. Cambridge/Mass., London: Harvard Univ. Press.

Appendix

Example 1 – 4 in English and German

Example 1: Pragmatic type, subject 02

(37'', correctly solved, number of phrases: 10)

English translation

C8 / [formal expression]

aha / .. / .. / [orientation, self-initiation] /

it must be hatched diagonally/ [problem solving process, reasoning] /

aha / [affirmation, self-initiation] /

left hatched or hatched to the right? / [problem solving process, request by questions to specify the reasoning] /

so, all hatched / [problem solving process, again reasoning] /

where's that? / [problem solving process, request by questions] /

.. / this is- this is not- not logical / [orientation, self-control] /

after all / now I see the figure / [problem solving process: affirmation of the problem solution] /

that's number one in C8 [formal expression: naming the solution]

Original

C8 / [Formale Äußerung] /

aha / .. / .. / [Orientierung, Selbstinitiiierung] /

das muss schräg schraffiert sein / [Problemlöseprozess, Schlussfolgerung] /

aha / [Bestätigung, Selbstinitiiierung] /

nach links schraffiert oder nach rechts schraffiert? / [Problemlöseprozess, Aufforderung durch Fragen zur Spezifizierung der Schlussfolgerung] /

also: ganz durchschraffiert / [Problemlöseprozess, erneute Schlussfolgerung] /

wo gibt's das? / [Problemlöseprozess, Aufforderung durch Fragen] /

. / das ist ja- das ist nicht- nicht so logisch / [Orientierung, Selbstkontrolle] /

doch / jetzt seh' ich die Figur / [Problemlöseprozess: Bestätigung der Problemlösung] /

das ist Nummer eins C8/ [Formale Äußerung: Nennung der Lösung] /

Example 2: Talkative Type, Subject 22

(1'19'', correctly solved, number of phrases: 23)

English translation

C8 / .. / C8 / .. / [formal expression] /

again such a rhythm / which is above . these things across / mhm / thus empty / filled in

Original

C8 / .. / C8 / .. / [Formale Äußerung] /

wieder so ein Rhythmus / der sich über . diese Querdinge da / mhm / also leer / dann ausgefüllt / und dann von . unten /

then / and then . down / there is once more / ..
/ .. / Mh / .. / right . joined with somewhat else
/ and it then gives this netting wire / [problem
solving process: first analysis] /

.. / and that's also completely filled / puts it
over the other / and below it is completely
filled / and then it lies down over the whole
thing / so I need a completed netting wire /
[problem solving process: reasoning] /

that is number one / [formal expression: nam-
ing the solution]

.. / mhm / the others are also quite nice / .. /
but you could also use the number five / be-
cause this is like a window, which you can open
/ that would be anywise nice / but it does not
fit naturally / so well / that was the number one
/ [situational relations]

that was the number one / [formal expression:
naming the solution]

Example 3: Doubting type, subject 21

(3'42", correctly solved, number of phrases: 33)

English translation

at C8 / [formal expression] /

.. / .. / I do not somehow tap the systematic
immediately / [problem solving process: negative
evaluation] /

and I only see some strips in front of me / [prob-
lem solving process: presentation] /

notice that somehow my concentration is getting
worse / .. / .. / mh shit / I do not manage that /
[situational relation, negative evaluation] /

.. / mh / what's the systematics? / [problem
solving process: initiating question] /

I must now proceed somehow concentrated /
[situational relation: motivational request] /

da kommt dann noch so ein / .. / .. / mh
/ .. / rechts . gesellt sich noch was dazu /
und es ergibt dann diesen Maschendraht
/ [Problemlöseprozess: erste Analyse] /

.. / und das ist dann auch ganz ausgefüllt
/ es legt sich über das andere / und
unten ist es ganz ausgefüllt / und dann
legt sich es allmählich über das Ganze /
also brauche ich ein ausgefülltes Ma-
schendraht / [Problemlöseprozess:
Schlussfolgerung] /

das ist die Nummer eins / [Formale
Äußerung: Lösungsnennung] /

.. / mhm / die andern sind auch ganz
nett / .. / aber man könnte auch die
Nummer fünf nehmen / weil das ist wie
ein Fenster das man aufmachen kann /
das wär' irgendwie ganz nett / aber es
passt natürlich nicht rein / also gut /
[Situative Bezüge]

die Nummer eins war das / [Formale
Äußerung: Lösungsnennung]

Original

bei C8 / [Formale Äußerung] /

.. / .. / hier erschließt sich mir irgend-
wie die Systematik nicht sofort / [Prob-
lemlöseprozess: negative Bewertung] /

und ich sehe nur irgendwelche Streifen
vor mir / [Problemlöseprozess: Darstel-
lung] /

merke wie die Konzentration irgendwie
nachlässt / .. / .. / mh shit echt / kriege
ich jetzt nicht gebacken / [Situativer
Bezug, negative Bewertung] /

.. / mh / was ist das denn für eine
Systematik? / [Problemlöseprozess:
initiiierende Frage] /

ich muss jetzt irgendwie konzentrierter
vorgehen / [Situativer Bezug]

le. half there is somewhat over it / then this
there that then this / [problem solving process:
problem representation] /

.. / mh / .. / my eyes are running somehow con-
fused over the paper / .. / and I feel I did not
manage what to put in / that cannot be true /
[situational relation: negative evaluation] /

.. / all so so / .. / mh / .. / this is complete / [prob-
lem solving process: again representation] /

.. / mh / .. / it is somehow ambiguous what to put
in now / and I do not manage / and I'll get some-
how visibly nervous / because I think that's be-
yond the time frame here, themselves / .. / and I
cannot see anything anymore between these
grids and strips and I I do not perceive the sys-
tematics / and I think to myself it can not be so
difficult, really not / .. / I do not cotton on that
just do not know what it is / [situational terms:
negative evaluation] /

the square above is not filled somehow / on the
right with lines left / there so there so / [problem
solving process: presentation] /

there must be a connection between the figures
/ [problem solving process: initiating request] /

.. / .. / mh / .. / .. / hm / .. / .. / this this this /
[problem solving process: presentation] /

and then it may be, oh well, maybe it is empty
now / there is still something about it and pulls it
up / [problem solving process: reasoning] /

.. / .. / I simply take the . one / [formal expres-
sion: naming solution] /

motivationale Aufforderung] /
li . so halb setzt sich was drüber / dann
das da dann das / [Problemlösepro-
zess: Problemdarstellung] /

.. / mh / .. / meine Augen rennen hier
irgendwie wirr übers Papier / .. / und
ich hab das Gefühl ich kriege es ir-
gendwie nicht raus was da rein soll /
das kann ja wohl nicht wahr sein /
[Situativer Bezug: negative Bewertung]
/

.. / ganz so so / .. / mh / .. / das ist ganz
/ [Problemlöseprozess: erneute Dar-
stellung] /

.. / mh / .. / irgendwie ist mir über-
haupt nicht klar was da jetzt rein soll /
und ich krieg es auch nicht raus / und
ich werde irgendwie zusehends nervös
/ weil ich mir denk das sprengt kom-
plett hier den Zeitrahmen / .. / und ich
sehe aber vor lauter Gitter und Stri-
chen bald überhaupt nichts mehr und
erkenne auch die Systematik einfach
nicht / und denke mir so schwer kann
es wirklich nicht sein / .. / ich kapiere
einfach nicht was das ist / [situativer
Bezug: negative Bewertung] /

da oben ist das Quadrat irgendwie gar
nicht ausgefüllt / rechts mit Strichen
links / da so da so / [Problemlösepro-
zess: Darstellung] /

muss doch irgendeinen Zusammen-
hang geben zwischen den Abbildungen
/ [Problemlöseprozess: initiiierende
Aufforderung] /

.. / .. / mh / .. / .. / hm / .. / .. / das das
das / [Problemlöseprozess: Darstel-
lung] /

und dann ist es möglicherweise- na ja
vielleicht kommt es jetzt leer / da setzt
sich noch was drüber da zieht es ganz
hoch / [Problemlöseprozess: Schluss-
folgerung] /

.. / .. / ich setzt jetzt einfach die . eins
ein / [Formale Äußerung: Lösungsnen-

good / wonderful / [Situational relation: positive evaluation with an ironic intonation]	nung] / gut / na wunderbar / [Situativer Bezug: positive Bewertung mit ironischer Intonation]
--	--

Example 4a: Taciturn type, subject 14

(59", correctly solved, number of phrases: 4)

English translation	Original
C8 / [formal expression]	C8 / [Formale Äußerung] /
.. / .. / .. / .. / .. / .. / hm? / [problem solving process: unspecific question] /	.. / .. / .. / .. / .. / .. / hm? / [Problemlöseprozess: unspezifische Frage] /
.. / I have to look at that exactly / [problem solving process: initiating]	.. / das muss ich mir erst noch mal genau anschauen / [Problemlöseprozess: Initiierung] /
.. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / [break] /	.. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / .. / [Pause] /
Is it symbol one? / [formal expression: naming solution in form of a question]	ist das Symbol eins? / [Formale Äußerung: Lösungsnennung in Frageform]

Example 4b: taciturn type, subject 17

(10", correctly solved, number of phrases: 2)

English translation	Original
C . 8 / [formal expression]	C . 8 / [Formale Äußerung] /
.. / .. / eins / [formal expression]	.. / .. / eins / [Formale Äußerung]

Keywords

Cultural-historical theory

Inner speech

Problem solving

Psycholinguistics

Speaking-thinking-types

Speech profile

Thinking aloud

Name index:

Achutina, T.V.

Anan'ev, B.G.

Bakhtin; M.M.

Bertau, M.-C.

Bühler, K.

Deppermann, A.

Galperin, P.J.

Humboldt, W. von

Keiler, P.

Leont'ev, A.A.

Leont'ev, A.N.

Lucius-Hoene, G.

Luria, A.R.

Sokolov, A.N.

Steinthal, H.

Van der Veer, R.

Vygotskij, L.S.

Werani, A.

Wertsch, J.V.

Chronotopes in writing

Excerpts from a case study

Andrea Karsten

This contribution presents and analyses excerpts from a case study on writing with early-career journalist Elli. The study relies on a dialogical and cultural-historical tradition of psycholinguistic theory. It starts from concepts by Jakubinskij, Vygotsky, Bakhtin and Voloshinov with special focus on Bakhtin's notion of chronotope. In the Concluding Remarks to the 1937-38 essay on the chronotope written in 1973, Bakhtin extends his originally literary concept of space-time and gives it a language-philosophical basis. The distinction between the chronotope of writer and reader – the real or creating world – and the fictive chronotope of the text – the represented world – is taken up and elaborated in this study. The research design – a variation of autoconfrontation method – supports the 'becoming-visible' of various chronotopes in writing. Transcripts of the autoconfrontation dialogue and the writing episode of Elli under scrutiny give insights into the formation of chronotopes in writing and their complex relationships. Among other things, the transcripts refract spatial and timely figurations of the writing episode, Elli's inner speech during writing, the remembered and imagined events and situations to be written about, the content of the text as it is presented and past and future episodes of writing and reading. The data-based analysis shows the complex interaction of chronotopes in writing and the role of language in their formation and identification.

1. Introduction

Bakhtin's notion of chronotope is one of the less used concepts by the author when it comes to research other than literature studies. However, the concept offers links to other core notions from Soviet linguistics and psychology of the 1920s and 1930s like inner speech (Vygotsky, Voloshinov), written speech (Jakubinskij, Vygotsky), speech genre (Jakubinskij, Bakhtin, Voloshinov) and, of course,

voice, position and the dialogic utterance (Voloshinov, Bakhtin). If conceived in the light of its original context, this primarily literary concept can be applied fruitfully to psycholinguistic research on writing.

The notion of chronotope originally was developed in relation to the problem of the “process of assimilating real historical time and space in literature” (Bakhtin 1937-38/ 1981, p. 84). Bakhtin consequently defines the concept as follows: “We will give the name chronotope (literally, ‘time space’) to the intrinsic connectedness of temporal and spatial relationships that are artistically expressed in literature” (Bakhtin 1937-38/1981, p. 84). Thus, the chronotope of an artistic utterance is the specific way, real temporal and spatial phenomena are given an altered shape and new relationship in the linguistic representation. This represented time-space complex is still connected to but differing from the experienced time and space of the real world.

This article presents excerpts from a case study with an early-career journalist called Elli.¹ The analysis presented here starts with a contextualization of the study and a reflection on Bakhtin’s notion of chronotope undertaken from the viewpoint of the *Concluding Remarks* Bakhtin added to the text in 1973. Succinctly, the concept forms the means to explore the complexities and dynamics of time and space on various layers of utterances involved in Elli’s writing process. Since writing, seen from a cultural-historical psycholinguistic perspective, is understood as a dialogic becoming of a specifically formed written utterance, it is not directly accessible by looking at the visible activity or the product alone. In order to methodologically address this problem, the dialogic processes involved are refracted with the help of an autoconfrontation dialogue. The aim of this approach is to shed light on the “volume” of the activity under scrutiny (cf. Clot 2008; Clot et al. 2001; Vygotsky 1925/ 1999), which in the present case is Elli’s writing process.

¹ The case study from which the excerpts are taken is itself part of a psycholinguistic PhD research project on writing conceptualized from a dialogical and cultural-historical perspective (Karsten in prep.). ‘Elli’ is a pseudonym.

2. Theoretical context of the study

As indicated, the approach presented here draws on an understanding of language as it was developed in Soviet psychology and linguistics of the 1920s and 1930s. It takes up a specific way of treating psycholinguistic questions especially prominent in four researchers of that time: L.P. Jakubinskij, L.S. Vygotsky, M.M. Bakhtin and V.N. Voloshinov. With differing focal points, these researchers formulated a special type of approach towards questions of thinking and speech, where the sociality of language and dialogue stand out as paradigmatic. Although they do not form a common 'school', their theories and ideas share some central characteristics, which draw a largely consistent picture of language, speech and thinking. In the works of all four authors, language is seen as a dialogic and social activity even when it is used in other contexts than primarily communicative ones. They all assign a central role to speech for thinking and therefore start from a genuinely psycholinguistic perspective, decades before the discipline itself was founded. Bertau (2011) has recently not only historically and philologically reconstructed this dialogical and cultural-historical tradition of psycholinguistic theory,² but also theoretically elaborated central language-related concepts in order to show their value for psycholinguistic research. Two such concepts must be briefly introduced, because they are also central to the present analysis: position/positioning and voice.

Bakhtin and Voloshinov state in several of their texts, that utterances are not neutral, but evaluative (e.g. Bakhtin 1953-54/1986; Voloshinov 1929/1986). Thus, every utterance is formed from a specific position:

“Every utterance in this sense has its author, whom we hear in the very utterance as its creator. [...] we hear a unified creative will, a definite position, to which it is possible to react dialogically. A dialogic reaction personifies every utterance to which it responds” (Bakhtin 1929/ 1984, p. 184, underlined added).

² For reconstructions with regard to the closeness of these authors in their thinking of language and with regard to their shared intellectual milieu in addition to Bertau (e.g. this volume, 2011, 2007) see also the work of Friedrich (e.g. 2005, 1993).

Further, all forms of speech take shape in correspondence with the quality of the other's bodily presence (Jakubinskij 1923/ 1979; Vygotsky 1934/ 1986) That is, it makes a difference to the form of the utterance, whether the other is for example co-present or distant, liked or disliked, a familiar person, a stranger, someone merely imagined, a typicalized position etc. All positions are relational, for every utterance of a person is not only shaped from a certain stance but also involves a vis-à-vis, another position.

In recent research the process of positioning has become an object of study. This process is conceptualized somewhat differently by mainly two theories: Positioning Theory (Harré & van Langenhove 1999a) and Dialogical Self Theory (Hermans 2001; Hermans & Kempen 1993). Despite their differences, both approaches are compatible and lend themselves well for developing concepts for analysis (cf. e.g. Raggatt 2007; Karsten 2009). Research done in the former paradigm draws attention to the positioning process in discursive activities and thus can provide the general analytic lenses, such as for example regarding the positioning effect of pronoun use (Mühlhäusler & Harré, 1990) or of evaluative expressions (Harré & van Langenhove 1999b; van Langenhove & Harré 1999). Researchers working in the latter paradigm focus on the multiplicity of positions a single person, a self, can take and on the dialogic creation of relations between these positions.

One central claim, following Bakhtin (1929/ 1984), is that every position is endowed with a voice. The concept is closely linked to the notions of position and of the dialogic utterance.

[...] a dialogic approach is possible toward any signifying part of an utterance, even toward an individual word, if that word is perceived not as the impersonal word of language but as a sign of someone else's semantic position, as the representative of another person's utterance; that is, if we hear in it someone else's voice. Thus dialogic relationships can permeate inside the utterance, even inside the individual word, as long as two voices collide within it dialogically (Bakhtin 1929/ 1984, p. 184; underlined added).

According to the language conceptualization favored here, linguistic forms exist only positioned and pre-used, as voices of others (Bakhtin 1929/1984), but they can be used, cited and variegated in different ways by others in their utterances (Voloshinov 1929/ 1986; Bakhtin 1929/ 1984). As Bertau (2011, 2007) points out,

the concept of voice is more than a metaphorical notion. Because of the migration and variation of forms from speech event to speech event, a person can change positions while speaking and utterances can even be multivoiced, conveying several different positions at once.

Following the sketched cultural-historical and dialogical perspective informed by Jakubinskij, Bakhtin, Voloshinov and Vygotsky results in some central claims about writing. Importantly, dialogic relations between different positions and the wandering of voices are found in every kind of linguistic activity. Consequently, solitary and interactional forms of speaking and writing in this perspective are without sharp distinction but rather form a continuum of various possible forms of utterances (Jakubinskij, 1923/ 1979). Another consequence is, that even in a monologic and written form, utterances are responsive, addressed and themselves call for responses (Jakubinskij 1923/ 1979; Voloshinov 1929/ 1986; Bakhtin 1953-54/ 1986). Since in writing there usually is no co-present dialogue partner and the material characteristics of the written product allow to extended communicative situations, more or less concrete “pre-speakers” and addressees must be remembered or imagined and possible responses have to be anticipated (Vygotsky 1934/ 1986; Bakhtin 1953-54/ 1986). Thus, inner speech – or inner dialogue, if one follows Voloshinov’s argument (1929/ 1986) – is a prerequisite for writing (Vygotsky 1934/ 1986).

3. The notion of chronotope

From this conjunction of ideas emerges Bakhtin’s notion of chronotope. It is formulated for the first time in 1937-38 in an essay called *Forms of Time and of the Chronotope in the Novel* and extended by *Concluding Remarks* to this essay in 1973. These *Concluding Remarks* embed the literary notion in Bakhtin’s more general linguistic and philosophical thinking. Crucial to the concept is the distinction between a representing or creating world on the one hand and a represented or created world on the other hand. Already the chronotope of the representing world is complexly structured, and this complexity affects the textual utterance.

“We may call this world the world that creates the text, for all its aspects – the reality reflected in the text, the authors creating the text, the performers of the text (if they exist) and finally the listeners or readers who recreate and in so

doing renew the text – participate equally in the creation of the represented world in the text” (Bakhtin 1937-38/ 1981, p. 253, underlined added).

Because of the dialogical tensions between representing worlds and represented worlds, representation cannot mean a one-to-one mapping or a re-representation in the literal sense of the world. Change and interaction between what is “there” and what is represented is a key feature of Bakhtin’s use of chronotope. Also in other texts by Bakhtin and by Voloshinov, it becomes clear that language has to be understood as evaluative, concrete and dialogic activity (e.g. Bakhtin 1953-54/ 1986; Voloshinov 1929/ 1986). In Voloshinov’s examination of the sign (1929/ 1986, p. 9ff.), the subject matter of representation and evaluation is captured by the notion of refraction.

“A sign does not simply exist as a part of a reality – it reflects and refracts another reality. Therefore, it may distort that reality or be true to it, or may perceive it from a special point of view, and so forth. Every sign is subject to the criteria of ideological evaluation (i.e., whether it is true, false, correct, fair, good, etc.)” (Voloshinov, 1929/1986, p. 10, underlined added).

Disaccord and variation between utterances is just as important as approval and continuity. Since every utterance is formed from a specific position, there are no neutral linguistic forms and identity of two utterances is never possible, as Bakhtin points out:

“‘Life is good.’ ‘Life is good.’ Here are two absolutely identical judgments, or in fact one singular judgment written (or pronounced) by us twice; but this ‘twice’ refers only to its verbal embodiment and not to the judgment itself. [...] if this judgment is expressed in two utterances by two different subjects, then dialogic relationships arise between them (agreement, affirmation)” (Bakhtin 1929/ 1984, p. 183f.)

There is another feature of the notion of chronotope in the Concluding Remarks, which is of special importance for the present approach: the possibility of hierarchically nested chronotopes. In the main body of the essay, Bakhtin focused on an elaboration of a typology of chronotopes. This approach has a close relationship to the identification of literary genres. In fact, “it is precisely the chronotope that defines genre and generic distinctions” (Bakhtin 1937-38/ 1981, p. 85). In this case,

the chronotopes under study are all on the same level of imagination or, put differently, of parallel distance to physical reality. They do each have an individually special relationship to the real world, their typical way of shaping the “process of assimilating real historical time and space in literature” (Bakhtin 1937-38/ 1981, p. 84). Still, these literary chronotopes are all literary chronotopes, and as such they are compared.³ However, the real world is also chronotopically structured:

“Out of the actual chronotopes of our world (which serve as the source of representation) emerge the reflected and created chronotopes of the world represented in the work (in the text)” (Bakhtin, 1937-38/ 1981, p. 253).

This permits to compare the time and space of the representing world and the represented world and, on further levels of representation, the world(s) represented in the represented world. Through various constellations of dialogically related utterances, not only a dynamics of alternating chronotopes is possible, but also a complex hierarchy of chronotopes can emerge. Such is the case of the excerpts from Elli’s case study to be presented.

Since the focus on hierarchically nested chronotopes is not elaborated but merely implied in the *Concluding Remarks* of the *Chronotope* essay, it is useful to go beyond Bakhtin’s writing in order to concretize the idea. What could a nesting of hierarchically different chronotopes look like? Erving Goffman’s famous examples in his essay *Frame Analysis* of what he calls “embedded replayings” (1974/ 1986, p. 506) may serve as an illustration:

“John wrote (saw, hinted, felt, dreamed) that Mary wrote (saw, hinted, felt, dreamed) that the boat had been carried away.

John wrote that Mary said that Harry felt that the boat would be carried away.

John told me that Mary wrote that the boat was there one moment and got carried away the next” (Goffman 1974/ 1986, p. 505f.).

³ This idea of hierarchically parallel chronotopes following each other and building upon each other in a kind of diachronic sequence is not restricted to literary analysis. It has been fruitfully applied to study the dynamics of dialogic semiotic activities in the ‘real’ world (Ligorio & Ritella 2010).

These examples remind of Voloshinov's analysis of reported speech in *Marxism and the Philosophy of Language* (1929/ 1986). Whereas Goffman's examples point to the multiplicity of layers in reported speech, Voloshinov's work shows the subtle differences in the way an utterance is refracted in another utterance in terms of mutual positioning.

Both approaches go together. A chronotope on either level of representation is never indifferent to its representing world and more precisely, to its author's and addressee's position towards it. This position results in a certain way the utterance is shaped.

"How are the chronotopes of the author and the listener or reader presented to us? First and foremost, we experience them in the external material being of the work and its purely external composition. But this material of the work is not dead, it is speaking, signifying (it involves signs); we not only see and perceive it but in it we can hear voices (even while reading silently to ourselves)" (Bakhtin 1937-38/ 1981, p. 252).

Hierarchical chronotopes do not merge, but they enter in complex dialogical relationships. This is even more so, because representing chronotopes are not neutral, they are always formed as a voice from a unique position from which the represented chronotope is created in a certain way and not in another.

"As we have already said, the author-creator, finding himself outside the chronotopes of the world he represents in his work, is nevertheless not simply outside but as it were tangential to these chronotopes. He represents the world either from the point of view of [...] or from the point of view of [...]" (Bakhtin 1937-38/ 1981, p. 256).

Positions, points of view and "participation frameworks" – the social constellations of the representing world – thus play a central role and influence the created chronotopes (Agha 2007). The represented chronotopes in this line of thought are always depictions from a certain stance or position. This involves the diversification of the author's self as it has been described above. Bakhtin's essay shows that

the position of “I as the teller” is different from the position “I as subject of my stories”.⁴

“Even had [the author-creator] created an autobiography of a confession of the most astonishing truthfulness, all the same he, as its creator, remains outside the world he has represented in his work. If I relate (or write about) an event that has just happened to me, then I as the teller (or writer) of this event am already outside the time and space in which the event occurred. It is just as impossible to forge an identity between myself, my own “I,” and that “I” that is the subject of my stories as it is to lift myself up by my own hair” (Bakhtin 1937-38/ 1981, p. 256).

So, the concept of chronotope serves as an analytical category to highlight competing and contrasting representations and evaluations of one and the same event, person or fact. “[E]very utterance projects a deicitically configured possible world” (Agha 2007, p. 322). As it is argued, the various chronotopes from which an imagined world is linguistically created are not equal in the sense that they are evaluated equally. This involves another aspect related to the typicality of the space and time of creation and the ‘usualness’ with regard to structure and style of the created chronotopes. Clot & Faïta (2000), drawing on Bakhtin, elaborate that every individual utterance and every individual style of performing an activity is in contrast (or in line) with generic forms of utterances and styles. How a chronotope is shaped, from a more generic or a more individual position and in a more or less generic form, is not without significance. Like this, there is always a tension between several voices or positions in a representation that are more or less in line with the socially habituated and accepted generic form.

In sum, there are three central aspects about the Bakhtinian concept of chronotope that enter the analysis presented here: (1) Bakhtin’s distinction between a representing world on the one hand and a represented world on the other hand; (2) the resulting possibility to embed or nest chronotopes with the re-presenting capacity of language so that they enter in complex dialogical relationships; (3) the non-neutrality of chronotopes in that they always are formed from a certain posi-

⁴ Cf. Hermans’ theory of the Dialogical Self, where Bakhtin’s formulation of “I as X” is mirrored prominently (e.g. Hermans 2001; Hermans & Kempen 1993).

tion, refract and not directly mirror the represented, and take their shape in relation to certain generic or more personally styled forms.

4. The case study of Elli and autoconfrontation method

Elli is an early-career journalist who in addition to attend a journalism school works freelance as reporter. The activity from which the materials for the case study were generated is a videotaped writing episode in her home bureau. Elli wrote a draft of an article on her computer about a regional layman theatre group of visually impaired actors, some of them also being disabled otherwise. Few days before the writing episode took place, she visited the theatre group at their rehearsal for an important stage play and did research for her reportage. Elli's article about the group was to appear both in print and online.

The method used to investigate Elli's writing activity is a version of autoconfrontation method, which stems from work psychology in a cultural-historical and dialogical tradition (Clot 2008, 2005; Clot et al., 2001; Clot & Faïta 2000). The methodological approach was designed in order to understand Elli's writing process by setting it into another context where it became refracted in dialogue (cf. Voloshinov 1929/ 1986). The excerpt of the study presented here looks at the interaction of different kinds of chronotopes. These chronotopes partly emerge through the specificity of the research design.

In a first step, Elli's writing process during an everyday working sequence was recorded. Two cameras were used. One camera captured Elli from the side; the other camera was set at the text from over Elli's shoulder (figure 1). While the profile camera was stable, the text camera was conducted by the researcher. One feature of autoconfrontation is the exploitation of the observer's effect often viewed in empiric studies as a factor of interference. For the purpose of the recording session is not only to gain data, but also to make the observed person turn the observing activity of the researcher towards herself in a reversing gesture. The latter process is a microgenetic one, supposed to function in line with Vygotsky's genetic law of cultural development, originally formulated for ontogenetic development. "The means of acting on oneself is initially a means of acting on others or a means of action of others on the individual" (Vygotsky 1931/1997, p. 105). Thus, the presence of researcher and cameras was supposed to elicit a new observer

perspective in Elli, in order for it to enter into a dialogic relationship with the usual intrinsic perspective Elli holds when writing (cf. Clot 2008).

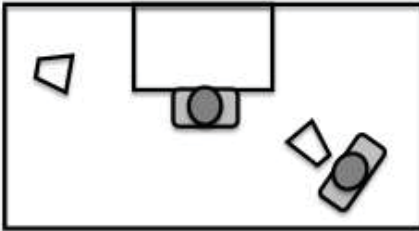


Figure 1: Recording of a writing sequence

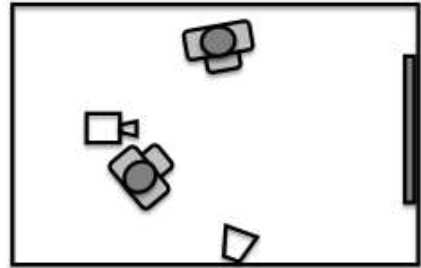


Figure 1: Autoconfrontation

After the first session, the two videos from profile and text camera were synchronized and edited picture-in-picture. In a second session, Elli and the researcher met in order to co-analyze the video. Elli was confronted with the recordings in presence of the researcher, who presented sequences from the video and asked questions in the form of an unstructured interview (figure 2). Elli was asked to intervene at any moment in the researcher's playing of the video to relate her thoughts and interpretations. The purpose of this second session was to create a new chronotope where all types of utterances from various positions involved in the writing processes become exteriorized, explained, questioned, in short: refracted by the actual dialogues of the second session (cf. Clot 2008, Voloshinov 1929/ 1986).

The interaction during the autoconfrontation session was also videotaped and transcribed. This transcript together with the video and the corresponding section in the first recording (i.e. the video of the writing episode) serve as material for a qualitative analysis. Figures 4 to 9 on the following pages present six excerpts from the German transcript in chronological order.⁵ The six excerpts were chosen from

⁵ In line with the concept of language favored here, all transcripts are given in their original German form, complemented by an approximated translation in the text. This choice was made in order to preserve the material as a *specifically formed* linguistic material. The autoconfrontation dialogue was transcribed in accordance with the GAT 2 transcription conventions (Selting et al. 2009).

the transcript deliberately, since they form the most significant situations for illustrating the chronotopical dynamics of Elli's writing activity.

5. Analysis

5.1 Overview: reconstructions of representing a scene from the theater group's rehearsal

Before entering the chronotopical analysis of the excerpts per se, it is useful to give an overview of what part of the writing episode Elli was confronted with and to translate and describe what Elli and the researcher were talking about in the six excerpts.

5.1.1 Writing about the rehearsal scene

Susi ist verliebt in einen Arzt. Doch der Arzt will sie nicht, er hängt einer ~~einer~~ selbst einer hoffnungsvollen Liebe.
 (markiert „hängt“) ~~hängt~~ hat
 (markiert „einer“) ~~einer~~ eine
 (markiert „volle“) ~~volle~~ lose
 (Setzt Cursor an Satzende) (4 sek)
 „ (4 sek) Ich bin abgestumpft“, schreit der Arzt Susi an. „Ich bin klein und fett“, schreit Susi. „Er will mich nicht.“
 (5 sek, Hand am Mund)

English translation:

*Susi is in love with a doctor. But the doctor does not want her; he himself has got a hopeless love. “ (4 sec) I'm callous“, the doctor yells at Susi. “I'm short and fat“, cries Susi. “He doesn't want me.“
 (5 sec, hand at mouth)*

Figure 3: Sequence of the writing episode

Figure 3 shows the small part of the writing episode to which all transcripts of the autoconfrontation session given here refer. It is Elli's introduction to her text – starting in the midst of a situation on stage with the characters “Susi” and “the doctor” performed by the visually impaired actors Bettina and Michael.

5.1.2 Remembering the rehearsal situation in order to write it down

Prior to the situation rendered in the first excerpt (figure 4), the researcher asks Elli, how she remembers the situations she writes about.

```

457 E: manchmal auch also wenns jetzt wirklich nur n interview ist
458 dann als erinner ich mich jetzt natürlich nicht äh an die
    <<gestikulierend>m> (.)
459 °hh an die umstände
460 A: aha (-)
461 ja
462 E: aber in dem fall dann schon weil des war ja jetzt nicht was
    sie <<zeigt auf sich>mit MIR gesprochen> haben
463 <<kreisende geste>sondern das was sie untereinander
    gesprochen [haben>]
464 A: [mhm ]
465 E: =was ich beobachtet hab

```

Figure 4: Excerpt 1

Elli states that when people speak with her, for example in an interview situation, she remembers what they said to her, that is, the content of their conversation. However, when people talk with each other, she remembers the situation as a whole. She visualizes the second alternative with a circular gesture: “<<circular gesture>but what they spoke among themselves> / <<kreisende geste>sondern das was sie untereinander gesprochen haben>” (l. 463). She adds that in this latter case, she holds an observer position: “what I observed / was ich beobachtet hab” (l. 465).

5.1.3 Describing the process of remembering

In excerpt 2 (figure 5), Elli is asked what it is that happens in her mind when she writes down a citation taken from a situation where she is an uninvolved observer while others talk and interact: “what exactly is it that happens there in your head / was genau passiert da in deinem kopf” (l. 476). She answers that it feels like the whole scene happens once again: “the scene kind of runs once again / die szene spielt sich eigentlich nochmal ab” (l. 478). Elli tries to see the scene once again in her imagination: “in a way, it is that I try to exactly see again before my eyes how it was / eigentlich ist es so dass ich das genau nochmal v versuche vor mir zu sehen wies war” (l. 480). She describes this process of trying to experience the scene

once again as “rummaging around / kramen” (l. 482) for the “picture / bild” (l. 482) of that scene.

```

475 A: wenn du da sitzt und son zitat schreibst
476 was genau passiert da in deinem kopf
477 E: naja=also
478 die szene spielt sich eigentlich nochmal ab
479 A: mhm
480 E: eigentlich ist es so dass ich das genau nochmal v versuche
    vor mir zu sehen wies war
481 A: mhm
482 E: also ich versuch des schon nochmal sos des BILD nochmal son
    bisschen hervorzu: (-) äh (.) kramen

```

Figure 5: Excerpt 2

5.1.4 Evaluating the textual representation of the rehearsal scene

```

488 A: und ähm wie wie wie kommt des dann in den TEXT
489 wa [wa ((unverständlich)) ] ((geht
    über in lachen))
490 E: [ <<gespielt "überfragter" gesichtsausdruck>fh°>]
491 <<lächelnd>ja>
492 (---)
493 ((wendet sich film zu))
494 naja d?
495 (2.0)
496 A: allo ich geh mal noch n stückchen
497 [kleines stückchen] zurück
498 E: [ja: ja_a ]
499 A: dann kannst du dich vielleicht besser in dich rein::
    versetzen nochmal
500 =vielleicht hilfts'

```

Figure 6: Excerpt 3

In excerpt 3 (figure 6), Elli is asked how the scene gets into the text: “and how does that enter the TEXT then / und ähm wie wie wie kommt des dann in den TEXT” (l. 488). With a facial expression implying that this question is over her head (l. 490), she does not answer verbally. The researcher plays the scene in question one more time to help her put herself in the position of herself during writing: “then you can maybe put yourself better in your position again; maybe it helps / dann kannst du dich vielleicht besser in dich rein:: versetzen nochmal; =vielleicht hilfts” (l. 499f.).

Instead of responding to the question still unanswered of what happens when the scene enters the text, in excerpt 4 (figure 7), after some hesitation (“°hh ((clicks her tongue)) °hhh; mh;; ((looks at video for 4 sec)) / °hh ((schnalzendes geräusch)) °hhh; mh;; ((schaut film für 4.0 sek))” (l. 504ff.)), Elli acknowledges she thinks in that case she did not succeed: “((clicks her tongue)) well, I find I didn’t succeed much there / ((schnalzendes geräusch)) also ich find des is mir auch nicht so gelungen” (l. 507). She leaves open in what exactly she did not succeed.

```

503      ((film läuft 18 sek))
504  E:  °hh ((schnalzendes geräusch)) °hhh
505      mh:
506      (4.0)
507      ((schnalzendes geräusch)) also ich find des is mir auch
        nicht so gelungen jetzt=also
508      [des is jetzt nicht so de:r] ((schnalzendes geräusch)) das
        paradebeispiel[=weiste]
509      [((wendet sich A zu))      ]
510  A:      [mhm      ]
511  E:  normalerweise muss ich schon auch sagen dass die szene so
        wie sie sich bei mir im kopf abspielt und so wie sie
        nachher aufm papier steht
512      is nich unbedingt identisch
513  A:  mhm'
514  E:  also:
515      es kann schon sein dass das nochmal so dran gefeilt wird
516      damit sie dann halt auch einfach WIRKT
517  A:  mhm
518      ja
519  E:  =also nicht dass ich jetzt wirklich was verändern also: mh
        was umstellen würde=aber
520      °hh mh
521      ich kann sie nicht ganz hundertprozentig so schreiben wie
        sie wirklich vielleicht passiert ist oder wie ich sie
        erlebt hab
522      sondern es muss schon noch schauen KRÄMEN (und dann)
523      was äh:m (-)
524      was beSONders war und des vielleicht so n bisschen
        rausarbeiten

```

Figure 7: Excerpt 4

Her next statement is, turning towards her communication partner, that this case is not a prime example: “now this is not much the ((clicks her tongue)) the prime

example=you know / des is jetzt nicht so de:r ((schnalzendes geräusch)) das paradeispiel=weiste" (l. 508).

Elli argues that "usually / normalerweise" (l. 511) the scene how it actually took place and the scene in her text are not the same: "that the scene how it runs in my head and how it stands written on the paper afterwards; is not necessarily identical / dass die scene so wie sie sich bei mir im kopf abspielt und so wie sie nachher aufm papier steht is nich unbedingt identisch" (l. 511f.). Elli introduces this statement with the concession "I have to say / muss ich schon auch sagen" (l. 511). Then, she goes on with describing the process of adapting the scene to her text. Using passive voice, she explains that it is possible that the scene is tweaked in order to take effect: "it can happen that it is tweaked; for it to simply take EFFECT then / es kann schon sein dass das nochmal so dran gefeilt wird; damit sie dann halt auch einfach WIRKT" (515f.).

She clarifies: it is not that she would really change something: "well, not that I would really change that is move around something=but / also nicht dass ich jetzt wirklich was verändern also: mh (was) umstellen würde=aber" (l. 519). But she cannot write the scene a hundred percent alike to how it really happened or to how she experienced it: "I cannot write it a hundred percent like it really may have happened or like I experienced it / ich kann sie nicht ganz hundertprozentig so schreiben wie sie wirklich vielleicht passiert ist oder wie ich sie erlebt hab" (l. 521).

Again, she uses the metaphor of rummaging and narrates she has to look for what was special about that scene and then to elaborate this specialness: "but it has to, look, RUMMAGE, and then; what ahm (-); what was SPECIAL and maybe elaborate that a little / sondern es muss schon noch schau'n KRamen (und dann); was äh:m (-); was beSONders war und des vielleicht so n bisschen rausarbeiten" (l. 522ff.).

5.1.5 Explaining the difficulties in representing the scene

After a while, in excerpt 5 (figure 8) Elli explains that "usually / normalerweise" (l. 532) one has seldom the chance to stay long enough with a person or situation to get hold of the most interesting scene. Often, she says, one has to switch to what people relate: "you know, usually mh you have seldom the chance ah to stay as long with a with a person; or to stay with a situation; until you really get THE most thrilling scene; often you have to switch to what they TOLD you / weißt du norma-

erweise mh hast du selten ne chance ah so lange bei nem eben bei ner person zu bleiben; oder bei ner situation zu bleiben; bis du wirklich DIE spannend(st) scene hast; oft musst du halt dann auch darauf ausweichen was sie dir erzÄHLT haben” (l. 532ff.).

She turns to the example of her own text, where she says she tried to write down what she had seen: “I have tried there to ah write what I have seen / ich hab da versucht eben des zu äh schreiben was ich gesehen habe” (l. 541).

```

532 E: wei weißt du normalerweise mh hast du selten ne chance ah
      so lange bei nem eben bei ner person zu bleiben
533      oder bei ner situation zu bleiben
534      bis du wirklich DIE spannend(st) scene hast
535 A: mhm
536 E: oft musst du halt dann auch darauf ausweichen was sie dir
      erzÄHLT haben
537 A: mhm
538      °h und dann: ist es natürlich schwieriger
539      dann (-) musst du halt dann äh
540      {(wendet sich film zu)}
541      ich hab da versucht eben des zu äh schreiben was ich
      gesehen habe'
542 A: mhm
543 E: °hh (--){(schnalzendes geräusch)}
544      ich mein im endeffekt hab ichs dann auch so geschrieben was
      ich gesehen habe=aber:
545      mh {(schnalzendes geräusch)} äh:=ja
546      aber ich hab dann schon auch nochmal was die mir erzählt
      haben einfach als hintergrundinfo genommen
547 A: [mhm ]
548 E: [und des] war dann einfach WICHTig
549      das dann [auch] so: die information reinzu[bringen]
550 A: [ja ] [ja ]
551 E: was die andern erzählt hatten
552      <<knarrende stimme, "schuldbewusster" gesichtsausdruck>>ja.>
553      {(schulterzucken)}

```

Figure 8: Excerpt 5

She confirms that “the bottom line is / im endeffekt” (l. 544) actually that she wrote what she had seen: “I mean, the bottom line is that I wrote like what I saw=but / ich mein im endeffekt hab ichs dann auch so geschrieben was ich gesehen habe=aber:” (l. 544). But after some hesitation she adds that she used what the actors Bettina and Michael had told her as a background information: “mh

((clicks her tongue)) ah:=yeah; but I did also take what they told me simply as background info / mh ((schnalzendes geräusch)) äh:=ja.; aber ich hab dann schon auch nochmal was die mir erzählt haben einfach als hintergrundinfo genommen" (l. 545f.).

In her next utterance, Elli dubs it "important / wichtig" to include such related information: "and then it was simply IMPORTANT; to also like to include the information; what the others had narrated / und des war dann einfach WICHTig; das dann auch so: die information reinzubringen; was die andern erzählt hatten" (549ff.). She concludes her words with a shrug and a facial expression (l. 552f.) that can be interpreted as not knowing how to explain things better or not having a better interpretation of what happened in the video of her writing episode.

5.1.6 Revising the text about the rehearsal scene

About an hour later, when Elli is confronted with her revision process, she refers to that same introductory section of her text once again (figure 9). During the revision, Elli first highlights and then deletes the sentence "*'I'm callous', says the doctor. / 'Ich bin abgestumpft', sagt der Arzt*" (writing episode).

The sentence "*'I'm callous', the doctor yells at Susi. / 'Ich bin abgestumpft', schreit der Arzt Susi an.*" has in the meantime been changed to "*'I'm callous', says the doctor. / 'Ich bin abgestumpft', sagt der Arzt.*" While Elli watches herself highlighting this sentence she relates in the autoconfrontation dialogue that during her revision she noticed that the formulation "*'I'm callous / Ich bin abgestumpft*" (l. 4205) does not go with writing about the doctor's love. It is, however, a description of the actor's autism, she says, and Michael uttered this sentence like that. Still, Elli thinks "*callous / abgestumpft*" is not adequate to describe his feelings for his hopeless love: "now I notice somehow that this I'm callous °h doesn't FIT; because it would be a description of his autism; and he in fact SAID it like this; but ((clicks her tongue)) somehow that doesn't fit at all; if I talk about his love; because this does not mean; that's not callous / jetzt merk ich irgendwie dass dieses ich bin abgestumpft °h gar nicht PASST; weil das wär ja (.) ne beschreibung auf seinen autismus; und (.) hat er zwar so geSAGT; aber ((schnalzendes geräusch)) irgendwie PASST das eigentlich gar nicht; wenn ich da von seiner liebe spreche; weil das heißt ja nicht; das ist ja dann nicht abgestumpft" (l. 4205ff.).

Video: Autoconfrontation	Video: Writing
4205 E: jetzt merk ich irgendwie dass dieses ich bin abgestumpft "h gar nicht PASST	(markiert „Ich bin abgestumpft“) (6 sek)
4206 weil das wär ja (.) ne beschreibung auf seinen autismus	(markiert „Ich bin abgestumpft“, sagt der Arzt.)
4207 A: [mhm]	
4208 E: [und] (.) hat er zwar so geSAGT	
4209 aber ((schnalzendes geräusch))	
4210 irgendwie PASST das eigentlich	
[gar nicht]	
4211 A: [mhm]	
4212 E: wenn ich da von seiner liebe	
spreche	
4213 weil das heißt ja nicht	
4214 das ist ja dann nicht	
abgestumpft	
4215 A: mhm	
4216 E: ich glaub da bin ich jetzt auch	
grade	
4217 deswegen <<andere	
stimmqualität>WEG>	} „Ich bin abgestumpft“, sagt der Arzt.
4218 ((beide lachen))	}
4219 E: ja	}
4220 ((film läuft 45 sek))	}
	}
4221 E: weg weg	}
4222 ((beide lachen))	}
4223 E: das war auch so ein gedanke um	}
das nochmal einzuleiten=aber	}
4224 (--) das is auch eigentlich	}
alles neu	}
4225 ich habs auch wirklich von	}
anfang is nochmal GANZ anders	}
eigentlich geworden	}
4226 A: mhm	}
4227 E: ja.	}
4228 ((film läuft 7 sek))	}
4229 E: also da bin ich nicht zufrieden	}
da	}
4230 A: mhm	}
4231 ((beide lachen))	}
	}
	}
	}
	}
	}
	}
	}
	}
	}
	}
	}
	}
	}
	}
	}

Figure 9: Excerpt 6 and parallel sequence of writing episode

So, when Elli in the writing episode pushes a key and deletes the sentence, Elli in autoconfrontation says with a changed quality of voice: “away / weg” (l. 4217). Both Elli and the researcher immediately start to laugh (l. 4218). Something similar happens little time later. Elli is confronted with the next seconds of the video where she tries out a new introductory sentence to her text: “*This is the story of a true love. / Das ist die Geschichte einer großen Liebe*” (writing episode). While she watches herself writing the sentence in autoconfrontation, she takes up her last utterance and says: “away away / weg weg” (l. 4221). Again, both Elli and the researcher laugh at Elli’s refracted reaction (l. 4222).

5.2 Chronotopical analysis: time and space relations in writing about the rehearsal scene

The analysis of the six excerpts presented draws on the notion of chronotope as it has been elaborated above. Special emphasis lies on the interaction of chronotopes on various hierarchical levels with regard to distance from the representing world(s) and on Elli’s evaluation of those nested chronotopes. There are at least six chronotopic levels identifiable, partly hierarchically nested, that interact in the scenes rendered:

1. Elli visiting the theater group, talking to the people and watching them rehearse: *the chronotope of the rehearsal*
2. Elli sitting at her home desk writing about her visit of the theater groups’ rehearsal and especially her writing about a scene she observed at the rehearsal: *the chronotope of writing*
3. The rehearsal scene as it is described in the developing text: the created world, i.e. the *fictive chronotope*
4. Elli and the researcher watching the video of her writing episode and co-analyzing it: *the chronotope of autoconfrontation*

5.2.1 The chronotope of the rehearsal

The chronotope of the rehearsal (1) is the time and space of Elli visiting the theater group while they rehearsed for an important show. According to Ellis narrative in the autoconfrontation conversation, the rehearsal chronotope contains two basic participant constellations with Elli being in two crucially different positions. One is Elli talking with the people there and interviewing them. The other is Elli’s position

as a special kind of audience, watching the rehearsal and not intervening actively. As the majority of the excerpts shows, these two formats are crucial to Elli as she later writes to represent the rehearsal scene in her text. One could, in fact, argue that there are two hierarchically parallel chronotopes at work: one where Elli is actively involved in interactions (1a) and one where Elli is an outside observer (1b). Things become even more complex, because in the interview constellation, one can find the actors' stories and narratives about their lives and the theater project, the play itself and the characters 'Susi' and 'the doctor'. These narratives construct *chronotopes-in-the-chronotope*⁶, since they are nested into the chronotope of the rehearsal in the constellations where Elli holds an inside position (1a). Elli calls these self-narratives "background info / hintergrundinfo" (l. 546). In contrast, the scene she observed (1b) is remembered as a "picture / bild" (l. 482), something dynamic that one can play and replay in one's mind (l. 578).

Further, the two positions of Elli – 'Elli as observer' and 'Elli as interview partner' – are not just two different participant roles leading to different memory qualities, but they come along with two different spatial positions in relation to the others in the setting. This is taken up and visualized by the gestures Elli performs, when she contrasts "with me / mit mir" (pointing to herself) and "among themselves / untereinander" (circular gesture) (l. 462f.). Like this, she links her self during the rehearsal (1) with her self and her physical body during the autoconfrontation conversation (4) and she links the others that form part of the rehearsal chronotope (1) with an imagined 'them' created by her gesture.

5.2.2 The chronotope of writing

Elli's chronotope of writing (2) is a good example of what Bakhtin (e.g. 1937-38/1981, p. 252) calls "the world of the author". A closer examination shows that this chronotope at real-world level is highly complex. It is far from being a simple basic chronotope from which represented chronotopes are created. To the contrary, this chronotope is itself embedded in other chronotopes and involves relationships to parallel as well as to nested chronotopes.

⁶ For the sake of clarity and because Elli does not specify these narratives much with regard to their content and form, these *chronotopes-in-the-chronotope* were not included into the analytic numbering.

Firstly, the chronotope of writing (2), just as the chronotope of Elli watching the rehearsal (1b) identified above, is characterized by a special feature: there is a passive observer at the borders of that chronotope. In the case of Elli at her desk it is the researcher with her two cameras that enters the otherwise habitual scenery. Like this, the chronotope of writing and Elli's usual writing activity are embedded in a chronotopic constellation consisting of the 'researcher as observer' and the cameras. This setting makes it possible to later use the recordings and embed the chronotope of writing in the chronotope of autoconfrontation (4).

Secondly, there is a relation of the chronotope of writing to an assumed hierarchically parallel chronotope: the one of the reader (which could be numbered 2'). This becomes clear when Elli wants the scene "as it is written on the paper / so wie sie nachher aufm papier steht" (l. 511) to be in such a way as to "simply having EFFECT / damit sie dann halt auch einfach WIRKT" (l. 516). She implies the chronotope of a distant reader who is reachable and can be affected via the transportability of the text. Wandering of the text from one chronotope to the other is possible because of its material form. Note that Elli is writing a digital text, but talking about paper here. She uses the familiar materiality of paper texts as a kind of link between her own time and space (2) and that of a distant reader (2'). Elli's recourse to the paper metaphor builds an imagined bridge between the two chronotopes. Elli wants the text to have effect, that is, psychological influence, on the reader.

The chronotope of writing (2), finally, is connected with an assumed time and space that is constructed as hierarchically depending on it. During the autoconfrontation, the researcher directs the analytical focus towards Elli's thoughts while she sits and writes: "when you sit there and write such a citation; what exactly happens there in your head / wenn du da sitzt und son zitat schreibst; was genau passiert da in deinem kopf" (l. 475f.). A new referential world is created as if it was a chronotope-in-the-chronotope: 'in Elli's head', that is, in her imagination.⁷ Elli takes up this nested chronotope proposed by the researcher when she relates that she is 'replaying' the rehearsal scene in her mind. She uses a cinema metaphor to

⁷ Again, this chronotope is not included into the analytic numbering system (cf. note 6). It's status as hypothetical time and space deserves further analysis, which, however, is beyond the scope of this paper.

characterize this embedded chronotope, which is a memory of the rehearsal scene (1a) and serves as basis for representing the scene in the text (3).⁸ In order to be able to ‘replay’ the event she wants to put in words, Elli searches for the scene itself and for special features of the scene. In a part of the transcript not cited here, Elli characterizes such processes as conscious. This evaluation strengthens the impression one gets when she uses the word “rummage / kramen”: she is actively looking for the scene.

The expression ‘rummaging’ implies another metaphor for memory: the memory as a container. According to this metaphor, experienced scenes are stored and can later be selected to form the basis for representation. Both metaphors, cinema and container, specify memory with regard to time and to space. The cinema metaphor characterizes remembered scenes as processual events that ‘run’ and can be ‘replayed’. The container metaphor explains the location of these scenes: stored somewhere ‘in memory’ at a specific location, which has to be looked for and found.

5.2.3 The fictive chronotope

Another aspect that deserves analysis is the relationship between the fictive chronotope (3) and its representational basis, that is, the chronotope of the rehearsal (1). In the fictive chronotope of the text the two chronotopes of the experienced rehearsal scene with ‘Elli as interviewer’ (1a) ‘Elli as observer’ (1b) are merged into one. The textual representation differs from the remembered scenes and information in that they are represented with different chronotopic qualities. Whereas in Elli’s recall there is the processually observed rehearsal scene on the one hand (1b) and the more static and less ‘lived’ background information stemming from interview situations on the other hand (1a), the textual world (3) combines both chronotopes. What the reader (2’) is presented with, is an introductory sentence from an authorial author’s position: “*Susi is in love with a doctor. But the doctor does*

⁸ Noteworthy, this metaphor of staging for speaking or writing is quite prominent in scientific approaches to language. Cognitive linguistics draws heavily on such cinema or theater metaphors in their conceptualization of the cognitive processes involved in speech (e.g. Langacker 2004, 1999, 1990 and Schulze 2000a, 2000b, 1998). Also Goffman (1974/ 1986, pp. 496ff.), as cited above, uses this kind of metaphor in his *Frame Analysis of Talk* and speaks about “replaying” scenes in talk.

not want her; he himself has got a hopeless love / Susi ist verliebt in einen Arzt. Doch der Arzt will sie nicht, er hat selbst eine hoffnungslose Liebe” (writing episode). This authorial voice bears resemblances with Elli’s observer position in one of the participant constellations of the rehearsal situation (1a), but it uses information from the narratives Elli obtained when actively interacting with the persons at the rehearsal (1b): *“he himself has got a hopeless love / er hat selbst eine hoffnungslose Liebe*” (writing episode).

The next sentences in the text are direct speeches of the characters “Susi” and “the doctor”. Especially the doctor’s utterance, *“‘I’m callous’ / ‘Ich bin abgestumpft’*” (writing episode), represents what the actor Michael actually exclaimed during the stage scene: *“and he in fact SAID it like this / und (.) hat er zwar so GESAGT”* (l. 4208). Like this, Elli’s observer position – what she saw and heard during the rehearsal – is mirrored almost directly. However, Elli deletes this representation in the text (3) stemming from the rehearsal situation (1a), because of her knowledge of Michael’s autism she obtained in the interviews (1b): *“because that would be a description of his autism /weil das wär ja (.) ne beschreibung auf seinen autismus”* (l. 4206).

So, instead of directly representing what she saw resp. what she was told from a corresponding position (observer -> direct speech, no visible author’s position resp. ‘omniscient’ -> authorial author’s position), Elli combines the two represented chronotopes and the related positions in her text. She tries to give this combined representation a specific quality – she wants her story to be thrilling and special:

look, RUMMAGE and then; what ahm (-); what was SPECIAL and maybe elaborate that a little / „schauen KRamen (und dann); was äh:m (-); was beSONders war und des vielleicht so n bisschen rausarbeiten (l. 522ff.)

until you really get THE most thrilling scene / bis du wirklich DIE spannend(st) scene hast (l. 534)

5.2.4 The chronotope of autoconfrontation

During their autoconfrontation conversation, Elli and researcher reflect upon this process of combining, changing and adapting the remembered scenes in writing. The chronotope of autoconfrontation (4) lies on the outmost level of embedded-

ness. It is designed to provide insights about the other chronotopes and their relationships. Analytical accessibility to the chronotopes is provided in a twofold way. On the one hand, the chronotopes are reconstructed by means of narrated memory of the rehearsal scene (1), of the writing situation (2), and of the text as it is remembered (3). On the other hand, the video provides access to the fictive chronotope (3) through a projected video image of the text and to the chronotope of writing (2) through the image of Elli in profile. The video images are supposed to help Elli take her own position during writing and elicit new perspectives on the writing activity and the evolving text.

The other chronotopes identified so far serve as topics of the autoconfrontation conversation as can be seen throughout the excerpts. A crucial feature is that in autoconfrontation these chronotopes and their dynamics are not just represented neutrally, but refracted from various positions. Strengthened by the presence of the researcher and by the format of the collected video-recordings, evaluation plays a central role. Clot and colleagues (Clot 2008; 2005; Clot et al. 2001; Clot & Faïta 2000) argue that in autoconfrontation the videotaped persons judge their recorded activity against conventional generic forms of carrying out an activity of this kind. How 'one' does this activity is contrasted with how 'I' perform an instance of this activity. In Elli's case, exactly this tension can be identified in the transcripts and becomes crucial when Elli explains an instant where she is not happy with her performance in excerpt 4 (figure 7).

To understand this scene, it is important to first take a look at how Elli re-experiences her writing activity during autoconfrontation. In a part of the transcript not given here, Elli states that she mostly watches the picture in the picture, which shows the evolving text shot by the over-the-shoulder camera. She says she gets better access to her writing activity by focusing on that picture instead of the profile camera one's. As I have argued elsewhere (Karsten, 2010), the camera that catches the text from over Elli's shoulder can evoke a critical, third position because of its specific monitoring perspective. Following Clot (2008, p. 204ff.), there is always such a "sur-destinataire" involved in autoconfrontation dialogues, a "superaddressee" in Bakhtin's (1959-61/ 1986) terminology. It represents the profession – journalism in Elli's case. The superaddressee stands for understanding and evaluation of an utterance or action that is valid beyond the scope of the actual

dialogue with a concrete addressee. Such a third generic position is voiced several times in Elli's reconstruction of her writing activity. One such case can be seen in excerpt 4 (figure 7). The transcript shows how the second time a certain passage from the video is played, Elli's responds with discontentment to her own writing process. She finds she did not succeed and did not match her own standards (l. 507ff.). This evaluation of her own writing activity points towards a position that emerged or became prominent in autoconfrontation: Elli critically evaluates her activity performed in the chronotope of writing. This evaluation comes along with the voicing of standard generic forms of journalistic writing and of Elli's position in relation to these generic forms: "now this is not much the ((clicks her tongue)) the prime example=you know / des is jetzt nicht so de:r ((schnalzendes geräusch)) das paradebeispiel=weiste" (l. 508)

In addition to the discussed example taken from excerpt 4, a closer look at the transcripts shows how on the one hand, there are formulations that indicate the generic form of carrying out the activity. They are often introduced by generalizing expressions like "usually" or "often":

usually, I have to say, that the scene how it runs in my head and how it stands written on the paper afterwards; is not necessarily identical / normalerweise muss ich schon auch sagen dass die scene so wie sie sich bei mir im kopf abspielt und so wie sie nachher aufm papier steht; is nich unbedingt identisch (l. 511f.)

you know, usually mh you have seldom the chance ah to stay as long with a, with a person; or to stay with a situation; until you really get THE most thrilling scene / weißt du normalerweise mh hast du selten ne chance ah so lange bei nem eben bei ner person zu bleiben; oder bei ner situation zu bleiben; bis du wirklich DIE spannend(st) scene hast (l. 532ff.)

often you have to switch to what they TOLD you / oft musst du halt dann auch darauf ausweichen was sie dir erZÄHLT haben (l. 536)

it can happen that it is tweaked; in order for it to simply take EFFECT then / es kann schon sein dass das nochmal so dran gefeilt wird; damit sie dann halt auch einfach WIRKT (l. 511f.)

On the other hand, there are formulations pointing to Elli's personal style of trying to represent the rehearsal scene in her text. These statements often involve an expression of contrast to the generic form like "but" or "also":

well not that I would really change that is move around something=but / also nicht dass ich jetzt wirklich was verändern also: mh was umstellen würde=aber (l. 519)

I mean the bottom line is that I wrote like what I saw=but / ich mein im endeffekt hab ichs dann auch so geschrieben was ich gesehen habe=aber: (l. 544)

mh ((clicks her tongue)) ah:=yeah; but I did also take what they told me simply as background info / mh ((schnalzendes geräusch)) äh:=ja; aber ich hab dann schon auch nochmal was die mir erzählt haben einfach als hintergrundinfo genommen (l. 545f.)

These examples show how the method of embedding chronotopes (here: of the rehearsal (1), of writing (2), and fictive (3)) into a new chronotope (here: autoconfrontation (4)) makes it possible to voice contrasting positions and evaluations with regard to these chronotopes: Elli judges her instance of representing the rehearsal scene in the text against the generic way to represent a scene in a reportage. In doing so, Elli calls on the researcher to witness the tension between what 'one' does and what she sees herself doing with the expression "you know / weißte" (l. 508, 532). This discourse marker can serve various interactional functions of building or asserting shared interpretation, such as referring to shared knowledge, appealing for understanding and claiming to acknowledge that the speaker is right (Müller 2005, pp. 147ff.). In a similar vein, Östman defines the prototypical meaning of 'you know' as following: "The speaker strives towards getting the addressee to cooperate and/or to accept the propositional content of his utterance as mutual background knowledge" (1981, p. 17).

Another point illustrating the tension between personal style and generic form is Elli's hesitations in her narrative. When it gets more complex to interpret and explain her activity, that is, when there are two competing voices concerning what she is doing in the sequence, there is more hesitation (l. 504f., 520, 545). This results in changes in tempo of the autoconfrontation chronotope in situations where

the represented chronotopes (fictive (3), of writing (2) and of the rehearsal (1)) can be depicted in more than one way.

5.2.5 Synchronizing chronotopes

Another instance where the temporal dimension of the chronotopes is most crucial is the almost direct refractions of Elli's inner speech during writing happening in the scene described in excerpt 6 (figure 9 and 10). In fact two times in the sequence, the two chronotopes of writing (2) and of autoconfrontation (4) are almost exactly synchronic here for one moment.

Just the moment Elli in the video of the writing episode presses a key to delete the sentence "*'I'm callous', says the doctor. / 'Ich bin abgestumpft', sagt der Arzt*" (first curly bracket), Elli in autoconfrontation mirrors her inner speech during writing: "away / weg" (l. 4217). This refraction is indicated not only by the synchrony of the two events, but also by the changed quality of voice between "therefore / deswegen" and "away / weg" (l. 4217). The impression this scene gives of the two chronotopes meeting in that very instant, is strengthened by Elli's next utterance. Again she says "away away / weg weg" (l. 4221) exactly during her writing the sentence "*This is the story of a true love. / Dies ist die Geschichte einer großen Liebe*" (second curly bracket) to be deleted again right away. Also in this second case, the two forms of space and time of the writing episode and of autoconfrontation meet and Elli performs a pivotal utterance valid and significant in either of the chronotopes. In both occasions, Elli and the researcher immediately start to laugh as a response to the refraction (l. 4218, 4222). This can be read as a sign that they both notice the closeness and interaction between what Elli does in the video and what Elli utters during autoconfrontation almost simultaneously.

Video: Autoconfrontation			Video: Writing	
4217	deswegen <<andere stimmqualität>WEG>	}	„Ich bin abgestumpft“, sagt der Arzt.	
4218	((beide lachen))		(...)	
4219	E: ja		(setzt Cursor an Textanfang)	
4220	((film läuft 45 sek))		Dies ist die Geschichte einer großen Liebe.	
4221	E: weg weg	}		
4222	((beide lachen))			

Figure 10: Meeting of chronotopes

5.3 Summary of the analytic results

To sum up, I want to first briefly recapitulate the most prevalent patterns of nesting for the chronotopes identified in Elli's writing activity and the autoconfrontation dialogue. On the outmost level lies the autoconfrontation chronotope itself (4). It represents both the chronotope of writing (2) (image of the profile camera) and the fictive chronotope (3) (image of the text camera). Further it represents the chronotope of reading (2') and Elli's recall of the rehearsal scene (1) and of the self-narratives of the theater group as she describes them to the researcher.

The chronotope of writing (2) contains Elli's memory of rehearsal (1) and of the persons' narratives therein. This nesting is different from the one in autoconfrontation, because Elli remembers the situation for herself, not for the researcher, while at the same time being observed by the researcher. It is here, the different qualities of the two participation formats in the rehearsal scene with Elli as active participant (1a) and Elli as observer (1b) are most important, because they result in two memory qualities (static and processual).

The fictive chronotope of the text (3) is created in the chronotope of writing (2). It also represents the rehearsal scene (1) and the nested self-narratives, but in yet another way. Here the addressee is positioned in the assumed chronotope of reading (2') and therefore the chronotopical features of the text differ from the ones of Elli's memory during writing (2) and during autoconfrontation (4). In the text, the two memory qualities (static and processual) are combined to one textual time and space. Correspondingly Elli's two separate positions (outside observer and

addressee of narratives) are combined to an alternation of an authorial author's voice and figures' speech.

As for nodes where several chronotopes meet, especially the text in its quality as both material object and utterance, the video images and Elli's pivotal utterance ("away / weg" (l. 4217, 4221)) have been identified as links. This shows, that semi-otic activities, especially speech, and the resulting artifacts are crucial not only in the construction of a chronotope. They are also the means to create dialogical relations between two or more chronotopes. It is by their specific form, that positions from one chronotope are refracted in another one.

6. Concluding remarks

The chronotopical analysis of Elli's case study shows some of the dialogical interactions between various chronotopes that are involved in the psycholinguistic activity of writing. The analysis focused especially on the process of creation of various chronotopically specified worlds and on the meeting points of those worlds. This creation of the chronotopes is done through activities where speech and thinking meet, such as imagining and remembering, writing, videotaping, and collaboratively analyzing videotaped sequences by verbal dialogues. A nested structure of real and linguistically created worlds was identified, which points to a complex interaction of various hierarchical chronotopic levels. It is interesting to see how deep the dialogical interrelations of these worlds run, especially because moments of convergence between nested chronotopes were identified. Writing proved to be a highly dialogical process involving a variety of different voices and positions stemming from chronotopes at various hierarchical or parallel levels. Further, the relationship between what actually was done and genre conventions for these kinds of activities became apparent in Elli's judgments of her performance. The specific research design presented here facilitated analytical access to dialogically interrelated chronotopes and the evaluative tensions they carry along.

In sum, the shifting of voices, positions and events from one chronotope to another in the case study of Elli always happened in the form of dialogical refraction, not as direct mirroring in the sense of a one-to-one repetition. The form of evaluation, citation and reflection of one chronotopic level was shown to affect the time and space of the corresponding representing level. All this points to Bakhtin's primal

diagnosis: “Language, as a treasure-house of images, is fundamentally chronotopic” (1937-38/ 1981, p. 251).

References

- Agha, A. (2007). Recombinant selves in mass mediated spacetime. *Language and Communication*, 27, pp. 320-335.
- Bakhtin, M.M. (1959–1961/1986). The problem of the text in linguistics, philology, and the human sciences: An experiment in philosophical analysis. In C. Emerson & M. Holquist (Eds.), *Speech genres and other late essays* (pp. 103-131). Transl. by V.W. McGee. Austin: University of Texas Press.
- Bakhtin, M.M. (1953-54/1986). The problem of speech genres. In C. Emerson & M. Holquist (Eds.), *Speech genres and other late essays* (pp. 60-102). Transl. by V. W. McGee. Austin: University of Texas Press.
- Bakhtin, M.M. (1937–1938/1981). Forms of time and of the chronotope in the novel. In M. Holquist (ED.), *The dialogic imagination. Four essays by M. M. Bakhtin* (pp. 84-258). Transl. by C. Emerson & M. Holquist. Austin: University of Texas Press.
- Bakhtin, M.M. (1929/1984). *Problems of Dostoevsky's poetics*. Ed. and transl. by C. Emerson. Minneapolis: University of Minnesota Press.
- Bertau, M.-C. (2011). *Anreden, Erwidern, Verstehen. Elemente einer Psycholinguistik der Alterität* [Addressing, replying, and understanding. Elements of a psycholinguistics of alterity]. Berlin: Lehmanns Media.
- Bertau, M.-C. (2007). On the notion of voice. An exploration from a psycholinguistical perspective with developmental implications. *International Journal for Dialogical Science*, 2, 1, pp. 133-161.
- Clot, Y. (2008). *Travail et pouvoir d'agir* [Work and the power to act]. Paris: Presses Universitaires de France.
- Clot, Y. (2005). L'autoconfrontation croisée en analyse du travail – l'apport de la théorie bakhtinienne du dialogue [Crossed autoconfrontation in analysis of work – the contribution of Bakhtin's theory of dialogue]. In L. Fillettaz & J.P. Bronckart (Eds.), *L'analyse des actions et des discours en situation de travail. Concepts, méthodes et applications* (pp. 37-55). Leuven: Peeters.
- Clot, Y., Faïta, D., Fernandez, G. & Scheller, L. (2001). Entretiens en autoconfrontation croisée : une méthode en clinique de l'activité [Crossed autoconfrontation conversations. A method for the clinic of activity]. *Education permanente*, 146, pp. 17-25.
- Clot, Y. & Faïta, D. (2000). Genres et styles en analyse du travail. Concepts et méthodes [Genres and styles in analysis of work. Concepts and methods]. *Revue Travail*, 1, 4, pp. 7-31.
- Friedrich, J. (2005). The use and function of dialogue in the Soviet-Russian discourse of the 1920ies, especially with Yakubinsky and Vygotsky. In M.-C. Bertau & J. Friedrich (Eds.), *Colloquium Yakubinsky: Think about language dialogically – Understand action dialogically*. <http://epub.uni-muenchen.de/2020/>.
- Friedrich, J. (1993). *Der Gehalt der Sprachform. Paradigmen von Bachtin bis Vygotskij* [The content of the form of language. Paradigms from Bakhtin to Vygotsky]. Berlin: Akademie Verlag.
- Goffman, E. (1974/1986). *Frame analysis. An essay on the organization of experience*. Boston: Northeastern University Press.

- Harré, R. & Langenhove, L. van (Eds.) (1999a). *Positioning Theory. Moral contexts of intentional action*. Oxford, Malden (Massachusetts): Blackwell.
- Harré, R. & Langenhove, L. van (1999b). The dynamics of social episodes. In R. Harré & L. van Langenhove (Eds.), *Positioning Theory. Moral contexts of intentional action* (pp. 1-13). Oxford, Malden (Massachusetts): Blackwell.
- Hermans, H.J.M. (2001). The dialogical self. Toward a theory of personal and cultural positioning. *Culture & Psychology*, 7, 3, pp. 243-281.
- Hermans, H.J.M. & Kempen, H.J.G. (1993). *The Dialogical Self. Meaning as movement*. San Diego: Academic Press.
- Jakubinskij, L.P. (1923/1979). On verbal dialogue. *Dispositio*, 4, 11/12, pp. 321-336.
- Karsten, A. (in prep.). *Schreibprozesse und Schreibpraktiken. Eine Konzeption aus dialogischer Perspektive* [Processes and practices in writing. A conceptualization from a dialogical perspective]. Dissertation project at Ludwig-Maximilians-Universität, Munich.
- Karsten, A. (2010). Towards cultural-historical and dialogical writing research. Some methodological considerations. *Cultural-Historical Psychology*, 4, pp. 91-98.
- Karsten, A. (2009). *Vielfalt des Schreibens. Zur Dialogizität schriftlicher Äußerungen im Spannungsfeld von Konventionalisierung und Positionierung* [Manifoldness of writing. On the dialogicality of written utterances between the poles of conventionalization and positioning]. Berlin: Lehmanns Media.
- Langacker, R. (2004). Grammar as image. The case of voice. In B. Lewandowska-Tomaszczyk & A. Kwiatkowska (Eds.), *Imagery in language. Festschrift in honour of Professor Ronald W. Langacker* (pp. 63-114). Frankfurt am Main: Peter Lang.
- Langacker, R. (1999). *Grammar and conceptualization*. Berlin & New York: Mouton de Gruyter.
- Langacker, R. (1990). *Concept, image, and symbol. The cognitive basis of grammar*. Berlin & New York: Mouton de Gruyter.
- Langenhove, L. van & Harré, R. (1999). Introducing Positioning Theory. In R. Harré & L. van Langenhove (Eds.), *Positioning Theory. Moral contexts of intentional action* (pp. 14-31). Oxford, Malden (Massachusetts): Blackwell.
- Ligorio M.B. & Ritella, G. (2010). Chronotopes and heterotopias as conceptual tools to understand the development of a computer supported collaborative professional task. *ijCSCL*, 5, 4, pp. 433-452.
- Mühlhäusler, P. & Harré, R. (1990). *Pronouns and people: The linguistic construction of social and personal identity*. Oxford & Cambridge (Massachusetts): Blackwell.
- Müller, S. (2005). *Discourse markers in native and non-native English discourse*. Amsterdam & Philadelphia: John Benjamins.
- Östman, J.-O. (1981). *You know: A discourse functional approach*. Amsterdam: John Benjamins.
- Raggatt, P. (2007). Forms of positioning in the Dialogical Self: A system of classification and the strange case of Dame Edna Everage. *Theory and Psychology*, 17, 3, pp. 355-382.
- Schulze, W. (2000a). Towards a typology of the accusative ergative continuum: The case of East Caucasian. *General Linguistics*, 37, 1/2, pp. 71-155.
- Schulze, W. (2000b). *Cognitive linguistics meets typology: The architecture of a "Grammar of Scenes and Scenarios"*. http://www.lrz-muenchen.de/~wschulze/cog_typ.htm.
- Schulze, W. (1998). *Person, Klasse, Kongruenz. Fragmente einer Kategorialtypologie des einfachen Satzes in den ostkaukasischen Sprachen. Vol. 1: Die Grundlagen* [Person, class, agreement. Frag-

- ments of a categorial typology of simple sentences in East Caucasian. Vol. 1: Foundations of categorial typology]. München & Newcastle: Lincom Europa.
- Selting, M., Auer, P., Barth-Weingarten, D., Bergmann, J., Bergmann, P., Birkner, K. et al. (2009). Gesprächsanalytisches Transkriptionssystem 2 (GAT 2) [Conversation analytic transcription system 2 (GAT 2)]. *Gesprächsforschung - Online-Zeitschrift zur verbalen Interaktion*, 10, pp. 353-402.
- Voloshinov, V.N. (1929/1986). *Marxism and the philosophy of language*. Transl. by L. Matejka & I. R. Titunik. Cambridge: Harvard University Press.
- Vygotsky, L.S. (1934/1986). *Thought and language*. Transl. by A. Kozulin. Cambridge (Massachusetts), London: MIT Press.
- Vygotsky, L.S. (1931/1997). *The collected works of L. S. Vygotsky. The history of the development of higher mental functions (Vol. 4)*. New York, London: Plenum Press.
- Vygotsky, L.S. (1925/1999). Consciousness as a problem in the psychology of behavior. In N. Veresov (Ed.), *Undiscovered Vygotsky. Etudes on the pre-history of cultural-historical psychology* (pp. 251-281). Transl. by N. Veresov. Frankfurt/Main: Peter Lang.

Keywords

autoconfrontation,
chronotope,
inner speech,
position,
self,
speech genre
voice,
writing,

Name index

Bakhtin, M.M.;
Clot, Y.
Jakubinskij, L.P.;
Voloshinov, V.N.;
Vygotsky, L.S.;
Yakubinsky, L.P.;

On the relations between writing and thinking

Stefanie Surd-Büchle

This article discusses aspects of the relation between writing and thinking within the framework of cultural-historical psycholinguistics. Based on a psycholinguistic conception of writing and reflections on a cultural-historical concept of thinking, the article first summarizes hypotheses about the relations between writing and thinking and then explores the possibility of empirical access to these processes, where the concept of 'trace' plays an important role. This is followed by a presentation of writing-thinking-types and a model of writing-thinking-relations, which are based on an empirical study on diary writing. The article concludes with a synopsis of further research topics and possible connections to language acquisition and language teaching contexts.

1. Introduction

"Writing restructures consciousness" (Ong 1982, p. 78) – the famous thesis by Walter Ong ascribes vast influence on thinking processes to writing. However, as especially empirical research on so-called functional illiteracy (e.g. Romberg 1993; Börner 1995; Löffler 2000; Bertau 2001; Linde 2008) has shown, to know the technique of writing does not necessarily mean that people know how to write. From this standpoint, the article attempts to answer the question of what is how possible for thinking processes through writing.

While the reflections on scripture and writing are old topics in European philosophy (for an overview cf. Schlieben-Lange 1994), psychological and psycholinguistic research about writing and especially the relation of writing and thinking is relatively new (cf. Knobloch 1996 who gives an overview about psychological writing research since the 19th century). In the late 19th and beginning 20th century graphology was the leading form of psychological writing research. Handwriting was considered as a plausible instrument to garner information about a writer's personality. This approach is now strongly criticized and not considered scientific any longer (cf. Kanning 2009). Since the beginning of the 20th century there was quite a

lot of experimental research on topics which was often aimed at improving the teaching of writing at schools. Several models concerning writing process were developed (e.g. Flower & Hayes, 1980a/ 1980b) which conceptualize the writing process in a modular way from a purely cognitivist perspective. Yet this type of psychological writing research does not adequately deal with the question how writing and thinking are related in a recursive process. In fact, many psychological articles often deal with quantitative or qualitative methods related to inquiries or interviews to inquire about the relations between reading and writing, but they largely ignore the writing products. In similar fashion, linguistic articles often examine writing products without considering basic psychological processes.

This article is an attempt to develop a model of the relations between writing and thinking which is based on an empirical study of writing products. The leading theoretical perspective is the cultural-historical approach, which was mainly developed by Vygotsky in Russia and the Soviet Union within the 1920s and 1930s. During the last two decades this approach was discovered as a fertile theoretical reference point for psycholinguistic research and enhanced in its theoretical as well as its empirical dimension (e.g. Messing 1981; Knobloch 2003; O'Connell & Kowal 2003; Karsten 2009; Surd-Büchle 2009; Bertau 2011; Werani 2011). The present article is situated within this research context.

2. Vygotsky's Notion of Writing – A Point of Entry

According to Vygotsky (1934/ 1987) writing is conceptualized as written speech. This makes relations between inner and outer speech possible. Vygotsky (1934/ 1987, p. 250f.) argues that the different forms of speech merge again and again. It is assumed that during these processes the forms of speech partly change their functions, but at the same time they remain speech and retain speech character and attributes. Evidence for this is given in the work of Werani (2011), who argues in her analysis of inner speech that inner speech is like outer and written speech a form of appearance of speech. These three appearances of speech often look similar and may be used for similar purposes. As a consequence, the potential of written speech can just be understood if the potential of language and speech are discussed first. The next question then has to be how the specific appearance of speech in writing can be described.

It is quite salient that Vygotsky differentiates between language (*jazyk*) and speech (*reč*). This dichotomy results on one hand in a static, systemic perspective and a dynamic, process-oriented and interactive one on the other. Vygotsky focuses on the second one and does not start his reflections with the forms of speech, but on its functions. He emphasizes that communication is the first function of speech: “Specifically, the initial and the primary function of speech is communicative. Speech is a means of social interaction, a means of expression and understanding.” (Vygotsky 1934/ 1987, p. 48). Hence, the social nature of speech is the starting point to understand speech, all forms of speech always have communicative contingents – not only formally, but also within their functions. This means they are always addressed to someone else, thus making understanding possible. More specifically, the work of Bertau (2011) develops from Humboldt’s ideas and from the Russian psychologists and linguists the concept of alterity, arguing that speech always has an addressee, which is the reason for its cognitive potential. This addressivity has to be differentiated into ‘for me’ and ‘for others’ categories, which may both appear simultaneously (Surd-Büchle 2011).

At the same time “[s]ocial interaction presupposes generalization and the development of verbal meaning;” (Vygotsky 1934/1987, p. 48). Therefore speech is not only communicative, but it is also always inseparably pensive. Speaking and thinking react to and enable each other. “It has always been understood that both functions are somehow combined in speech” (Vygotsky 1934/ 1987, p. 48).

Writing conceptualized as ‘written speech’ therefore has a communicative and a cognitive dimension simultaneously. This conception of writing, which considers both central dimensions without allocating them to concrete forms, avoids the classification problems of writing functions other authors are faced with (e.g. Ludwig 1980).

Vygotsky also shows that it is not useful to analyze these two dimensions separately, as it is often done in psychology and linguistics: “The mode of analysis that decomposes the whole into its elements divorces the communicative function of speech from its intellectual function” (Vygotsky 1934/1987, p. 48).

For Vygotsky the specificity of writing consists first in the specific communicative situation as the dialogue partner normally is absent: “It is speech without an interlocutor. [...] In written speech, those to whom the speech is directed are either

absent or out of contact with the writer. [...] It is a conversation with a white sheet of paper, with an imaginary or conceptualized interlocutor. Still, like oral speech, it is a conversational situation" (Vygotsky 1934/ 1987, p. 202f.). This specific communication situation causes "[t]o a much greater extent than in oral speech, [that] thought is expressed in formal word meanings" (Vygotsky 1934/ 1987, p. 270). Additionally, "[i]n written speech, we must use words to transmit what is transmitted in oral speech through intonation and the immediate perception of the situation" (Vygotsky 1934/ 1987, p. 272).

Vygotsky also emphasizes that writing is maximally expanded and syntactically differentiated. These observations on the characteristics on writing are surely true, but they describe mainly prototypic western forms of literacy such as letter or novel writing. That is why we have to ask critically which genres Vygotsky had in mind while developing his reflections on writing (Surd-Büchle/ Karsten 2010). Moreover, the role of genre shows that it is hardly possible to make a definite statement about writing itself, because writing appears always in concrete genres which are used by people in concrete situations. From this point of view only research that considers formally- and situationally bounded writing allows a progress in theory.

Another characteristic of writing lies in its specific material nature, which also may offer communicative possibilities. Written speech needs a durable material base. Through the arbitrary physical properties of the material, changes can originate in the characters that can be visually or tactilely recognized. It also has to be differentiated between non-integrated (simply technical) an integral (conceptual) writing (cf. Ludwig 1995).

A final consideration regarding written speech is that while the material nature of writing visualizes and conserves some of the writing process other parts of the writing process are invisible to the reader. At the same time there are strict conventions or at least implicit expectations of how writing is supposed to appear, namely 'like printed'.

The consistency of the medium makes it much easier to communicate through time and space as opposed to oral speech or a messenger. Ehlich's (1979; 1983/ 2005) reflections on text demonstrate that the possibility of a detachment from the actual speech situation (Ablösung aus der Sprechsituation) and the quality of

tradition (Überlieferungsqualität) are characteristic for texts. As writing makes speech permanent and is detached from a concrete speaker, it becomes more adequate for the production and especially for the conservation and transmission of texts.

Yet the detachment from the actual speech situation requires that the written text may be extracted from one situation and transferred to another, a situation only made possible when speech production is no longer connected with a single individual. Instead it is separated from the human medium and converted to a mobile and transportable object. Non-face-to-face communication, which may be between people not familiar or locally connected with one another, implies certain difficulties, e.g. the lack of common knowledge between writer and reader. Vygotsky (1934/ 1987) also compares the various motivating factors of written speech to oral speech. While speech automatically arises through the real presence of a dialogue partner in oral communication situations, writing contexts have to refer to the fictive presence of a “reader”. Consequently, Vygotsky sees the motives to use written speech as “more abstract, intellectualistic, and separated from need” (Vygotsky 1934/ 1987, p. 204).

3. Thinking as higher psychological function

According to Vygotsky (1931/ 1997) human thinking consists of several higher psychological functions. The adjective ‘higher’ is in contrast to ‘lower psychological functions’, which are qualitatively different from the specifically human higher psychological functions. Vygotsky (1930/ 2003) chooses the term “function” as opposed to “system”. The psychological system is built by the flexible relations between several separate higher psychological functions. With this distinction he clearly differentiates between separate parts (functions) of thinking, which can be analyzed separately and fulfill a specific function within thinking (as system) and thinking as whole (system), which can be analyzed and understood only through an analysis of its parts and their relations (Vygotsky 1930/ 2003, p. 320f.).

Vygotsky does not offer a complete list of higher psychological functions. Sometimes he names some of them, but always remarking that this is only a selection: “[...] higher functions (verbal thinking, logical memory, formation of concepts, voluntary attention, will, etc.) [...]” (Vygotsky 1931/ 1997, p. 17).

Vygotsky focuses on the development of higher psychological functions and on the relationship between lower and higher psychological functions. He understands higher and lower psychological functions as “two basic branches, two streams of the development of higher forms of behavior inseparably connected, but never merging into one. These are, first, the processes of mastering external materials of cultural development of thinking: language, writing, arithmetic, drawing; second the processes of development of special higher mental functions not delimited and not determined with any degree of precision and in traditional psychology termed voluntary attention, logical memory, formation of concepts, etc.” (Vygotsky 1931/1997, p. 14).

Through the use of signs, especially linguistic instruments, which offer a particular manifold sign system, in Vygotsky’s conception, humans develop their characteristic higher psychological functions. The specific use of signs consists for Vygotsky with the fact that “that man himself creates stimuli that determine his response and uses these stimuli as devices for mastering processes of his own behavior. Man himself determines his behavior with the help of artificially created stimuli-devices” (Vygotsky 1931/1997, p. 47f.). This use of signs is a mediated activity. The sign becomes “a means of psychological action on behavior, one’s own or another’s, a means of internal activity directed toward mastering man himself; the sign is directed inward” (Vygotsky 1931/1997, p. 62).

As a consequence of these views, every higher psychological function and thus the psychological system have linguistic dimensions. At the same time the possibilities of thinking fundamentally depend on the quality of the available linguistic instruments, as Werani (2011) shows in her study about inner speech. Thus the assumption is that with a change of linguistic instruments a modification of thinking will also take place.

As the linguistic instruments and the relations between signs and meanings change permanently, a constant formula describing the relation between speaking and thinking is assumed not to exist (Vygotsky 1930/2003, p. 321). The consequence of this line of thought is a highly flexible system which is constantly undergoing change and development.

The central role that language plays as an instrument of thinking in Vygotsky's theory also explains the social nature of all higher psychological functions: "Man as an individual maintains the functions of socializing" (Vygotsky 1931/ 1997, p. 106).

Valsiner and van der Veer (2000) explicate four attributes of higher psychological functions: (1) Higher psychological processes are culturally mediated. (2) They have a kind a social structure, as they have social origins. (3) Higher psychological processes are mediated because they use signs. (4) Higher psychological processes are interiorized. Werani (2011) emphasizes that interiorization does not mean (passive) transport from outside to inside, but interiorization means interdependency between intra- and interpsychological processes. Vygotsky (1931/ 1997) also develops assumptions about the empirical research on higher psychological functions. First, he argues for a holistic analysis and not only a concentration on un-hinged single elements. Secondly, the research should occur within a process analysis which involves historical and developmental dimensions. Finally, Vygotsky emphasizes that not only a description but also an explanation (particularly of causalities) is salient to research on higher psychological functions.

4. Assumptions about the relation between writing and thinking

Based on the aforementioned reflections on writing and thinking, four main assumptions can be deduced about the relations between writing and thinking. As written speech is considered a form of appearance of speech, reflections on the relation between speaking and thinking must be clarified first before adapting to the particularities of written speech.

1. It can be expected that the use of written speech has influence on all higher psychological functions it is connected with. To understand how this works we have to specifically consider the material nature of written speech and the social practice which is connected with writing.

As thinking is considered speech-based within the cultural-historical paradigm, the use of a different form of speech, here it is written speech, is expected to have an impact on thinking processes.

2. Changes in higher psychological functions are not caused by writing per se, but by the specific use of writing as written speech.

As a consequence, one may assume that writing is used for specific higher psychological functions which are usually related to specific genres. Empirical analysis then must necessarily include the genre and the higher psychological functions related to that genre.

3. The relations between speaking and thinking are complex processes which are not directly observable. According to Vygotsky, "The relationship of thought to word is not a thing, but a process, a movement from thought to word and from word to thought" (Vygotsky 1934/ 1987, p. 250). This passage indicates that he understands the relationship between words and thought is not linear, but recursive or maybe even like a hermeneutic spiral. That means thoughts are developed further while they are re-thought several times. And because thoughts can be re-thought, we do not speak or write completed thoughts, but preliminary results. This process character indicates that speaking and thinking do not coincide and that thinking does not proceed speaking and just needs to be verbalized (Vygotsky 1934/ 1987, p. 250f). Another aspect of such externalized language lies in its materialized form. With the exception of copying mistakes, a written text does not change, which means that the material basis always remains the same. In other words something written may be reread verbatim and reflected upon, while the actual physical words always remain the same. Because of its material form, it is assumed that writing can be used very well for stabilizing processes.

Written speech is expected to be both a completed thought, stabilized and conserved in a specific form and a flexible medium in that it is a possible starting point for new thoughts.

4. Whereas written text as an object does not change, the reader and its environment do. As a result, a new understanding of the apparently same circumstances is always possible. What is more, the amount of written speech is not affected by the limits of short or long time memory. Consequently the question of selection of writing contents is different.

Moreover written speech as oral speech means an externalization of thinking. Meanwhile through writing down it gets representational in its form and obtains

object character. Thus it gets possible for the writing person to contemplate the own written speech, which is no longer connected to the person from an outer perspective and with distance. This analysis, which at the same time means always a new thinking of the written, may also make possible a form of reflection, which is because of its evaporation not possible at oral speech.

Thus it is assumed that the form can get the object of analysis and is expected that the use of written speech may facilitate certain forms of reflection processes on form.

5. Empirical approaches

5.1 The difficulty of investigating thoughts

Empirical research about thinking is made difficult by the fact that it is not directly accessible. Various research methods have been developed to resolve this issue – e.g. the method of thinking aloud (cf. Lüer 1973; Ericsson & Simon 1993; Huber & Mandl 1994; Weidle & Wagner 1994; Ericsson 2003; 2006; Funke & Spering 2006; Werani 2011) or neuroimaging – but these all contain specific difficulties.

Measuring thinking via the thinking aloud method, Werani (2011) calls attention to the capacity problem (not everything that is in the mind can be simultaneously expressed) and to the expression problem (dependency of the selection of expressions by different external factors like the research question or the instructions of the investigator) which lead to an incompleteness of think-aloud-protocols. A further problem with the thinking aloud method is considering which thinking processes reach consciousness and thus be verbalized. Finally the think aloud method is part of an experimental design where collected data are influenced by the experimental situation (e.g. investigator effects, stress effects through the experimental situation).

As for the problematic aspects of neuroimaging, Nitsch (2009) remarks that the main focus of previous analyses concentrated on word level that the task influences the result and that the in the experiments created activation images do not answer the question of speech processing but just the question of the experiment. Without negating the possible positive results of this method, she states that images suggest a direct access to reality, but this is an illusion (cf. Nitsch 2009, p. 94).

5.2 The concept of 'trace' as a possible methodological solution

Our contribution proposes as possible solution, similar to the thinking aloud method, that traces of thinking can be found in expressed linguistic materializations. According to Vygotsky (1934/ 1987), the word is an adequate tool to analyze the relation of word and thought. The analysis of different forms of speech e.g. in think-aloud-protocols or written texts thus allow to infer specific indexical conclusions on thinking and on the relations between the respective form of speech and thinking as discussed for example Brown (1984), Bertau (1999) and Werani (2011). In our study (Surd-Büchle 2011), we take the concept of trace as such an index of the relation between written speech and thinking.

The understanding and implications of the concept of 'trace' are based on Bedorf (2007), addressing 'trace' as philosophical concept.

The starting point for all further reflections about the concept of trace is the assumption that traces have to be read as references to absent things (Bedorf 2007, p. 401) that are interpreted at a later time. Based on this meaning of trace, Bedorf identifies several areas which mark the semantic field of the metaphor. A first understanding comes from criminalistics, where traces are understood as evidence for reality, which generate specific facts about an event. To differentiate between useful and just contingent traces, further validations and correlations have to confirm the suspicion. Salient is the principle of significance, which differentiates between important and what have been determined to be irrelevant traces. For the success of an investigation, it is important to follow different traces for different interpretations. Traces are not just read, they are also constructed (Bedorf 2007, p. 402). For philosophers the search for evidence is also an important field where the metaphor of trace is used. Scholars in this field discuss the appointment of the content of reality and the measurement of the trace-constituting contexts (Bedorf 2007, p. 402).

Thus the metaphor of trace is ascribed a meaning similar to 'path', thus implying a metaphor of space. It is also helpful to understand traces as indices of a suppressed past on the one hand and individualized, exclusive access on the other (Bedorf 2007, p. 408). If the trace-metaphor is separated from collective or individual memories, it retains the name of a relation between something present and something absent (Bedorf 2007, p. 408). A trace can also lead its perception. In

that sense, it is used as bare scaffold for insights which cannot be realized directly (Bedorf 2007, p. 410). At the same time the metaphor of trace can be separated from distinct imaginations (Bedorf 2007, p. 412f.), because it is more than a bare mark, which unambiguously points. The attractiveness of traces consists in their perceptibility as signs, which are not unambiguously interpretable. They give evidence which still has to be connected with a context within a certain area of interpretation (Bedorf 2007, p. 414).

These meanings of 'trace' lead to two assumptions concerning the analysis of the relations between thinking and writing with the help of written texts. It is assumed that traces of the underlying thinking processes can be found in these texts because higher psychological functions may take place in writing. At the same time, the written text may show traces of the recursive processes of the emergence of thoughts.

For the current analysis, the investigated linguistic forms adopt the criminalist understanding of the term defined as indices which have to be interpreted within a superordinate theoretical approach – the cultural historical approach. Results gained in this way have to be interpreted as possible – in the sense of preferably traceable – but not as an exclusive interpretation.

With the help of the concept of trace the concentration on linguistic forms as bases of the analysis also becomes justifiable. Thus traces are visible forms which have to be interpreted. The starting point for all interpretation is the visible form as it is given in the trace.

The form as concrete appearance is considered as the adequate category, as neither speech nor linguistic elements exists 'as such' but only in a historically and situationally bound form.

5.3 Traces of thoughts in diary writing – an empirical study

The concept of 'trace' is useful when analyzing relations between thinking and writing. However, the selection of specific linguistic forms to be treated as traces must be made.

The following reflections were taken into account about the relations between thinking and diary-writing in an empirical study that analyzed the diaries of 14 con-

temporary writers of paper and online diaries. The aim was to investigate the relations between writing and the selected higher psychological functions remembering, self-construction, self-monitoring and reflection (cf. Surd-Büchle 2011).

The analysis was divided into three categories. The first one, 'Communicative Structure', is based on the idea that every form of speech in any genre has a communicative dimension, which has to be examined to understand the relationship between thinking and speaking. The second category, "Writing and Genre", considers the specificities of writing within the analyzed genre. The third category, "Higher psychological Functions", accounts that for different mental processes different linguistic forms may be in particular relevant.

The following table gives an overview of the study's concrete structure:

Categories	Communicative Structure		Writing and Genre		Higher psychological Functions	
Areas of Analysis	Addressivity	Deixis	Fashioners	Ritual	Questions	Rationales
Linguistic forms	Explicit addressings Comments Abbreviation and Expansion	Temporal structures Positioning of the writer (I, We, One)	Multiplication of letters/punctuation marks Capitalization Emoticons/ Inflectives Inverted commas Carets Slashes Brackets Dashes	Fixed forms (poems, lists etc.) Salutations/ complimentary closes Headlines First/Last sentences Phrasing level	Questions with explicit addressing Questions without explicit addressing Questions in indirect speech	Causal Conjunctions Composed causal reference constructions

Table 1: Analysis structure for thinking in diary writing (overview).

The first level of categories is divided into three parts. First, communicative structure of written speech as specific genre has to be taken into account. This may occur with the concrete analysis of addressivity markers and deictic structures. The second abstract area concentrates on the specificities of writing and the characteristics of the genre. For diary writing non-phonemic uses of signs and the regularity, and reproducibility of this specific kind of writing were analyzed. The third category asks about the relevance of certain forms of speech for the analyzed higher psychological functions. For the analyzed higher psychological functions

remembering, self-construction, self-monitoring and reflection the analysis of questions and rationales were of certain interest.

The analysis of the concrete linguistic forms combined a quantitative (frequencies) and qualitative approach to gain information about the relevance and the qualities of the analyzed forms.

5.4 Writing-thinking-types

A further research inquiry was how these analyzed linguistic forms could be related to each other from a qualitative point of view. Based on the results of the single investigations a grid was developed (see fig. 1).

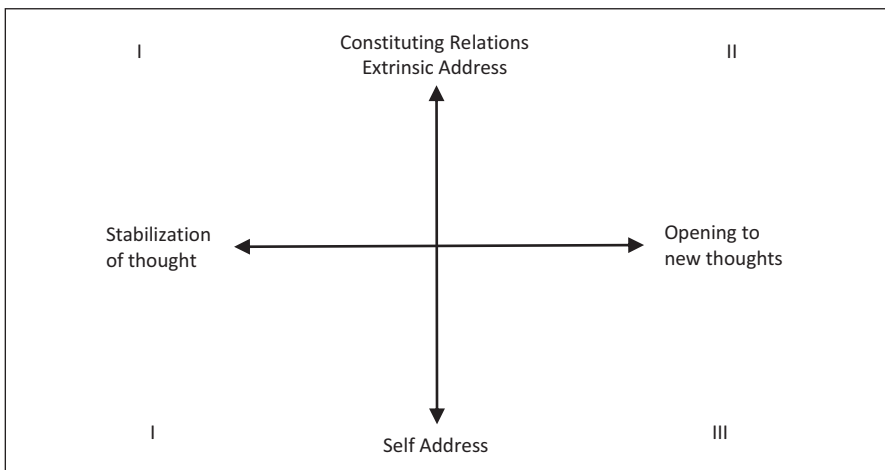


Figure 1: Systematization grid for the quality of the analyzed forms.

All linguistic forms could be allocated to the grid consisting of four quadrants. The vertical axis represents the amount the respective form addresses the writer or another (real or imagined) person. The horizontal axis shows the amount the linguistic form is used to stabilize and fix a thought or to open and develop new thoughts.

Profiles of all analyzed writers were created by filling the grid with the linguistic forms found in their texts. As most forms were used by several writers, the frequencies calculated in the quantitative analysis revealed information about the relevance of the single forms for every person. Through a combination of quantita-

tive and qualitative results individual profiles of every single writer could be identified. By looking at all profiles it could be determined that all writers quite often used stabilizing self-addressing forms. Hence, the difference was mainly if and how much they also used opening and extrinsic addressing forms.

Based on the above observation, the 14 single profiles were selected for possible clustering to different writing-thinking-types. Four characteristic writing-thinking-types could be identified for the analyzed diary-writers (Surd-Bücheler 2011). The so-called 'holders' used mainly self-addressing and stabilizing linguistic forms (fig. 1, quadrant IV). The 'daily routine managers' had a focus on extrinsic addressing opening forms (fig. 1, quadrant II). 'self-ascertainers' used relatively much stabilizing extrinsic addressing forms (fig. 1, quadrant I). Finally, a large amount of self-addressing opening forms is found in the texts of the so-called 'individualists' (fig. 1, quadrant III).

On that basis, we could differentiate specific functional forms of written speech: self-addressing and stabilizing speech, self-addressing and opening speech, extrinsic addressing and stabilizing speech, and finally extrinsic and opening speech.

These four forms of speech, which may appear in oral, written and inner speech, may be closely related to the higher psychological functions connected to the individual writer. This leads to assumptions on writing-thinking relations in regard of different higher psychological functions.

5.5 Relations of writing and thinking: proposing a model

Based on the writing-thinking-types and the observation that all writers use stabilizing forms but not all do use opening forms, the following model (see fig. 2) schematically shows relations between writing and thinking.

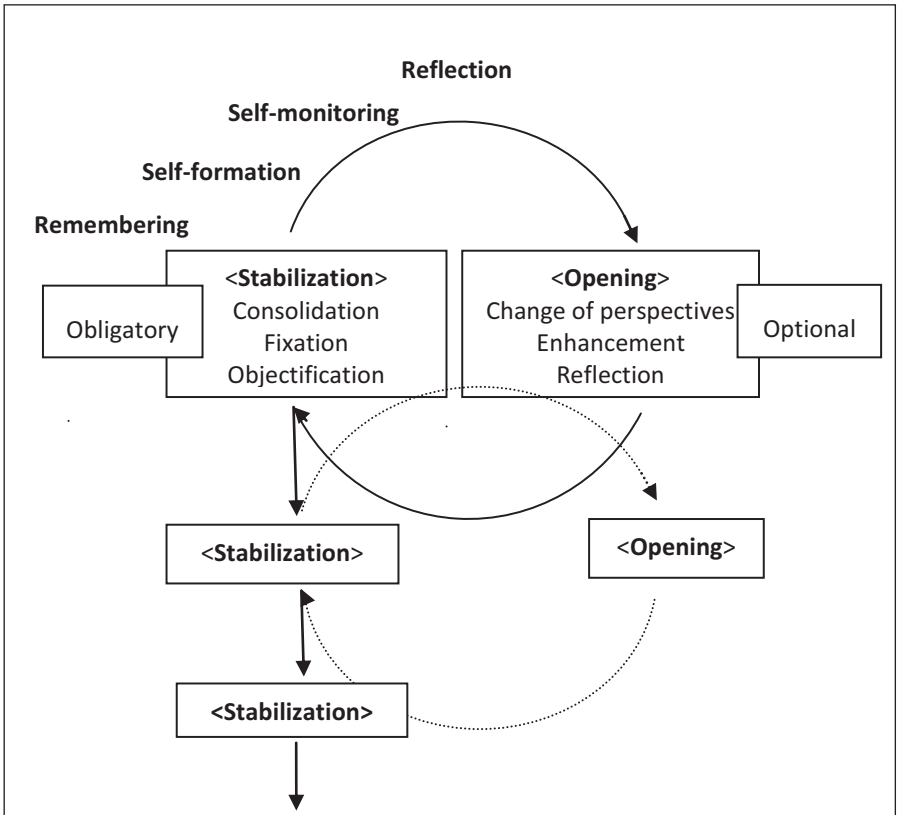


Figure 2: A model of the relations between writing and thinking.

The starting point for all writing-thinking-cycles is the stabilizing dimension of speech, here with its particular forming in written speech. It is assumed that every word amounts to a stabilization of thought. That is why this process is conceived as obligatory. This stabilization may be the final point of a thinking process, but it may optionally also be the starting point for the opening to new thoughts and enhancement of thoughts – processes which are closely connected with reflection.

It is further assumed that different higher psychological functions require the stabilizing and opening dimension in different degrees. The current study on diary writing discussed this issue for remembering (the degree to which writing can be used for reminding), self-formation, self-monitoring and (self-)reflection. For these

higher psychological functions in this specific genre it could be demonstrated that writing to remember primarily uses the stabilizing dimension of written speech. Self-formation processes in diary writing also are quite stabilizing as the writer uses the texts to stabilize his or her position. Self-monitoring processes are a bit more opening as it has to be found out how should be (re-)acted. And traditional reflecting processes need the stabilizing dimension of speech as much as the opening dimension.

Based on the above analysis, all writers were shown to use the stabilizing dimension of writing. The differences amongst participants lie in the use of the opening potential of speech. Only some writers were seen to use forms that can be seen as traces for self-monitoring and reflecting thinking processes. In this context additional research is necessary to understand if they are generally less able to use these opening forms or if they just do not need them for their diary writing as they e.g. just concentrate on writing to remember events of their life.

In closing, it is important to emphasize that writing is not only an attachment or product of thinking, but a dynamic tool, enabling several forms of thinking. Through its specific potential it offers possibilities for stabilization processes, which can be the starting point for opening processes. The concrete relations between stabilization and opening can only be analyzed within concrete genres.

6. Concluding: Points of Entry for further research and writing acquisition

The developed model of relations between writing and thinking leads to further research questions concerning theoretical as well as developmental or pedagogical issues.

One open question concerns the relations between the two complementary dimensions of stabilization and opening. We may find that both dimensions in all forms and genres of speech. Yet little is known about the relations between these two dimensions within concrete genres. One avenue of research would be to investigate these relations within different genres in written and oral speech. Methodological approaches could be a corpus analyses as well as the collection of new data through experiments.

A further research question concerns the acquisition of opening elements in writing and how this is institutionally arranged and supported. More research is required about the relations between speaking-, writing and thinking abilities, where the close connection between oral, inner and written speech must be emphasized. That means that a promotion of oral speech and with that a promotion of inner speech should be a central strategy to research written speech. It is not enough to focus on vocabulary acquisition; the quality of speech must play a salient role in any research project.

During writing acquisition it also has to be learnt to use written speech for oneself and to address it to oneself. The handling of self-addressed forms of speech in general and written speech in particular is an important and difficult task for young writers. Teaching this kind of writing is also a challenge for teachers as self-addressed writing cannot be judged in the same way as writing addressed to others.

Lastly, an individually adequate use of the genre is important for a positive and heuristical use of written language (e.g. Bauermann & Ludwig 1986). That's why knowledge about the genre's conventions but also about the individual possibilities to use the genre has to be taught.

References

- Bauermann, J. & Ludwig, O. (1986). Aufsätze vorbereiten – Schreiben lernen. [Preparation of Essays – Writing Acquisition] *Praxis Deutsch* 13, 80, pp. 16-22.
- Bedorf, T. (2007). Spur. [Trace] In Konersmann, R. (Ed.), *Wörterbuch der philosophischen Metaphern* (pp. 401-420). Darmstadt: Wissenschaftliche Buchgesellschaft.
- Bertau, M.-C. (1999). Spuren des Gesprächs in innerer Sprache. Versuch einer Analyse der dialogischen Anteile des lauten Denkens. [Traces of talk in inner Speech. Analyzing dialogical aspects of thinking aloud] *Sprache & Kognition* 18, 1-2, pp. 4-19.
- Bertau, M.-C. (2001). *Maßnahme zum Abbau des zunehmenden funktionalen Analphabetismus bei Jugendlichen ohne Qualifizierenden Hauptschulabschluß und Ausbildungsplatz in der Großkommune München. Eine Kooperation der Ludwig-Maximilians-Universität München und der Münchner Volkshochschule (Gilgamesch-Projekt)*. [Program to reduce the growing functional illiteracy of youths without graduation and apprenticeship training position in Munich. Cooperation between the LMU Munich and the Munich adult education center. (Gilgamesch-Project)] http://epub.ub.uni-muenchen.de/2021/1/gilgamesch_de.pdf

- Bertau, M.-C. (2011). *Anreden, Erwidern, Verstehen. Elemente einer Psycholinguistik der Alterität*. Berlin: Lehmanns. [Addressing, replying and understanding. Elements of a psycholinguistics of alterity]
- Börner, A. (1995). *Sprachbewußtheit funktionaler AnalphabetInnen am Beispiel ihrer Äußerungen zu Verschriftungen*. [Language consciousness of functional illiterates – Examples of their utterances about writing] Frankfurt/Main: Lang.
- Brown, A.L. (1984). Metakognition, Handlungskontrolle, Selbststeuerung und andere, noch geheimnisvollere Mechanismen. [Metacognition, action control, self regulation and other, more mysterious mechanisms.] In F.E. Weinert & R.H. Kluwe (Eds.), *Metakognition, Motivation und Lernen* (pp. 60-65). Stuttgart: Kohlhammer.
- Ehlich, K. (1979). *Verwendungen der Deixis beim sprachlichen Handeln: linguistisch-philologische Untersuchungen zum hebräischen deiktischen System. 2 Bde.* [Uses of deixis within linguistic action: Linguistic-philosophical investigations on the Hebrew deictic system.] Frankfurt/Main: Lang.
- Ehlich, K. (1983/2005). Text und sprachliches Handeln. Die Entstehung von Texten aus dem Bedürfnis nach Überlieferung. [Text and linguistic action. The development of texts from the need of tradition] In S. Kammer & R. Lüdeke (Eds.), *Texte zur Theorie des Textes* (pp. 228-245). Stuttgart: Reclam.
- Ericsson, K.H. (2006). Protocol analysis and expert thought: current verbalizations of thinking during experts' performance on representative task. In K.H. Ericsson et al. (Eds.), *Cambridge handbook of expertise and expert performance* (pp. 223-242). Cambridge: Cambridge University Press.
- Ericsson, K.H. (2003). Valid and non-reactive verbalization of thoughts during performance of tasks: Toward solution to the central problems of introspection as a source of scientific data. *Journal of Consciousness Studies* 10, 9-10, pp. 1-18.
- Ericsson, K.A.; Simon, H.A. (1993). *Protocol analysis. Verbal reports as data*. Cambridge: MIT Press.
- Flower, L. & Hayes, J.R. (1980a). Identifying the organization of writing processes. In: L.W. Gregg & E.R. Steinberg (Eds.): *Cognitive processes in writing* (pp. 3-30). Hillsdale: Lawrence Erlbaum.
- Flower, L. & Hayes, J.R. (1980b). The dynamics of composing: making plans and juggling constraints. In: L.W. Gregg & E.R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 31-50). Hillsdale: Lawrence Erlbaum.
- Funke, J. & Spering, M. (2006). Methoden der Denk- und Problemlöseforschung. [Methods of cognitive and problem-solving research] In: J. Funke & M. Spering (Eds.), *Denken und Problemlösen. Enzyklopädie der Psychologie* (pp. 647-744). Göttingen: Hogrefe.
- Huber, G.L. & Mandl, H. (Eds.) (1994). *Verbale Daten. Eine Einführung in die Grundlagen und Methoden der Erhebung und Auswertung*. Weinheim: Beltz. [Verbal data. An introduction into the basics and methods of collection and interpretation.]
- Kanning, U.P. (2009). *Von Schädeldeutern und anderen Scharlatanen. Unseriöse Methoden der Psycho-diagnostik*. [About quacksalvers and other charlatans. Dubious methods of psychological diagnosis] München: Dustri.
- Karsten, A. (2009). *Vielfalt des Schreibens. Zur Dialogizität schriftlicher Äußerungen im Spannungsfeld von Konventionalisierung und Positionierung*. [Manifoldness of writing. On the dialogicality of written utterances between the poles of conventionalization and positioning] Berlin: Lehmanns.
- Knobloch, C. (2003). Geschichte der Psycholinguistik. [History of psycholinguistics] In G. Rickheit, T. Herrmann & W. Deutsch (Eds.), *Psycholinguistik. HSK-Band 24* (pp. 15-33). Berlin: de Gruyter.

- Knobloch, C. (1996). Historisch-systematischer Aufriß der psychologischen Schreibforschung. [Historical-systematical presentation of psychological writing research] In H. Günther & O. Ludwig (Eds.), *Schrift und Schriftlichkeit. HSK-Band 10/2* (pp. 983-992). Berlin: de Gruyter.
- Linde, A. (2008). *Literalität und Lernen: Eine Studie über das Lesen- und Schreibenlernen im Erwachsenenalter*. [Literacy and learning: A study about reading and writing acquisition in adulthood] Münster: Waxmann.
- Löffler, C. (2000). *Analphabetismus in Wechselwirkung mit gesprochener Sprache*. [Illiteracy in interaction with oral language] Hannover: Campus-Druck.
- Ludwig, O. (1980). Funktionen geschriebener Sprache. [Functions of written language] *Zeitschrift für germanistische Linguistik (ZGL)* 8,1, pp. 74-92.
- Ludwig, O. (1995). Integriertes und nicht-integriertes Schreiben. Zu einer Theorie des Schreibens: eine Skizze. [Integrated and non-integrated writing] In J. Baumann & R. Weingarten (Eds.), *Schreiben. Prozesse, Prozeduren und Produkte* (pp. 273-287). Opladen: Westdeutscher Verlag.
- Lüer, G. (1973). *Gesetzmäßige Denkabläufe beim Problemlösen*. [Normal thinking processes at problem solving] Weinheim: Beltz.
- Messing, J. (1981). *Funktionen der Sprache*. [Functions of language] Köln: Pahl-Rugenstein.
- Nitsch, C. (2009). Möglichkeiten und Grenzen der Untersuchung von Sprachverarbeitung im Gehirn mit den neuen bildgebenden Methoden. [Possibilities and limits of investigating speech processing in the brain with the help of neuroimaging methods] *Zeitschrift für Literaturwissenschaft und Linguistik (LiLi)* 155, pp. 85-110.
- O'Connell, D.C. & Kowal, S. (2003). Psycholinguistics: A half century of monologism. *American Journal of Psychology*, 116.2, pp. 191-212.
- Ong, W. (1982). *Orality & literacy. The technologizing of the word*. New York: Routledge.
- Romberg, S. (1993). *Wege Erwachsener in die Schrift. Schreibprozesse bei funktionalen Analphabeten*. [Ways of adults towards writing. Writing processes of functional illiterates] Opladen: Westdeutscher Verlag.
- Schlieben-Lange, B. (1994). Geschichte der Reflexion über Schrift und Schriftlichkeit. [History of reflection on writing and literacy] In H. Günther & O. Ludwig (Hg.), *Schrift und Schriftlichkeit. Ein interdisziplinäres Handbuch internationaler Forschung. HSK-Band 10/1* (pp. 102-121). Berlin: de Gruyter.
- Surd-Büchele, S. (2009). *Bilingualer Schriftspracherwerb. Kognitive Voraussetzungen und gesellschaftliche Rahmenbedingungen aus kulturhistorischer Perspektive*. [Bilingual writing acquisition. Cognitive preconditions and social determining factors from a cultural-historical point of view] Berlin: Lehmanns.
- Surd-Büchele, S. & Karsten, A. (2010). Vygotskij's Begriff des schriftlichen Sprechens. [Vygotsky's concept of written speech] *Tätigkeitstheorie*, 1, pp. 15-41.
- Surd-Büchele, S. (2011). *Tagebuch: Schreiben und Denken. Beiträge zu einer empirischen Verhältnisbestimmung*. [Diary: writing and thinking. Empirical investigations of their relation] Dissertation, Universität München.
- Valsiner, J. & van der Veer, R. (2000). *The social mind. Construction of the Idea*. Cambridge: Cambridge University Press.
- Vygotsky, L.S. (1931/1997). The History of the Development of higher mental Functions. In R.W. Rieber (Ed.), *The collected works of L. S. Vygotsky, Vol. 4*. New York: Plenum Press. [Vygotskij, L.S. (1931/

- 1992). *Geschichte der höheren psychischen Funktionen*, Edited by A. Métraux, transl. by R. Kämper. Hamburg: Lit.]
- Vygotsky, L.S. (1934/1987). Thinking and Speech. In R.W. Rieber (Ed.), *The collected works of L. S. Vygotsky, Vol. 1* (pp. 39-288). New York: Plenum Press. [Deutsch: Vygotskij, L.S. (1934/ 2002): Denken und Sprechen. Weinheim und Basel: Beltz.]
- Vygotsky [= Vygotskij], L.S. (1930/2003). Die psychischen Systeme. [On psychological systems] In J. Lompscher (Ed.) *Lev Vygotskij. Ausgewählte Schriften. Band 1* (pp. 319-352). Berlin: Lehmanns.
- Weidle, R. & Wagner A.C. (1994). Die Methode des lauten Denkens. [The method of think aloud] In G.L. Huber & H. Mandl (Eds.), *Verbale Daten* (pp. 81-103). Weinheim: Beltz.
- Werani, A. (2011). *Inneres Sprechen - Ergebnisse einer Indiziensuche*. [Inner speech – empirical evidence based on speech profiles] Berlin: Lehmanns.

Keywords

Cultural-historical psycholinguistics
Diary writing
Empiric study
Higher psychological functions
Thinking
Writing
Writing-thinking-types
Written speech

Name index

Bedorf, T.
Bertau, M.-C.
Ehlich, K.
Ericsson, K.H.
Karsten, A.
Knobloch, C.
Ludwig, O.
Ong, W.
Romberg, S.
Schlieben-Lange, B.
Surd-Büchele, S.
Valsiner, J.
Van der Veer, R.
Vygotsky, L.S.
Werani, A.

Let's Do Language With Each Other! Looking at a Language Education Approach from a Cultural-Historical Perspective

Andrea Sens

This article investigates an approach to language education for young children situated in a cultural-historical tradition. This approach recognizes the fundamental situatedness and dialogicality of language learning. It views language learning as a joint activity which is located within daily routines and social practices that are meaningful to young children and their care givers. It looks at the nexus of social, cognitive and linguistic development and accentuates the key role of the care giver. An approach to language education for young children with a cultural-historical perspective demands a high level of professionalism in early childhood settings. This implies a concept of professional training for child care providers which offers knowledge, skill training and reflection on individual belief systems. The article suggests directions for further research on professional training of child care providers based on a cultural-historical perspective.

1. Introduction

Language development in the early years has been of interest to various research disciplines for many centuries. In recent years, early childhood research in Germany has generated a special interest in how child care providers in day care can be a powerful resource for early language learning of young children before school. Stressing the importance of the early years and the key role of language skills to fight social, cultural, or gender related disadvantages has heightened efforts to improve the quality of day care, since increasing numbers of young children in Germany spend the majority of their waking hours in day care. Unfortunately, day care centers in Germany vary widely in terms of their quality (Tietze 1998; Egert & Eckhardt 2010).

As a result, many language programs have been developed for early childhood education in Germany in recent years with rather different ideas on how to promote language skills successfully. These differences can be explained with different views of, and theories about, the nature of language and language learning, which again has led to different goals of language programs. As van Oers et al. (2008) point out, “the goals of learning especially can have decisive influence on how the actions are organized and regulated and what strategies are selected for the accomplishment of one's goals” (p. 10). It is highly problematic that most programs do not relate to an explicit theoretical framework on the nature of language and only present a taken-for-granted position that assumes that the chosen approach on language education will successfully promote young children. While there have been heated discussions about different findings based on *empirical data* and their implications for language education in day care, there is little debate about differences in *theoretical perspectives* on the nature of language within the research community.

This paper introduces a study (Sens in prep.) that aims, firstly, to systematically analyze the theoretical perspective on the nature of language and language learning of an approach developed by Jampert et al. (2006, 2009, 2011). This approach to early language education can be situated in a cultural-historical tradition once some of the underlying principles and paradigms have been made explicit. Hence, they are discussed by addressing specifically the cultural nature of language education in the institutional context of early childhood. The terms ‘language learning’ and ‘language education’ are used because this article refers to language activities within the institutional context of early childhood (day care) with an educational focus. The article also addresses the implications for professional training of day care providers. On the theoretical grounds of cultural-historical psycholinguistics the study from Sens (in prep.) aims, secondly, to discuss adequate research strategies to evaluate the dynamics of in-service training.

2. A language education approach for young children linked to cultural-historical psycholinguistics

In 2005, the German Federal Department of Family Affairs, Senior Citizens, Women and Youth (Bundesministerium für Familie, Senioren, Frauen und Jugend, BMFSFJ) commissioned Germany's largest non-university research institute, the German Youth Institute (Deutsches Jugendinstitut, DJI), to develop a framework for language education in day care which was published by an interdisciplinary group of researchers (Jampert et al. 2006) and further developed into a practitioner's guideline for language and literacy education in the early years (Jampert et al. 2009, 2011). Jampert et al. considered a number of ways in which the framework can be implemented in day care settings. In the current phase of the project, a model for a 12 months in-service training is being developed. As previously mentioned, the study by Sens (in prep.) is being conducted to learn more about the dynamics and outcomes of this particular in-service training model. The publications by Jampert et al. (2006, 2009, 2011) have a number of underlying principles in common which constitute an approach clearly linked to cultural-historical psycholinguistics.

The approach by Jampert et al. looks at the nexus of social, cognitive, and linguistic development, in relation to the ways in which children act and think; the aim being to clarify the ways in which differential linguistic abilities – word meaning, syntactic ability and so on – develop over the ages of zero to six years. For this, the long-term nature of the process of children's language acquisition was carefully taken into account. Furthermore, the framework establishes language activities within broader educational areas and daily routines for children from naught to six in early childhood settings.

One can establish a link to cultural-historical psycholinguistics because the approach by Jampert et al. presupposes that language development is embodied and embedded in interaction and everyday practices. By emphasizing embodiment and embeddedness of language, Jampert et al.'s approach thus accords with the view of language as "situated within life activity of situated and positioned, mutually oriented societal individuals, it is not abstractable from these individuals, nor from their activity" (Bertau this volume). Jampert et al. concluded that the level to which language abilities of young children develop depends on the availability of a

stimulating other person and an environment in which a child's curiosity can flourish. Thus, the approach by Jampert et al. begins by viewing children in their comprehensive development as expressive personalities who are not merely capable of learning, but are positively eager to learn and who are situated in a social environment within a community with a set of specific cultural routines and rules.

Jampert et al.'s view of language shows a close similarity to Linell's (2009) view, as it "implies establishing and sustaining relationships with or within the environment. It does not consist merely in the internalization and retention of some objective 'input', as some monologist learning theories would have it. Instead, we are often faced with active sense-making practices, in which apprentices appropriate aspects of the environment, aspects which are actively brought in and created, shared and used under the guidance of the teacher or in interaction with other learners" (Linell 2009, p. 86). Jampert et al.'s rejection of "monologist learning theories" can hence also be related to an accentuated dialogic understanding of the language activity (Bertau this volume): Jampert et al. thus speak of a fundamental "dialogic attitude" (*Dialoghaltung*) towards the developing child.

This cultural-historical perspective on (language) learning contrasts with the view that the language development of young children can be promoted *aside* from daily routines, dismembered from other curriculum areas and social practices and specifically taught for certain hours of the day by one language expert through practicing grammatical rules and labeling words with young children. Alarmingly, this perspective is still widespread in the scientific community in Germany and results in many different training programs for young children aside from daily routines and meaningful social practices (for an overview of the most prominent language programs in Germany for day care see Jampert et al., 2007). If one acknowledges that young children act fundamentally social in dialogic exchange with their caregivers, peers and their environment one must neither artificially confine language education to a small time frame nor support the idea that only experts can, and indeed are eligible to support young children's language learning. Even more so from a cultural-historical perspective on language learning, one has to argue clearly against the idea that children's language learning is facilitated best by some kind of monologist input that will effectively stimulate the child as long as it is applied as often as possible in a particular systematic manner.

Another key component of the approach by Jampert et al. (2011) refers to the role of child care providers such as nursery teachers and how they can be a powerful resource for early language learning in day care (see also Best et al. 2011). The assumptions are based on the interactive language stimulation model for in-service training that is frequently used in the United States (Cole et al. 1996) and Canada (Weitzman 1992). It trains child care providers to use naturalistic interaction strategies that are associated with accelerated language development. Theoretically, the model stems from social interactionist perspectives of language development that attribute a major facilitatory role to the caregivers' ability to provide responsive social contexts and a linguistically stimulating environment (Bruner 1983; 1981; Hoff-Ginsberg 1986). A significant number of studies have reported that children who engage mainly in such responsive, elaborative interactions with adults display higher levels of language development than children who are exposed to a directive interactional style (Barnes et al. 1983; de Kruif et al. 2000; Hoff-Ginsberg 2000; Snow & Ferguson 1977). This, in turn, highlights the role of the dialogic quality of language activity as previously mentioned.

Girolametto, Weitzman & Greenberg (2003) identify three main clusters of caregiver strategies within the interactive language stimulation model as adapted by Jampert et al. (2011) and Best et al. (2011):

- *“Child-oriented techniques* that are designed to promote frequent episodes of joint activity around the child's interests (e.g. wait for children to initiate, follow their lead)
- *Interaction-promoting techniques* that are intended to encourage balanced turn-taking and peer interaction among children (e.g. pause to allow children to talk turns)
- *Language-modeling-techniques* that provide developmentally appropriate language models (e.g. labels, expansions of children's utterances)” (p. 300).

These techniques demand a level of professional development for child care providers that involves the reflection of their behavior and their attitudes towards young children. To be *child-oriented* and to *promote interaction*, child care providers have to be aware of the dialogical nature of language education and acknowledge that language learning entails learning how to engage in conversations and

how to form and shape dialogues with others. They also have to become sensitive towards the ways they address and talk to young children. And most importantly, they have to reflect to what extent they responsively listen to young children because “the addressed listening other is the necessary condition to any speaking and also to any clear, articulated thinking” (Bertau this volume). Language skills can only flourish and develop if and only if they can be addressed towards an interested other. This is a crucial point for language education in day care settings because it demands that child care providers facilitate the participation and interaction of all children in their group. This can be a particular challenge since most activities in settings for young children are organized as group activities. Therefore child care providers need to engage with all children on a regular basis and encourage them to participate in dialogues.

Furthermore, it is necessary that child care providers develop an *attitude* that appreciates contributions from all children to the class room dialogue, because “the infant’s will, initiatives and intrinsic motivations are constantly encouraged by caregivers, or discouraged, if the behaviors are undesired by them. In these processes of continuous interplay, children are enticed into perceiving the same aspects of the environment as the caregivers, and their behaviors and actions get channeled and calibrated into patterns” (Linell 2009, p. 256). It is also necessary that child care providers critically reflect the socio-cultural-context in which language practices are positioned and how or whether this context reflects the family and community experiences of all children in an early childhood setting. This corresponds closely to what Jampert et al. label “dialogic attitude”.

Language modeling techniques have to be seen within a broader view of language and language development that takes the formative function of language for communicative and psychological processes into account. Then, language modeling involves more than teaching grammatical structures or words to young children. “They [the adults] teach the child how to mean [...], and the child learns how to ascribe intentionality to actions and utterances. A parallel line of development involves collaborative games, such as peekaboo, in which infant and caregiver enact primitive forms of turn-taking (response, initiative, reciprocation)” (Linell 2009, p. 256). Hence language education has to support children to make sense of the world and to think through practices that are mediated through language. This

involves experiencing different genres of acting in social contexts while being supported to acquire the rules and practices of the community in order to participate independently, critically, and creatively within the borders of the community's practices (van Oers et al. 2008).

Summarizing the approach by Jampert et al. (2006, 2009, 2011), one can state that the authors assume that

- one needs to look at the nexus of social, cognitive, and linguistic development when wishing to assess language learning in the early years,
- language learning takes place within broader educational areas and daily routines and
- the caregiver plays a very important role for language learning by providing responsive social contexts and a linguistically stimulating environment.

Arguing from a cultural-historical psycholinguistic perspective, this recognizes the fundamental *situatedness* and *dialogicality* of language learning. It highlights the social context between the children and their care takers, and it underscores their dialogues as fundamental to children's overall development.

3. Implications for professional training in language education for young children

A major focus of the current debate about quality of day care in early childhood research is on the role of professional development for child care providers. Even though about 80 different professional degrees in the area of early childhood education and care have been developed at German universities over the past decade, most practitioners who currently work in a German day care setting do not hold an academic degree. This is one of the main reasons why current research in early childhood education investigates the potential and the outcomes of in-service training (Fröhlich-Gildhoff, Nentwig-Gesemann & Pietsch 2011; Egert in prep.).

All of the underlying principles of the approach by Jampert et al. demand a high level of professionalism by child care providers if they are expected to be established on a day to day basis in day care settings. Even more so, if child care providers are supposed to provide meaningful dialogues that can foster language skills of young children within every curriculum area and a huge variety of social practices.

For this reason, we will discuss and critically reflect on the implications of a cultural-historical psycholinguistic perspective for the professional development of child care providers (Sens in prep.).

One of the most significant indicators of quality in early childhood settings is the extent to which child care providers receive specific training in child development, including language development (Doherty et al. 2000). Hence the curriculum developed by Jampert et al. (2011) provides child care providers with theory-based knowledge to help them (1) to better understand the strategies and milestones in language development in the early years and (2) to establish developmentally appropriate language practices.

Even though child care providers with specialized training are more likely to provide responsive social contexts for language learning, Girolametto, Weitzman & Greenberg (2003) discovered significant differences in the teaching outcomes of child care providers that have participated in specialist training based on the model of interactive language stimulation even though there was an overall positive effect and all participants of the in-service training were able to adopt a number of techniques from the program outline. "The individual data indicated that the child care providers were very selective about the program strategies that they acquired and the contexts in which they made improvement. (...) Caregivers did not blindly 'learn their lessons'. Rather, the majority of the child care providers appeared to individualize the instruction" (Girolametto, Weitzman & Greenberg 2003, p. 309). This could indicate that the child care providers participating in this study carried different belief systems, some which matched the main ideas of the in-service training program, and others that conflicted with these goals. Van Oers et al. (2008) emphasize that "Educators' interactions with children are directly based upon their belief systems and theories about the nature of children, child development, knowledge, society, pedagogy, and so on. And different interactions tend to result in different developmental outcomes" (p. 4).

Approaches to teacher education or to in-service training must therefore not only focus on the delivery of knowledge and skill training, but have to take into account the reflection and development of developmentally appropriate beliefs and practices. According to Phipps (2010), research on conceptual change leads to the conclusion that the following strategies in teacher education can promote changes in

teachers' beliefs and practices: "reflecting on concrete teaching experiences, helping teachers explore the beliefs underlying their practice, helping create dissatisfaction with existing beliefs, offering alternative theories which are intelligible and plausible, considering the advantages of new practice, seeing examples of this new practice, experiencing the new practice as learners, and providing support and guidance to integrate new practice into their own teaching" (p. 23).

Hence, in-service training in the area of early language education needs to provide individual support for child care providers and the possibility to carefully investigate the reasons why certain areas of the program outline are adapted while others are neglected. Consequently, in-service training has to be provided with a coaching structure, which leaves room for individual development and has to be organized as a long-term provision. The training must further offer knowledge about language development and introduce principles of effective teaching based on research findings on the one hand. It has to be inquiry-oriented on the other hand, thus "encouraging teachers to reflect on their own teaching and developing their ability to do so, and is constructivist in that it acknowledges the importance of cognitive processes of learning to teach" (Phipps 2010, p. 21).

4. Conclusion

First of all, a more thorough explication of theoretical assumptions on the nature of language and language learning is a condition to understand conceptual differences in language programs in the early childhood sector in Germany. Hence, scientific questions on how to support language learning in the early years and how to facilitate professional development in teacher education in this area must not only be answered with empirical data. Such an inquiry also demands that a theoretical stance be taken on the nature of language and language learning. We have argued for the need of an approach to language education that is based on the perspective of cultural-historical psycholinguistics and thus acknowledges the fundamental *situatedness* and *dialogicality* of any language activity. We have stressed, that this implies a high level of professional development for child care providers. This would involve not only the delivery of knowledge and skill training but, even more importantly, a reflection on one's individual belief systems by child care providers and, if necessary, conceptual change.

Secondly, any research in the area of language education in early childhood has to critically reflect on the methodological questions of the research design. This involves discussing the theoretical implications of a particular research design and evaluating the kinds of outcomes which are produced by using certain methods and types of data. The underlying assumption is that every research design incorporates a certain theoretical view on the nature of (language) learning and therefore only generates outcomes in the light of this particular perspective. Hence, one must critically analyze which kind of outcomes are measured and in which way they relate to the theoretical perspective underlying a program under investigation. One can certainly not apply a solely pragmatic approach by applying methods and instruments that are at hand, ready to be used and easy to apply.

Yet at this point in time, further research is needed to investigate how child care providers can benefit from an in-service training model such as the one suggested by Jampert et al. (2011), which offers a perspective of cultural-historical psycholinguistics in language education. A study that aims to investigate language learning from a cultural-historical perspective needs to critically reflect how 'outcomes' can be measured and which methods that can be used or have to be designed to shed light onto the specific manner. Looking at current research findings, one also needs to investigate individual differences in outcomes of in-service training in early language education.

The exploratory study by Sens (in prep.) aims to address these aspects by analyzing how in-service training with the approach by Jampert et al. (2011) can support child care providers in their professional development. The case study at hand investigates patterns of teacher interaction in early childhood settings. It is designed to provide an in-depth understanding of how early childhood teachers perceive and make sense of their own interactions with young children. Based on quantitative and qualitative research methods, the aim is to identify in which ways interactional styles and belief systems of child care providers change through the in-service training model developed by Jampert et al. (2011). Methods such as questionnaires, video analyses of child care providers' behavior and instant video revisiting are used to explore the connection between the child care providers' beliefs and their interactional styles. The study is conducted in a pre-post-design

and uses theoretical sampling as a strategy to gain a deeper understanding of the different types of child care providers.

With this case study, we assume to be able to gain a better understanding of the dynamics underlying in-service training and to identify the key reasons that lead to effective pedagogical practices through in-service training. The results of this study will be used to improve the in-service training and professional development of child care providers to facilitate children's language learning. It will also be devoted to address methodological questions in research on outcomes of language programs in early childhood education.

References

- Barnes, S., Gutfreund, M., Satterly, D. & Wells, G. (1983). Characteristics of adult speech which predicts children's language development. *Journal of Child Language*, 10, pp. 65-84.
- Best, P., Laier, M., Jampert, K., Sens, A. & Leuckefeld, K. (2011). *Dialoge mit Kindern führen. Die Sprache der Kinder im dritten Lebensjahr beobachten, entdecken und anregen.* [Interacting with young children. The discovery and facilitation of language from children at the age between two and three.] Weimar, Berlin: verlag das netz.
- Bruner, J. (1981). The social context of language acquisition. *Language and Communication*, 1, pp.155-178.
- Bruner, J. (1983). *Child's talk. Learning to use language.* Bern, Göttingen, Toronto, Seattle: Hans Huber.
- Cole, K., Mills, P., Dale, P. & Jenkins, J. (1996). Preschool language facilitation methods and child characteristics. *Journal of Early Intervention*, 20, pp. 113-131.
- Doherty, G., Lero, D., Goelman, H., Tougas, J., & LaGrange, A. (2000). *You bet I care: key findings and their implications.* Guelph, Ontario, Canada: The Centre for Families, Work and Well-Being.
- Egert, F. & Eckhardt, A. (2010) *Nutzung und Wirkung von Kindertagesbetreuung und früher Förderung in Deutschland - Eine Literatur- und Datenstudie.* [The use and effects of day care and early intervention in Germany. A literature review and an empirical study.] Expertise im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend. München: Deutsches Jugendinstitut. e.V.
- Egert, F. (in prep.). *Die Wirkung von Erzieherinnenweiterbildung auf Qualität, Erzieherinnenperformanz und kindliche Kompetenzentwicklung.* [The effects of in-service training of day care providers on quality, teacher performance and child development.] Dissertation project at University of Bamberg, Bamberg.
- Fröhlich-Gildhoff, K., Nentwig-Gesemann, I. & Pietsch, S. (2011). *Kompetenzorientierung in der Qualifizierung frühpädagogischer Fachkräfte.* [Competence-based professional training of day care providers in early childhood.] Eine Expertise der Weiterbildungsinitiative Frühpädagogische Fachkräfte (WiFF). München: Deutsches Jugendinstitut e.V.
- Girolametto, L., Weitzman, E. & Greenberg, J. (2003). Training day care staff to facilitate children's language. *American Journal of Speech Language Pathology*, 12, pp. 299-311.

- Hoff-Ginsberg, E. (1986). Function and structure in maternal speech: Their relation to the child's development of syntax. *Developmental Psychology*, 22, pp. 155-163.
- Hoff-Ginsberg, E. (2000). Soziale Umwelt und Sprachlernen. [Social environment and language learning] In Grimm, H. (Ed.), *Enzyklopädie der Psychologie. Sprache. Band 3 Sprachentwicklung* (pp. 463-494). Göttingen: Hogrefe.
- Jampert, K., Best, P., Guadatiello, A., Holler, D. & Zehnbauer, A. (Eds.) (2007). *Schlüsselkompetenz Sprache. Sprachliche Bildung und Förderung im Kindergarten. Konzepte - Projekte - Maßnahmen*. [Language as a key competence. Language education in day care. Concepts – Projects – Provisions.] Weimar, Berlin: verlag das netz.
- Jampert, K., Leuckefeld, K., Zehnbauer, A. & Best, P. (2006). *Sprachliche Förderung in der Kita. Wie viel Sprache steckt in Musik, Bewegung, Naturwissenschaft und Medien*. [Language education in day care. How much language is in music, physical, science and media education?] Weimar, Berlin: Verlag das netz.
- Jampert, K., Thanner, V., Schattel, D., Sens, A., Zehnbauer, A., Best, P. & Laier, M. (Eds.) (2011). *Die Sprache der Jüngsten entdecken und begleiten. Sprachliche Bildung und Förderung für Kinder unter Drei*. [Discovering and facilitating young children's language. Language education for children from zero to three.] Weimar, Berlin: verlag das netz.
- Jampert, K., Zehnbauer, A., Best, P., Sens, A., Leuckefeld, K. & Laier, M. (Eds.) (2009). *Kinder-Sprache stärken! Sprachliche Förderung in der Kita: das Praxismaterial*. [Facilitating children's language. Language education in day care: the practitioner's guideline.] Weimar, Berlin: verlag das netz.
- de Kruijff, R.E.L., McWilliams, R.A., Ridley, S.M. & Wakely, M.B. (2000). Classification of Teachers' Interaction Behaviors in Early Childhood Classrooms. *Early Childhood Research Quarterly*, 15, pp. 247-268.
- Linell, P. (2009). *Rethinking language, mind, and social world dialogically: interactional and contextual theories of human sense making*. Charlotte (NC): Information Age.
- van Oers, B., Wardekker, W., Elbers, E. & van der Veer, R. (2008). *The transformation of learning. Advances in Cultural-Historical Activity Theory*. Cambridge: Cambridge University Press.
- Phipps, S. (2010). *Language teacher education, beliefs and classroom practices*. Saarbrücken: Lambert Academic Publishing.
- Sens, A. (in prep.). *Mit jungen Kindern im Dialog*. [Interacting with young children.] Dissertation project at Ludwig-Maximilians-University. Munich.
- Snow, C.E. & Ferguson, C.A. (Eds.) (1977). *Talking to children: Language input and acquisition*. Cambridge: Cambridge University Press.
- Tietze, W. (1998). *Wie gut sind unsere Kindergärten? Eine Untersuchung zur pädagogischen Qualität in deutschen Kindergärten*. [How good are our day care settings? A study on pedagogical quality in German day care settings.] Neuwied: Luchterhand.
- Weitzman, E. (1992). *Learning language and loving it*. Toronto, Ontario, Canada: The Hanen Centre.

Keywords

Beliefs

Day care

In-service training

Language education

Language learning

Name index

Best, P.

Bertau, M.-C.

Bruner, J.S.

Egert, F.

Girolametto, L.

Greenberg, J.

Jampert, K.

Linell, P.

van Oers, B.

Phipps, S.

Sens, A.

Thanner, V.

Weitzmann, E.

Ethnological Methods in Cultural-Historical Psycholinguistics

Participant Observation in Two German Kindergartens

Clara Epping

Acknowledging the complexities of normal life, this article explores the benefits of ethnological methods for cultural-historical psycholinguistic research in the area of children's language development. Within the framework of the cultural-historical tradition methods which strengthen the importance of context and dialogue between a researcher and her field appear to be interesting. Using the example of own fieldwork done with children in two German kindergartens, a reflection on the advantages and disadvantages of ethnological methods is proposed. The focus will be on participant observation, narrative interview and the influence of the researcher on the field in general.

1. Introduction

It seems commonplace, but it is crucial to find adequate methods for the aimed research question within a theoretical framework. By relating cultural-historical psycholinguistics with ethnology¹ our question is whether the use of ethnological methods could be fruitful in the area of children's language development. Are the methods in accordance with the theoretical position? Cultural-historical psycholinguistics and modern ethnology have more in common than the obvious fact that both of them refer to the concept of culture – ethnology through its traditional object of research, the cultural-historical tradition through the notion of social mediatedness of higher psychological functions. One important point here is that

¹ In this article we will use the terms ethnology, ethnological etc. instead of the English anthropology, anthropological, etc. as they have the same meaning and the former are commonly used within the German scientific discourse.

both share a similar view of humans: being not only a product of culture, but constructing it and playing an active role in their own development.

At the intersection of cultural-historical psycholinguistics and ethnology our interest lies in the language and speaking of culturally embedded individuals, especially in the language development of children within multicultural societies. Children develop through interaction with other members of their society and they cannot be understood if they are regarded as “entities separate from cultural processes, existing independently of their cultural communities” (Rogoff 2003, p. 41). Following the cultural-historical paradigm individual development should not be regarded as “being influenced by (and influencing) culture. [...] [Instead] people develop as they participate in and contribute to cultural activities that themselves develop with the involvement of people in successive generations” (Rogoff 2003, p. 52). Since individual development and cultural or social development are interwoven, human development should always be considered and examined as part of its culture and societal-historical determination (Lompscher 2004, p. 33). Thus, the traditional experimental setting which does not take the context into account but only observes individuals becomes dissatisfying. Hedegaard (2008b, p. 185) gets to the heart of it: the “paradigm of the traditional experiment [...] cannot be used when trying to understand the development of a child within the complexities of a normal life pattern”. The discomfort with traditional experimental methods and approaches is quite widespread within the social sciences. There is a growing conviction that dissecting life into variables does not help in any case to explain human behavior and the testing of a hypothesis “can only support or reject what the theory outlines” and is therefore restricted (Hedegaard 2008a, p. 34). Qualitative research methods promise a way out, and ethnological methods – which are qualitative in nature – seem to be quite promising in reaching this holistic approach. Thus, the ethnological methods have been used in a multitude of disciplines during the last years, including pedagogy (e.g. Heinzl et al. 2010), sociology (e.g. Christmann 1996), and psychology (e.g. Spindler 1978; Hedegaard 2008).

As part of a current research project (Epping, in prep.) we conducted a fieldwork in two German kindergartens² using ethnological methods as they might offer an

² In Germany the kindergarten is for children from age 3 (2) to 6 (7).

appropriate access to the understanding of children's language development which is in accordance with the insights of the cultural-historical tradition. The aim of the present article is to reflect on the two ethnological methods which have been proven fruitful in the course of our research: participant observation and narrative interview. Additionally, the influence of the researcher is discussed – a kind of reflection which is quite common within ethnology and which should also be important for empirical studies in cultural-historical psycholinguistics.

Beforehand, the theoretical frame of the research project is introduced and reasons for the choice of methods are given.

2. Framing of the Research Project

Within modern multicultural societies people from different backgrounds and with a multitude of languages live together. Thus, not only the individuals, but also the societal institutions face new challenges. Among those is the language situation for preschool children. In German kindergartens the children's groups are not linguistically homogeneous anymore: children of different mother tongues and with different experiences with the German language meet and mix. A lot of studies about language acquisition (grammar, vocabulary, etc.) are conducted in this context, but the majority sees these children as deficient and does not see their potentials and achievements. Our study aims at applying a holistic approach to language development within a multicultural society. The chosen setting is the kindergarten with its interactions and shared activities. In this setting we examine how understanding is mediated. The research question is how children of different language backgrounds create a basis for shared activities and which means and forms they use for this purpose. These means and forms are manifold – language and speech, gestures, mimics, etc. as well as touching, singing together and laughing.

Language development is understood, following cultural-historical theory, not as an acquisition of an abstract system of grammar and vocabulary, but as a socially developed activity and a dynamical process. A cultural-historical understanding of language (e.g. Bertau, 2011; Werani, 2011) has some implications on the methods. As a basic principle the context has to be included, that is, not as an additional variable, but as an essential constituent of the language development. Viewing

language as social and dialogical implies the observation of interactions instead of isolated individuals. With Hedegaard (2008a, p. 30) we agree that research “that is culturally and historically framed takes into account all of these multidimensional elements of children’s participation in everyday life”. It includes the children’s activities as well as the societal conditions which influence “the way they [the adults within communities] can be parents, caregivers and educators” (Hedegaard, 2008a, p. 30). Thus, “childhood research should be explicitly anchored in historical settings”, if it is to be regarded as cultural-historical (Hedegaard, 2008, p. 4).

Following Hedegaard, in cultural-historical research it is important to “see the child as a participant in a societal collective interacting with others in different settings. A child develops as an individual with unique distinctiveness, and as a member of a society where different institutional practices are evident” (Hedegaard, 2008, p. 10). These institutional practices and the children’s development as well are “connected to a conception of what constitutes a ‘good life’ and these vary within the different types of institution and even among those who participate in the practices found within these institutions” (Hedegaard, 2008, p. 11). Accordingly, methods have to observe not only the behavior of the children, but also the specific practice traditions of the institutions, in this case those of the kindergartens. Another important point is to pay attention to “children’s appropriation and display of motives and competencies through entering activity settings and sharing activities with other people within a particular cultural practice tradition” and the demands, norms and values which are connected with these activities (Hedegaard 2008a, pp. 2728). Thus, an all-embracing picture would be necessary to fully understand children’s language development, but it is not realistic to gain it with one study. Rogoff (2003, pp. 52-62) illustrates how the focus of a research can be set in a way that the important information is included. For this kind of study she proposes an interpersonal focus of analysis, which includes “background understanding of community processes [...] and attention to personal processes” (Rogoff 2003, p. 58). Rogoff stresses that the “observers or researchers construct the focus of analysis” as they decide which aspects they want to foreground and examine, but “the distinctions between what is in the foreground and what is in the background [...] are not assumed to be separate entities in reality” (Rogoff 2003, p. 58).

Consequently, we were searching for methods which could fulfill these requirements and are adequate for our research question addressing the forms and means children use to create a common basis in shared activities. As ethnological methods are context sensitive, holistic and adjustable to the conditions of research, they seem appropriate. Two ethnological methods were chosen (participant observation and narrative interview), and conducted in two German kindergartens – one in a large city in Bavaria, the other one in a smaller town in North Rhine-Westphalia. In the following sections our aim is to reflect whether these two methods prove to be useful within this special research design: Can they lead to meaningful results? How can they contribute to answer the research question?

3. Reflections on the Methods Used

3.1 Participant Observation

Participant observation seems to be the ethnological method par excellence. After Malinowski's research on the Trobriand Islands (1922) at the beginning of the 20th century most of the researchers in ethnology and anthropology have relied on this method. It involves being there, going to the "field", taking part in the natives' lives as a good means to get full inside into their culture. Within the classic area of ethnological studies, spending at least a year in the researched culture is still the most used method even if "researched culture" does not necessarily imply "uncivilized" tribes anymore. The use of participant observation and other ethnographic methods increasingly takes place within the own culture of the ethnographer and in focused settings (Oester 2008, p. 233). "Ethnographers value the idea of 'walking a mile in the shoes' of others and attempt to gain insight by being in the same social space as the subjects of their research" (Madden 2010, p. 1). The aim is to find the insider's, the 'natives' point of view. It is an attempt to see the world – the objects, actions and events – with the eyes of the acting people and with the same meaning they attribute to it. While these meanings might be obvious and expressed in language, the bigger part stays unconscious and taken for granted. However, "in every society people make constant use of these complex meaning systems to organize their behavior, to understand themselves and others, and to make sense out of the world in which they live" (Spradley 1980, p. 5). Trying to understand these meaning systems one important point of the participant obser-

vation as a research strategy is its strong focus on exploration of social phenomena instead of the testing of hypotheses (Flick, 2010, p. 297). Consequently, the participant observer has two roles simultaneously: take part in the action and observe it. The taking part role is important for the researcher to get a feeling for the situation. Otherwise, he is not only a participant, but also an observer. Spradley (1980, pp. 5458) makes the difference obvious and describes six major differences: (1) the participant observer always follows the dual purpose of engaging and observing, he exercises himself in (2) explicit awareness and (3) tries to use a “wide-angle lens” by “taking in a much broader spectrum of information” (Spradley 1980, p. 56) which includes characteristics of the situation which seem to be irrelevant to the normal participant. During participant observation the researcher (4) makes simultaneously the insider/outsider experience and is constantly oscillating between the two roles. Unlike normal participants he is reflecting a lot on the experience and the situation and uses (5) introspection as a means of understanding. “Introspection may not seem ‘objective’, but it is a tool all of us use to understand new situations and to gain skill at following cultural rules” (Spradley 1980, p. 57). In this way the body of the participant researcher becomes one of his most important tools. Finally, possibly the most obvious difference: (6) the observer uses record keeping and writes about the situations. These fieldnotes and records form the base for analysis and interpretation.

Going a step further Hedegaard and her colleagues formulate a dialective-interactive approach which uses, amongst others, the strengths of participant observation to research social situations of children. Hedegaard states that being a participant in the child’s social situation is crucial, but “the researcher is not a full participant in the everyday activities, because the researcher’s social situation is also a research situation” (Hedegaard 2008, p. 28). Between these two situations there is a constant tension; the researcher has to find a balance between taking part, being close to the other participants on one side, and concentrating on her research aims and keeping the necessary distance on the other side.

In the case of the two German kindergartens we studied, the participant observation method was used to get insight into the life of the children and caretakers at the institutions. It was possible to get some distance through sitting at a table and getting busy writing. Usually, the children consider it as normal when adults are in

the same room even without engaging actively with them. When the adult is busy, they feel unobserved and continue their activities. In this way, it is possible to observe authentic interaction between children. Sitting and writing at a table in the kindergarten in M., I could observe – unnoticed – two little girls (4 and 5 years old) playing with a doll's house at the next table. Both of them were completely absorbed in their game – changing their voices for the different characters and acting in complex social situations. Just as a kindergarten teacher made a comment to me about their game they got aware of the fact that they are observed, and started to feel uncomfortable and changed their behavior. After a while they stopped their game and came over to ask me what I am doing there.

The participation in the children's situation and the playing with them offers a great opportunity to interact and talk to them. Thus, different insights are possible. Especially for research in the area of language development these situations are rich, because they offer speech data about the topic of interest, i.e. natural interactions between children and between child and teacher. The disadvantage is that it is most of the time not possible to record these spontaneous events and the notes have to be learned by heart, risking that important details get lost.

Two examples show the benefits of participant observation as a research method. The first episode takes place in the kindergarten in A., November 2010: I am playing a board game with L. and J. J. has great difficulties with counting and putting her token to the right place. In the meantime, I ask her: "Do you speak in German at home as well?" She shakes her head. "In which language do you talk? (short break) Russian?" – "Yes" – "Can you count in Russian?" And as she is nodding I ask her if she wants to count in Russian and she starts in German: „Eins, zwei, drei, vier, fünf, sechs...“ I could observe that her parents talk to her in Russian when they bring her. Thus, she possibly can count in Russian, but in this situation (which is supposed to be a German speaking one) she cannot (or does not want to?) switch to the other language and count. What was meant to help her with the game, seemed to confuse her even more. Or can it be that she does not have a conception of the different languages yet?

While the girl was reluctant to change languages, two boys in the kindergarten in M., both of them about half a year older than the girl in the previous example, deliberately play and count with the different languages. While putting on their

clothes to go out to the garden one of the boys, with Dutch as mother tongue, was teaching the other one (and later me) how to count in Dutch: Een, twee And how to say: I am 27 years old. Apparently they have a lot of fun and enjoy playing with the languages. But they stick to German and Dutch – even if the other one has Italian as a mother tongue (I unfortunately learned about that just afterwards).

These two situations show a different handling of somehow similar settings (somehow it is about counting) and can therefore reveal something about the use of different languages in kindergarten. This was only possible by participating in the daily life and situations of the children within the institution. As Malinowski put it at the beginning of the last century: there “is a series of phenomena of great importance which cannot possibly be recorded by questioning or computing documents, but have to be observed in their full actuality” (Malinowski 1922, p. 1). Especially concerning the use of language this is important.

The traditional participant observation usually requires a longer period of engagement in the researched culture (often more than a year). In our case, the fieldwork is similar to focused ethnography and involves spending a restricted amount of time in the field with a special question in mind. This approach is used and described for example by Oester (2008) and Knoblauch (2005). As it is difficult to get comparable and analyzable data by observation alone – especially if not too much time is spent in the field – the use of video cameras and other recording tools is common within focused ethnography. The intensity of data generated via audiovisual recordings compensates for the comparatively short time of research (Knoblauch 2005, p. 16).

During the participant observation and after discussing with the kindergarten teachers, we realized that these methods were not bringing enough insight regarding the aim of our research. For example, the cooperation between children of different language background did not occur too often within the researcher’s sight, and we could not decide whether the observed behavior was only typical for the specific child in that particular situation or whether it was something typical for all children in this situation. Thus, we decided to insert another method into the research design. Groups of two or three children got some playing materials (tracks, a station, puppets, animals and a small train) and were filmed during their play situation. As a researcher I was introducing the material to them and then

moved back behind the camera. Sometimes the children involved me into their conversation – what I did not refuse, but not search for neither. But, most of the time the play developed among them and, thus, this setting allowed for natural interactions between the involved children. The outcome was a set of videos of 16 children playing with the same toys, interacting and cooperating. The aim was to generate similar situations to observe and see whether the insights we got during participant observation can be confirmed in this way. Are there detectable structures? Patterns of behavior? These interactions can be studied in detail using the video files observing not only speech, but also gestures, mimics, proxemics, etc.

All in all, participant observation seemed to be a good method to get diverse impressions and insights about the ‘field’ and to get to know the acting persons (the children and the teachers). While stressing on the positive fact that field research “allows researchers to gain different perspectives and to interact with participants in the research study” (Hedegaard 2008, p. 6), Hedegaard criticizes that “a non-theoretical participant observation approach is (...) unproductive. Without a theoretical frame empirical research results only in a collection of ‘objective’ facts” (2008a, p. 34). That is why it is so important to leave the field for interpretation (Hedegaard 2008a, p. 45) and, if possible and necessary, not only rely on observation alone but use other methods as well. This is called triangulation (cf. Flick 2010). Within our research project the method of participant observation is combined with the videos and their analysis as well as with narrative interviews. The method of narrative interviewing will be discussed in the following section.

3.2 Narrative Interview

Children’s language development as understood within the cultural-historical tradition is not the achievement of individual children, but a social process. Children “learn the skills and practices of their community by engaging with others who may contribute to structuring the process to be learned, provide guidance during joint activity, and help adjust participation according to proficiency” (Rogoff 2003, p. 69). Thus, values, attitudes, and practices of the community in which the children grow up play an important role. One way of trying to understand them is talking to a kind of experts: the people involved in the raising of children. Parents, families, kindergarten staff, etc. are active partners of the children. Trying to get a more complete picture of the context involves getting their views. In this fieldwork

we chose to talk intensively to the kindergarten teachers to understand better the setting 'kindergarten' in which some of the children spend eight or even more hours per day.

Interviewing is an established and long known technique in getting information about people and their views. In the context of quantitative research the focus of interviews is to have standardized questions and a choice of pre-given answers. This method enables the researcher to ask a lot of persons in a relatively short amount of time and interpret the data with the help of statistical programs. Within the qualitative research paradigm the amount of persons interviewed is of less importance than the in-depth results from few, but carefully chosen interviews. In these interviews the questions tend to be more open and the answers are not pre-given. The technique of qualitative interviewing is not an exclusively ethnological method, but it evolves from the conditions and requirements of the fieldwork and it is widely used and discussed within ethnological research. Hopf (2009, p. 350) points out that the importance of qualitative interviews within ethnographical research projects lies in generating expert knowledge as well as in getting the subjective view or biography of the participants. In addition to that, Madden (2010, p. 73) states that a "good ethnographic interview will give the ethnographer insight into how a participant sees the world in analytical, typological, and relational ways, and such information helps to create an insight into the participant's worldview". These insights might be learned at "the least likely points in a conversation [...]. To get to this point sometimes requires ethnographers to relax their sense of control over an exchange and 'go with the flow'" (Madden 2010, p. 75) which might not be easy at all.

Narrative interviewing generally focuses on the narration of the interviewee and not on the questions of the interviewer. Trying to establish a normal and comfortable atmosphere for conversation, the researcher requires the interview partner to feel free to tell everything he regards as relevant to the question. In most cases, the involved persons see aspects differently from the researcher or even different aspects. Those aspects might not come up, if the researcher focuses on his own questions too early and solely. This kind of interview makes it possible for the participant to develop his story about the topic, and thus, set connections, stress important aspects and put actions and events into perspective. In doing so, the con-

text becomes more vivid and understandable for the researcher which is an important goal within the cultural-historical traditions.

Apart from the occasional talking during our fieldwork, the narrative interviews within the research project opened up a space for asking more and getting more detailed answers about the daily routine in the institutions and the work with the children while also getting to know the teachers and their views better. The method chosen for these interviews was the episodic interview which is a form of narrative interviewing. Flick (2010, pp. 238239) who developed the episodic interview is convinced that the knowledge about special areas is stored in the memory in two forms: narrative-episodal knowledge which is related to situations and experiences and semantical knowledge – more abstract and general in nature. The first form is remembered in situations within special contexts, the second form as concepts and their relation to each other. The episodic interview helps reveal this knowledge by asking different types of questions. One type refers to situations or episodes which are related to the question and topic of research while the other focus on the concepts within that area. In the context of my research topic, this implied questions about special situations (e.g. “When – during the last week – did a not German speaking child handle a communicative situation well? How?”) and about concepts like language development and the fostering of it.

Watching the children act and interact with each other, the interviewing kindergarten teachers provided me with useful insights into everyday life as well as special problems they face. The narrative interview gave a special frame and setting which enabled the teachers to reflect and talk. In addition to the information which can be collected via questionnaires as well (e.g., their work experience, their education, their focus etc.) this form gave the teachers space to unfold their views and bring up their own topics as well. They displayed themselves as professionals: we do it like this, because we learned it this way, this is the way it should be. Additionally they opened themselves and admitted difficulties and problems. They mentioned wanting to do more but not being able to, and doubting whether everything they do is good, and whether they meet the needs and challenges of each single child. In an interview one of the teachers made it quite explicit: “It’s a child who has to go to school next year. A girl who has extreme difficulties to acclimatize, because of her unsteadiness and second motherlanguage. (...) Both of us

reach our limits here linguistically. (...) According to her age she should be on a different level and I do not know what is the reason. Is it because of her poor language skills? Or also a cognitive problem? (...) What's right or wrong in this case? Due to the impossibility to communicate, I cannot estimate it."³

The interviews have shown to be a successful means for a better understanding of the people and the institution. The teachers explained the structure of their institution and unveiled conflicts between the teachers as well – differences in their methods and goals also caused by age differences and other things they learned during their professional education, financial reasons, practical obstacles. In one interview a young teacher told about her experiences with older colleagues who do not accept that the younger one has an own opinion and might see the difficulties of a child, where the older one cannot. "I have got four years of professional experience. But, what is that against someone who has 30 years? Yes, you need good self-confidence for telling him that. (...) Yes, I think, if you don't dare that, you don't have any chance. And I think, in this case a lot of children don't have a chance neither".⁴ As everybody sets different priorities and sees different things, good teamwork and a cooperative atmosphere within the kindergarten is required for good work. However, not only the teachers influence the work, but also the children and their abilities. The same teacher observed that in this kindergarten, that a lot of children with poor German skills attend, her practical work is changing. She explained for example that she likes to embed language training into the sport hours and starts with ambitious projects which relate the current topic of the group activities (e.g. autumn and apples) to physical activities. As most of the children do not understand her explanations, she has to reduce her aims step by

³ "Das ist ein Kind, was nächstes Jahr in die Schule kommt. Ein Mädchen, die durch ihre Unregelmäßigkeiten hier und durch die zweite Muttersprache extreme Probleme hat, sich hier einzufinden. (...) sprachlich stoße ich ständig an meine Grenzen und sie selber auch (...) Eigentlich müsste sie von ihrem Alter her auf einem ganz anderen Stand sein und ich weiß nicht, woran das liegt. Liegt es an den mangelnden Sprachkenntnissen? Oder ist es auch ein kognitives Problem? (...) Also, was da jetzt richtig oder falsch ist, da fehlt es dann an der Kommunikation, weil ich das eben nicht mehr einschätzen kann."

⁴ "Ich hab' jetzt vier Jahre Berufserfahrung, was ist das gegen einen, der 30 hat? Aber ja, da brauchst du auch ein gutes Selbstbewusstsein, um das demjenigen auch sagen zu können. (...) Ja, ich glaube, wenn du dich das nicht traust, hast du auch keine Chance so. Und ich glaube, dann haben auch viele Kinder keine Chance."

step. From complex activities with different roles (some children being mice which try to steal apples) to simply playing all together with parachute and balls symbolizing the wind playing with the apples. The observation alone would not have provided these insights in such a short time.

Another important aspect of the interviews with the involved teachers was the evaluation of the development (especially regarding language) of some children. As a temporary visitor, it was not easy for me to see whether a special behavior was typical for a child or temporary due to abnormal situations. The kindergarten teacher interacting with the children on a daily base has a better knowledge of the characteristics of every child. In the interviews our different point of views caused new insights and reflections for me and the teacher.

Within developmental psycholinguistics, narrative interviews are not widely used as they are thought to be irrelevant to the core interests of most of the research. But Rogoff states that "interpersonal and cultural-institutional information is necessary to understand what this child is doing, although it does not need to be attended to in the same detail as the child's efforts" (2003, p. 56). Interviews can add this kind of information to the research. Although, as an isolated method interviewing the teachers cannot be sufficient to understand aspects of children's language development, as one approach among others it provides interesting and valuable information and explicates important aspects of the cultural context in which the development takes place.

3.3 Influence of and on the researcher

Research and its results are inevitably influenced by the researcher and her motives and backgrounds, for example when formulating the questions and hypotheses, as well as during the interpretation and analysis (Flick, 2010, p. 25). While most of the quantitative research tries to minimize these influences (e.g. by using computers, double-blind-examinations, the concept of interrater reliability), ethnological work tries to take into account these influences and unfold and reflect them. Especially since the writing culture debate started in the late 1970s, the role of the researcher has been controversially discussed within ethnology. These discussions led to new ways of representation and description. One solution was the orientation towards more dialogical and polyphonic methods of representation and the explicit reflection on the role and impact of the researcher. Contrasting

the “Self” of the researcher with the ‘Other’ who used to be regarded as the object of research, Dwyer (1979, p. 219) postulated “that the initial step [...] must be to seek forms of social action which do not silence the Other’s full “voice” at the outset, which do not abstract it from its context, and which allow it to be heard in a critical address to the Self”. The so called ‘dialogical ethnography’ is highly contested for its disregard of the inevitable asymmetrical power structure of the research situation for example (Schupp 1997, p. 69 et seqq.). However, the requested reflection of the researcher and her influence and role became standard in modern ethnology. What is the role of the researcher in the field? How does she influence it? And how does – the other way round – the field influence the researcher? Does it change her opinions and attitudes? Will it perhaps change the research questions and aims?

The discussed ethnological methods try to capture complex situations in which it is not possible to identify clear variables. For that, they use different approaches: the observation of natural situations, discussing with the participants and listening to their views. The various methods focus on different aspects of the same general situation and each offers a valuable contribution to its understanding which could not be provided by one method alone. As a result the researcher will get some kind of insider’s view into the research area and its constitution.

Nevertheless, the outsider’s view which the researcher brings to the field originally helps to unfold the particularities in the situations, bringing along some new perspectives and questions for everyone involved. The difficulties the researcher faces during the first phase of research (getting ‘in’ the field) enable a new perspective to and understanding of the research area which is different from the insider’s view (cf. Schoneville 2010: 97). Thus, it offers a possibility to get aware of actions and motives as the members of the community “often have difficulty noticing their own practices because they take their own ways for granted, like the fish not being aware of the water”(Rogoff 2003, p. 24). Hence, Rogoff highlights the importance of the communication between ‘insiders’ and ‘outsiders’ of the community (Rogoff 2003, p. 24). This communication between researcher and the community members is not a confounding factor, but an explicit part of the research process. Flick (2010, p.29) clarifies: “The subjectivity of both of the researched and the researcher becomes part of the researchprocess. The researcher’s reflections about his

activities and observations in the field, his impressions, irritations, influences, emotions, etc. become data and part of the interpretation"⁵(translation: C.E.). In this light, the researcher is not so much of an expert, but asker, seeker, and not-yet-knower.

4. Conclusion

Following Miller (1993, p. 344), one important feature of cultural-historical oriented research is the active child in its context as a unit of research. This involves attention not only to the child, but also to the behavior and activity of surrounding people, factors of culture and situation. Ethnological methods, especially participant observation, are eminently context-sensitive. They prompt the researcher not to neglect situation, context and culture. But, they are also suited to examine the active child. James argues that "it is the use of ethnography as a research methodology which has enabled children to be recognized as people who can be studied in their own right within the social sciences. (...) For what ethnography permits is a view of children as competent interpreters of the social world. This involves a shift from seeing children as simply the raw and uninitiated recruits of the social world to seeing them as making a contribution to it" (James 2010, p. 246). Also within our fieldwork these methods allowed for special insights into the daily life and activities of children. Taking into consideration the context and the conditions of the institution, it was possible to see the children interacting in a meaningful way. Despite, their language use might seem to be defective and deficient on a first glance, most of the children find ways to express their needs, feelings and wishes and establish stable social relationships.

A strength of ethnological methods is that they enable for direct and straight observation. For the detailed analysis of speech data which is important for a lot of research questions in this area ethnological methods have to be modified according to the research question – for example by using recording devices. Hedegaard criticizes that these "new anthropological approaches [...] have not yet solved the

⁵-"Die Subjektivität von Untersuchten und Untersuchern wird zum Bestandteil des Forschungsprozesses. Die Reflexionen des Forschers über seine Handlungen und Beobachtungen im Feld, seine Eindrücke, Irritationen, Einflüsse, Gefühle etc. werden zu Daten, die in die Interpretation einfließen [...]".

problem of the relations between the specific situation and the general conceptions of their thematic studies" (Hedegaard 2008a, p. 36). Consequently, it does not seem to be appropriate to rely solely on them. But, depending on the research question, it can be definitely fruitful for cultural-historical psycholinguistics to take them into consideration.

References

- Bertau, M.-C. (2011). *Anreden, Erwidern, Verstehen. Elemente einer Psycholinguistik der Alterität*. [Addressing, replying, and understanding. Elements of a psycholinguistics of alterity]. Berlin: Lehmanns Media.
- Christmann, G.B. (1996). Zur Ethnographie kommunikativer Vorgänge in Ökologiegruppen. [On the ethnography of communication within ecology groups]. In H. Knoblauch (Ed.), *Kommunikative Lebenswelten. Zur Ethnographie einer geschwätzigen Gesellschaft* (pp. 53-72). Konstanz: Univ.-Verl. Konstanz.
- Dwyer, K. (1979). The dialogic of ethnology. *Dialectical Anthropology*, 4, 205-224.
- Epping, C. (in prep.). *Verstehen und Verständigung in deutschen Kindergärten*. [Understanding and comprehension in German kindergartens]. Dissertation project at Ludwig-Maximilians-Universität, Munich.
- Flick, U. (2010). *Qualitative Sozialforschung. Eine Einführung*. [Qualitative social research. An introduction] Reinbek bei Hamburg: Rowohlt-Taschenbuch-Verlag.
- Hedegaard, M. (2008). A cultural-historical theory of children's development. In M. Hedegaard, M. Fleer, J. Bang, & P. Hviid (Eds.), *Studying children. A cultural-historical approach* (pp. 10-29). Maidenhead: Open Univ. Press.
- Hedegaard, M. (2008a). Developing a dialectic approach to researching children's development. In M. Hedegaard, M. Fleer, J. Bang, & P. Hviid (Eds.), *Studying children. A cultural-historical approach* (pp. 30-45). Maidenhead: Open Univ. Press.
- Hedegaard, M. (2008b). The educational experiment. In M. Hedegaard, M. Fleer, J. Bang, & P. Hviid (Eds.), *Studying children. A cultural-historical approach* (pp. 181-201). Maidenhead: Open Univ. Press.
- Heinzel, F., Cloos, P., Köngeter, S. & Thole, W. (Eds.) (2010). *"Auf unsicherem Terrain". Ethnographische Forschung im Kontext des Bildungs- und Sozialwesens*. ["On insecure terrain". Ethnographical research within education and welfare] Wiesbaden: VS Verl. für Sozialwissenschaften.
- Hopf, Ch. (2009). Qualitative Interviews – ein Überblick. [Qualitative interviews – an overview]. In U. Flick, E. v. Kardoff, I. Steinke (Eds.), *Qualitative Forschung. Ein Handbuch* (pp. 349-360). Reinbeck bei Hamburg: Rowohlt Taschenbuch Verlag.
- James, A. (2010). Ethnography in the study of children and childhood. In P. Atkinson (Ed.), *Handbook of ethnography* (pp. 246-257). Los Angeles: SAGE.
- Knoblauch, H. (2005). Focused Ethnography. *Forum Qualitative Sozialforschung/ Forum: Qualitative Social Research*, 6, 30 paragraphs. Retrieved 12th of August, 2011, from <http://nbn-resolving.de/urn:nbn:de:0114-fqs0503440>.

- Lompscher, J. (2004). *Lernkultur Kompetenzentwicklung aus kulturhistorischer Sicht. Lernen Erwachsener im Arbeitsprozess*. [Learning culture and competence development in a cultural-historical perspective]. Berlin: Lehmanns Media.
- Madden, R. (2010). *Being ethnographic. A guide to the theory and practice of ethnography*. London: SAGE.
- Malinowski, B. (1922). *Argonauts of the Western Pacific*. Waveland Press Incorporated.
- Miller, P.H. (1993). *Theorien der Entwicklungspsychologie*. [Theories of Developmental Psychology]. Heidelberg: Spektrum Akademie Verlag.
- Oester, K. (2008). 'Fokussierte Ethnographie': Überlegungen zu den Kernansprüchen der Teilnehmenden Beobachtung. [Focused ethnography: Thoughts about the cores of participant observation]. In B. v. Hünersdorf, Ch. Maeder, & B. Müller (Eds.), *Ethnographie und Erziehungswissenschaft. Methodologische Reflexionen und empirische Annäherungen* (pp. 233-243). Weinheim: Juventa-Verlag.
- Rogoff, B. (2003). *The cultural nature of human development*. Oxford UK, New York: Oxford University Press.
- Schoneville, H. (2010). An ein Zelt lässt sich nicht gut anklopfen: Der Feldzugang als soziale Aufführung und Kampf um Deutungen. [It is not easy to knock at a tent: Access to the field as a social performance and fight for interpretation]. In F. Heinzl, P. Cloos, S. Köngeter & W. Thole (Eds.). *"Auf unsicherem Terrain". Ethnographische Forschung im Kontext des Bildungs- und Sozialwesens* (pp. 95-105). Wiesbaden: VS Verl. für Sozialwiss.
- Schupp, S. (1997). *Ethnologie und ihr koloniales Erbe. Ältere und neuere Debatten um die Entkolonialisierung einer Wissenschaft*. [Ethnology and its colonial heritage. Older and recent debates about the decolonialisation of a science]. Hamburg: Lit.
- Spindler, G.D. (Ed.) (1978). *The Making of psychological anthropology*. Berkeley, Los Angeles, London: University of California Press.
- Spradley, J.P. (1980). *Participant observation*. South Melbourne: Wadsworth Cengage Learning.
- Werani, A. (2011). *Inneres Sprechen – Ergebnisse einer Indiziensuche*. [Inner speech – empirical evidence based on speech profiles]. Berlin: Lehmanns Media.

Keywords

child development,
ethnology,
language development,
methodology,
narrative interview
participant observation,
psycholinguistics,

Name index

Hedegaard, M.;
Knoblauch, H.
Malinowski, B.;
Rogoff, B.;

Authors

Marie-Cécile Bertau, PD Dr., Ludwig-Maximilians-Universität München, Institut für Phonetik und Sprachverarbeitung; Research interests: investigating a dialogic notion of language; modelling the self as dialogic, especially in the perspective of ontogenetic development; the role of dialogical forms of inner speech, inner and imaginative instances for psychological processes; the “phenomenality” of language highlighting the formations of language activity; developing a notion of voice with regards to its phenomenal and psychological dimensions.

Email: bertau@lmu.de

Anke Werani, Ludwig PD Dr., Ludwig-Maximilians-Universität München, Institut für Phonetik und Sprachverarbeitung; Research interests: constructing cultural-historical psycholinguistics; investigating the relations between speaking and thinking, especially the role of inner speech on the basis of speech profiles; studying speech profiles with regards to processes in thinking and identity; exploring speaking and thinking in aphasic syndromes.

Email: anke.werani@lmu.de

Andrea Karsten, M.A., Ludwig-Maximilians-Universität in Munich, Institute for General Linguistics; Research interests: processes of positioning and conventionalization in language

activity; writing conceptualized as written speech, according to a dialogical and cultural-historical psycholinguistic framework; PhD-project “Processes and practices in writing. A conceptualization from a dialogical perspective”.

E-mail: mail@andreakarsten.de

Stefanie Surd-Büchele, M.A., Ludwig-Maximilians-Universität München, Dekanat der Fakultät für Sprach- und Literaturwissenschaften;

Research interests: psycholinguistics of writing, especially relations between writing and thinking; multilingualism; language acquisition; verbal consciousness.

E-Mail: surd-buechele@web.de

Andrea Sens, M.A., Ludwig-Maximilians-Universität München, Deutsches Jugendinstitut München e.V.;

Research Interests: the social context of language learning in the early years; the foundation of language learning from a cultural-historical perspective; language education in day care; professional training for day care providers in language education; inclusion in early childhood education.

Email: sens@dji.de

Clara Epping, M.A., Ludwig-Maximilians-Universität München, Institut für Interkulturelle Kommunikation;

Research interests: understanding and comprehension; language acquisition and

development; multicultural society; migration and integration.

E-mail: Clara.Epping@ikk.lmu.de

Glossary: Concepts of Activity Theory

Inneres Sprechen²

Verweise: Denken, Gedanke, egozentrisches Sprechen, äußeres Sprechen, intellektuelle Funktion des Sprechens, kommunikative Funktion des Sprechens, Schreiben, sprachliches Denken, [lautloses Sprechen, sozialisiertes Sprechen, Sprechfähigkeit].³

1.

Wir haben allen Grund zu glauben, dass das nicht nur beim lauten Lesen so ist, also beim Aussprechen der Wörter, sondern auch beim stillen Lesen, beim Lesen für sich, das vom inneren, lautlosen Sprechen begleitet wird. (1926, 38, 170)

[O vlijanii rečevogo ritma na dvizanie [Über den Einfluss des Sprechrhythmus auf die Atmung]. In: Problemy sovremennoj psichologii. Sbornik statej sotrudnikov Moskovskogo gosudarstvennogo universiteta Eksperimental'noj psichologii. Pod redakciej K. N. Kornilov. Leningrad 1926, 170]

2.

In der Tat erfordert die Lösung von so genannten stillen Tests als eine notwendige Bedingung die innere, verschlossene Teilnahme des Sprechens in zweifacher Form. Einerseits haben wir vor uns einfach das innere Sprechen, das das äußere ersetzt. Das Kind, das die Aufgabe schweigend löst, löst sie damit noch nicht ohne Sprechen. Es ersetzt nur die Prozesse des äußeren Sprechens durch die Prozesse des inneren Sprechens, die sich natürlich qualitativ von den äußeren unterscheiden, und eine kompliziertere höhere Stufe in ihrer Entwicklung darstellen. Somit haben die Forscher, die die stillen Tests eingeführt haben und gedacht haben, dass sie damit die Operation des Kindes von der Teilnahme des Sprechens entfernen, damit wirklich, ohne daß sie es selbst bemerkt haben, das Sprechen in verdeckter Form, in der Form des inneren

² [Zitiert nach Doris Mangott, Kontinuität und Wandel im Schaffensprozeß von L.S. Vygotskij. Ein russisch-deutsches Lexikon zur Ideengeschichte: 1926-1934. Mit einer Bibliographie. Band I. Innsbruck 1995, 297-315. (Diplomarbeit der Leopold Franzens Universität Innsbruck. Institut für Germanistik). Alle Übersetzungen aus dem Russischen von Doris Mangott. Mangott übersetzt „reč“ grundsätzlich mit „Sprache“, während wir die Übersetzung „Sprechen“ bevorzugen und deshalb alle Übersetzungen des Terminus „reč“ bei Mangott entsprechend gegen „Sprechen“ austauschen.]

³ [Die Originalzitate in russischer Sprache werden hier ausgelassen.]

Sprechens, das heißt in einer für das Kind komplizierteren Form, eingeführt. Somit wird die Aufgabe nicht erleichtert, sondern der sprachliche Teil des Tests sogar erschwert, der Einfluss des Sprechens wird nicht eliminiert, sondern an die Entwicklung des kindlichen Sprechens werden weit höhere Anforderungen gestellt. Denn das Lösen einer Aufgabe mit Hilfe des inneren Sprechens ist für das Kind schwieriger als das Lösen mit Hilfe des äußeren Sprechens. Und das auch deswegen, weil das innere Sprechen eine weit höhere und kompliziertere Stufe der Entwicklung des Sprechens darstellt. (1928, 75, 68)

[K voprosy o mnogojazyčnii v detskom vozraste [Zur Mehrsprachigkeit im Kindesalter]. In: L. S. Vygotskij, Umstvennoe razvitie detej v processe obučenija. Sbornik statej. Moskva, Leningrad 1935⁴, 68.]

3.

Er [= der Prozess] besteht in der Entwicklung des inneren Sprechens, der Hauptform des Denkens des Kindes. (1928, 81/5, 6)

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 6.]

4.

Im Egozentrismus des kindlichen Sprechens, wie er von Piaget beschrieben worden ist, sind wir geneigt, einen in genetischer Beziehung wichtigen Moment des Übergangs vom äußeren Sprechen zum inneren zu sehen. Das gesamte Denken, das sich mit Hilfe des inneren Denkens vollzieht, alles das, was wir für uns geheim halten, worüber wir mit uns selbst nachdenken, alles das ist die egozentrische Funktion des Sprechens. Der gesamte Unterschied zwischen dem Kind und dem Erwachsenen besteht darin, dass das egozentrische Sprechen bei uns zu einem inneren geworden ist, beim Kind ist es noch ein äußeres.⁵ (1928, 81/5, 9f.)

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 9f..]

⁴ [Laut Kommentar von A. M. Matjuškin wurde der Text bereits 1928 geschrieben – vgl. Vygotskij, Gesammelte Werke, Bd. III, Moskau 1983, 360.]

⁵ [Die Sperrungen Vygotskij's wurde hier und auch in den folgenden Zitaten gelöscht.]

5.

Somit verweist das Verringern, der heftige Rückgang des Egozentrismuskoeffizienten, der an der Grenze des Schulalters zu beobachten ist, nicht darauf hin, daß das Sprechen aufhört, in Bezug auf das Denken jene Funktion zu erfüllen, welche sie bislang erfüllt hat, sondern darauf, daß sie jetzt beginnt, sie anders zu erfüllen, wenn sie sich in eine innere Tätigkeit verwandelt. Der Rückgang des Egozentrismuskoeffizienten im äußeren Sprechen weist auf das Anwachsen des Egozentrismus im inneren Sprechen hin. Anders ausgedrückt, der Übergangsmoment in der Entwicklung des Sprechens um das 7. Lebensjahr herum, der von Piaget festgestellt worden ist, besteht im Übergang vom äußeren Sprechen in das innere. (1928, 81/5, 10)

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 10.]

6.

Gerade mit dem Beginn des Schulalters beginnt auch die Formierung und die Entwicklung des inneren Sprechens des Kindes und das auf ihm basierende sprachliche Denken. Das wichtigste objektive Symptom für diesen Wechsel besteht in der Verringerung des Egozentrismus des äußeren Sprechens. Zwei Umstände geben uns allen Grund anzunehmen, daß es am Beginn des Schulalters [...] zur endgültigen Differenzierung zweier Funktionen des Sprechens kommt – der egozentrischen und der sozialen – und zur Aufteilung des äußeren und inneren Sprechens. Das Sprechen als Werkzeug des Denkens und das Sprechen als Werkzeug des Verkehrs⁶ beginnen, sich hier auf zwei verschiedenen Linien zu entwickeln. (1928, 81/5, 10)

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 10.]

7.

Piaget ist es also gelungen aufzuzeigen, auf welche Weise das äußere Sprechen in das innere Sprechen übergeht. Er hat gezeigt, dass das egozentrische Sprechen von seiner psychologischen Funktion her ein inneres Sprechen ist und von seiner physiologischen Natur her ein äußeres. Das Sprechen wird also psychologisch früher ein inneres als es wirklich ein inneres wird. (1928, 81/5, 10)

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 10.]

⁶ [Im Original „obščenie“.]

8.

Das ermöglicht es uns zu erklären, wie die Bildung des inneren Sprechens vor sich geht. Diese Bildung vollzieht sich über den Weg der Teilung der Funktionen des Sprechens, über den Weg der Absonderung des egozentrischen Sprechens, über den Weg ihrer allmählichen Verkürzung und letztendlich über den Weg ihrer Verwandlung in das innere Sprechen. Dieser Weggang des äußeren Sprechens nach innen charakterisiert auch den Beginn des Schulalters. Der Koeffizient des egozentrischen Sprechens nimmt schnell fast um das Doppelte ab. Das egozentrische Sprechen ist eine Übergangsform vom äußeren Sprechen zum inneren Sprechen. (1928, 81/5, 11)

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 11.]

9.

Das Schulalter beginnt somit mit einem sehr wichtigen Wechsel in der Entwicklung des Denkens und Sprechens des Kindes. Dieser Wechsel besteht darin, dass sich beim Kind zwei verschiedene Funktionen des Sprechens differenzieren: Es beginnt sich das innere Sprechen herauszubilden, das heißt das kulturelle Denken im eigentlichen Sinne des Wortes. (1928, 81/5, 13)

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 13.]

10.

Wie immer man sich zu der komplizierten und noch umstrittenen theoretischen Frage der Beziehung zwischen Denken und Sprechen stellt, man muß jedenfalls die entscheidende und wichtige Bedeutung des inneren Sprechens für die Entwicklung des Denkens anerkennen. Die Bedeutung des inneren Sprechens für unser gesamtes Denken ist so groß, dass manche Psychologen das innere Sprechen und das Denken sogar identifizieren. Von ihrem Standpunkt aus ist das Denken nichts anderes als ein gehemmt, verzögertes, lautloses Sprechen. Es ist aber in der Pädologie weder geklärt, auf welche Weise die Verinnerlichung des äußeren Sprechens in das innere Sprechen vor sich geht, noch in welchem Alter sich die bedeutende Veränderung ungefähr vollzieht, wie sie verläuft, durch was sie hervorgerufen wird und was ihre genetische Charakteristik ist. (1928, 81/5, 16f.; vgl. 1929, 96, 121))

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 116f.]

vgl. Genetičeskie korni myšlenija i reči [Die genetischen Wurzeln des Denkens und des Sprechens]. In: Estestvoznanie i marksizm. Organ sekcii estestvennych i točnych nauk kommunističeskoj akademii. 1 (1929), 121.]

11.

Die wichtige psychologische Funktion der Frage besteht darin, dass das Kind dort fragt, wo wir denken. Das fällt vollkommen mit dem schon längst bekannten Faktum zusammen, dass jedes Denken mit einer Frage beginnt, mit einer Schwierigkeit, mit einem Problem. [...] Gerade deswegen steht die Frage des Kindes am Beginn des Denkens des Kindes [...]. Bevor das Kind zu denken beginnt, wendet es sich in schwierigen Situationen an die Erfahrungen der anderen. Es fragt; anders ausgedrückt: Dort, wo das Kind eigentlich denken sollte, wendet es sich viel häufiger an die Erfahrung der es umgebenden Erwachsenen. Das Kind stützt sich auf fremdes Denken, bevor es selbst zu denken beginnt. Später, im inneren Sprechen, wiederholt sich dieser Mechanismus in verkürzter Form und auf dieselbe Art und Weise. Er beginnt mit einer Frage und endet mit einer Antwort, die das Kind sich selbst gibt. Somit wiederholt das Denken, wenn es sich in einen inneren Mechanismus verwandelt hat, bis zu einer gewissen Stufe den äußeren Mechanismus der sozialen Erfahrung. (1928, 81/5, 18)
[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 5, 118.]

12.

Aber das stille Lesen, das Lesen für sich selbst, ist nichts anderes als ein inneres Sprechen. Wir sehen somit, welche tiefen Wurzeln die Entwicklung des schriftlichen Sprechens⁷ in der Entwicklung des inneren Sprechens des Kindes hat. (1928, 81/7, 7)
[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 7, 7.]

13.

Wir haben darauf hingewiesen, dass es im Schulalter zur Trennung des egozentrischen Sprechens und des sozialisierten Sprechens kommt. Das egozentrische Sprechen des Kindes verwandelt sich in das innere Sprechen, das sozialisierte Sprechen bleibt ein äußeres. Der Leseprozess ist gleichzeitig ein Prozess des inneren Sprechens als auch ein Prozess des sozialisierten Sprechens. Gerade deswegen erfährt durch das

⁷ [Im Original „pis'mennoj reči“.]

Lesen der innere Mechanismus des Denkens seine höchste Entwicklung, und das Lesen selbst verwandelt sich in eine spezifische Form des sozialen Denkens, d.h. in das innere Sprechen [...].(1928, 81/7, 7f.)

[Pedologija škol'nogo vozrasta. Zadanija 1 – 8. Moskva 1928, Aufgabe 7, 7f.]

14.

Es gibt keinen stichhaltigen Grund für die Annahme, dass die Entwicklung des inneren Sprechens auf rein mechanischem Wege verläuft, auf dem Weg der allmählichen Verringerung der Stimmhaftigkeit des Sprechens vor sich geht, dass also der Übergang vom äußeren (offenen) zum inneren (verschlossenen) Sprechen über das Flüstern, das heißt über das halbleise Sprechen, vor sich geht. Die Sache wird wohl kaum so vor sich gehen, dass das Kind allmählich immer leiser spricht und im Ergebnis dieses Prozesses letztendlich beim stimmlosen Sprechen anlangt. Wir möchten mit anderen Worten verneinen, dass es in der Genese des kindlichen Sprechens die folgende Aufeinanderfolge von Etappen gibt: lautes Sprechen – Flüstern – inneres Sprechen. (1929, 96, 121)

[Genetičeskie korni myšlenija i reči [Die genetischen Wurzeln des Denkens und des Sprechens]. In: Estestvoznanie i marksizm. Organ sekcii estestvennych i točnych nauk kommunističeskoj akademii. 1 (1929), 121.]

15.

Unsere Untersuchung zeigte, daß 1) in struktureller Hinsicht das flüsternde Sprechen keine irgendwie bedeutenden Veränderungen und Abweichungen vom lauten Sprechen und hauptsächlich keine Veränderungen, die ihrer Tendenz nach für das innere Sprechen charakteristisch sind, zeigt; 2) in funktioneller Hinsicht unterscheidet sich das flüsternde Sprechen gravierend vom inneren Sprechen und zeigt nicht einmal in Ansätzen eine Tendenz zur Ähnlichkeit; 3) in genetischer Hinsicht ist das flüsternde Sprechen letztendlich ein Sprechen, das schon sehr früh hervorgerufen werden kann, sich aber nicht spontan in erkennbarer Weise im schulpflichtigen Alter entwickelt. [...] Im Gegenteil spricht alles, was wir vom Flüstern der Kinder wissen, gegen die Annahme, dass das Flüstern einen Übergangsprozess zwischen äußerem und innerem Sprechen darstellt. (1929, 96, 122)

Genetičeskie korni myšlenija i reči [Die genetischen Wurzeln des Denkens und des Sprechens]. In: Estestvoznanie i marksizm. Organ sekcii estestvennych i točnych nauk kommunističeskoj akademii. 1 (1929), 122.]

16.

Erstens ist das innere Sprechen des Erwachsenen mit dem egozentrischen Sprechen des Vorschulkindes durch die Gemeinsamkeit der Funktionen verwandt. Sowohl die eine als auch die andere Form des Sprechens ist ein Sprechen für sich selbst, ein Sprechen, das losgelöst ist vom sozialen Sprechen, ein Sprechen, das nicht die Aufgabe der Mitteilung und der Verbindung mit der Umwelt erfüllt. [...]

Zweitens ist das innere Sprechen des Erwachsenen mit dem egozentrischen Sprechen des Kindes durch seine strukturellen Besonderheiten verwandt. Piaget hat bereits auf folgende Eigenschaften des egozentrischen Sprechens hingewiesen: Es ist der Umgebung unverständlich, wenn es einfach aufgeschrieben wird, das heißt, wenn es von der konkreten Handlung, bei dem es entstand, losgelöst wird. Es ist nur für den Sprechenden verständlich. Es ist verkürzt, es zeigt die Tendenz zu Auslassungen und zu ‚Kurzschlüssen‘. Es lässt weg, was sich vor den Augen des Sprechenden befindet und erfährt auf diese Weise komplizierte strukturelle Veränderungen. Eine einfache Analyse genügt, um zu zeigen, daß diese strukturellen Veränderungen eine ganz ähnliche Tendenz haben, wie die, die wir vorhin als strukturelle Grundtendenz des inneren Sprechens beschrieben haben, gerade eben die Tendenz zur Verkürzung.

Schlussendlich erlaubt die von Piaget festgestellte Tatsache des schnellen Absterbens des egozentrischen Sprechens im Schulalter die Annahme, dass im gegebenen Fall nicht ein einfaches Absterben des egozentrischen Sprechens vor sich geht, sondern ihre Verinnerlichung in das innere Sprechen, ein Weggang in das Innere sozusagen. (1929, 96, 124)

Genetičeskie korni myšlenija i reči [Die genetischen Wurzeln des Denkens und des Sprechens]. In: Estestvoznanie i marksizm. Organ sekcii estestvennych i točnych nauk kommunističeskoj akademii. 1 (1929), 124.]

17.

Ein älteres Kind benimmt sich schon wesentlich anders. Es sieht um sich, überlegt (das schließen wir aus den langen Pausen) und findet endlich eine Lösung. Auf die Frage, woran es gedacht habe, gibt es immer Antworten, die eine beträchtliche Ähn-

lichkeit mit dem lauten Denken der Vorschulkinder aufweisen. Wir nehmen an, daß dieselbe Option, die beim Vorschulkind im offenen Sprechen vor sich geht, beim Schulkind bereits im inneren lautlosen Sprechen vorgenommen wird. Würde sich diese Vermutung bestätigen, dann könnten wir folgenden Schluss ziehen: Das innere Sprechen entsteht und bildet sich ungefähr im ersten Schuljahr heraus. Das würde auch eine Erklärung für das rasche Sinken des Egozentrismuskoeffizienten im Schulalter liefern. (1929, 96, 125)

Genetičeskie korni myšlenija i reči [Die genetischen Wurzeln des Denkens und des Sprechens]. In: Estestvoznanie i marksizm. Organ sekcii estestvennych i točnych nauk kommunističeskoj akademii. 1 (1929), 125.]

18.

Wir würden so auch auf eine andere theoretische Frage eine Antwort erhalten: Warum wird das Sprechen zu einem inneren. Die Antwort darauf wäre, daß sie zu einem inneren wird, weil sich ihre Funktion verändert. Die Reihenfolge in der Entwicklung des Sprechens wäre dann eine andere als die von Watson aufgezeigte. Anstelle der drei Etappen – lautes Sprechen. Flüstern, lautloses Sprechen – würden dann drei andere treten: äußeres Sprechen, egozentrisches Sprechen, inneres Sprechen. (1929, 96, 126)

Genetičeskie korni myšlenija i reči [Die genetischen Wurzeln des Denkens und des Sprechens]. In: Estestvoznanie i marksizm. Organ sekcii estestvennych i točnych nauk kommunističeskoj akademii. 1 (1929), 126.]

19.

Auf dieses dritte folgt ein viertes Stadium, das wir das Stadium der ‚Verinnerlichung‘ nennen, weil es vor allem dadurch gekennzeichnet ist, dass die äußere Operation zu einer inneren Operation wird, zum inneren Sprechen wird und im Zusammenhang damit tief gehende Veränderungen erfährt. Es ist dies das Rechnen im Kopf oder die stumme Arithmetik in der arithmetischen Entwicklung des Kindes, es ist dies das sogenannte ‚logische Gedächtnis‘, das innere Wechselbeziehungen in der Gestalt innerer Zeichen benützt.

Auf dem Gebiet des Sprechens entspricht dem das innere oder lautlose Sprechen. Was dabei am bemerkenswertesten ist, ist die Tatsache, dass zwischen inneren und äußeren Operationen in diesem Fall eine ständige Wechselwirkung besteht, die Ope-

rationen gehen fortwährend von der einen in die andere Form über. Wir können das mit größter Deutlichkeit beim inneren Sprechen feststellen, das [...] sich dem äußeren Sprechen desto mehr nähert, je enger es mit diesem im Verhalten verbunden ist; die beiden können sogar vollkommen identische Formen annehmen, z.B. in dem Falle, wenn das innere Sprechen eine Vorbereitung zum äußeren Sprechen ist (z.B. Überlegung zu einer bevorstehenden Rede, eines Vortrags usw.). In diesem Sinne gibt es im Verhalten keine scharfen metaphysischen Grenzen zwischen äußerem, und innerem; das eine geht leicht in das andere über, das eine entwickelt sich unter der Einwirkung des anderen. (1929, 96, 127)

Genetičeskie korni myšlenija i reči [Die genetischen Wurzeln des Denkens und des Sprechens]. In: Estestvoznanie i marksizm. Organ sekcii estestvennych i točnych nauk kommunističeskoj akademii. 1 (1929), 127.]

20.

Diese Schlussfolgerung ist, dass sich das innere Sprechen durch Anhäufung lang anhaltender funktioneller und struktureller Veränderungen entwickelt, dass sie zusammen mit der Differenzierung der sozialen und der egozentrischen Funktionen des Sprechens von dem äußeren Sprechen abzweigt, und endlich, dass die sprachlichen Strukturen, die sich das Kind aneignet, zu den grundlegenden Strukturen seines Denkens werden. (1929, 96, 132f.)

Genetičeskie korni myšlenija i reči [Die genetischen Wurzeln des Denkens und des Sprechens]. In: Estestvoznanie i marksizm. Organ sekcii estestvennych i točnych nauk kommunističeskoj akademii. 1 (1929), 132f.]

21.

3. By observing the development of egocentric speech we find that this function does not simply disappear, being replaced by a socialized form of verbal behavior. Its planning functions are taken by specific pauses which have an intellectual character and are filled by internal speech.

4. On the strength of our experiments we consider it possible to change the traditional schema of the verbal evolution of explicit speech, viz., external speech – internal speech, into external speech – egocentric speech – internal speech. We thus consider egocentric speech as one of the most important processes having a specific function in the evolution of the cultural behaviour of the child. (1929, 114, 465)

[The function and fate of egocentric speech. Together with A. R. Lurija. In: Ninth Inter'national Congress of Psychology held at Yale University. New Haven, Connecticut, September 1st to 7th. Proceedings and papers. Princetown 1930, 465.]

22.

Sehr wichtige Schlüsse resultieren hieraus in Beziehung auf die stillen Tests: Eine Aufgabe schweigend zu lösen bedeutet nicht, wie unsere Untersuchung zeigt, sie ohne Hilfe des Sprechens zu lösen. (1930, 129, 18)

[Orudie i znak v razvitii rebenka. Zitiert nach L. S. Vygotskij, Sobranie sočinennij v 6-i tomach. Tom 6. Moskva 1984, 18.]

23.

Als bestes Beispiel dafür kann wohl die Entwicklung des Sprechens dienen. Alle wissen welche ungeheure Bedeutung die Prozesse des inneren Sprechens für das Denken des modernen Menschen haben. Diese Bedeutung ist so groß, daß viele Autoren sogar Denken und Sprechen identifizieren. Unterdessen gab es eine Zeit, da die Menschheit diese psychische Funktion überhaupt nicht gekannt hat, die wir heute als inneres Sprechen bezeichnen. Das Sprechen hat primär kommunikative Funktion. Sie dient den Zielen des Zusammenhangs, des Verkehrs, der sozialen Koordination des Verhaltens. Und erst später, der Mensch wendet diese Verhaltensverfahren auf sich selbst an, arbeitet der Mensch das innere Sprechen heraus. Dabei bewahrt er irgendwie die ‚Funktion des Verkehrs‘ selbst im individuellen Verhalten, er wendet auf sich ein soziales Handlungsverfahren an. (1930, 132, 450)

[Povedenie životnych i človeka [Tierisches und menschliches Verhalten]. In: L. S. Vygotskij, Razvitie vysšich psichičeskich funkcij. Pod redakciej A.N. Leont'eva, A.R. Lurija i B.M. Teplova. Moskva 1960, 450.]

24.

Die sprachlichen Mechanismen, die früher deutlich in der Periode des aktiven Sprechens ausgedrückt wurden, gehen in dieser ‚Periode der ursprünglichen Akkumulation‘ in das innere, nicht hörbare Sprechen über, und letzteres wird zu einem der bedeutendsten Hilfswerkzeuge des Denkens. Und es ist tatsächlich so, dass viele komplizierte und intellektuelle Aufgaben ungelöst blieben, wenn wir das innere Sprechen nicht hätten, dank dem das Denken klare und deutliche Formen annimmt, dank dem

ein vorläufiges sprachliches (oder besser intellektuelles) Probieren von einzelnen Lösungen möglich wird, dank dem seine vorläufige Planung möglich wird. (1930, 149, 196)

[Étjudy po istorii povedenija. Obez'jana. Primitiv. Rebenok [Studien zur Geschichte des Verhaltens. Der Affe. Der Primitive. Das Kind]. Sobmestno s A.R. Lurija. Moskva, Leningrad 1930, 196.]

25.

Erst in dieser letzten Periode verwandelt sich das Sprechen aus einem anerzogenen, äußeren Verfahren in einen inneren Prozess, und das Denken des Menschen gewinnt neue und gewaltige Perspektiven für die weitere Entwicklung. (1930, 149, 197)

[Étjudy po istorii povedenija. Obez'jana. Primitiv. Rebenok [Studien zur Geschichte des Verhaltens. Der Affe. Der Primitive. Das Kind]. Sobmestno s A.R. Lurija. Moskva, Leningrad 1930, 197.]

26.

In der „Pädologie des Schulalters“ haben wir nachzuweisen versucht, daß das innere Sprechen überhaupt erst mit Beginn des Schulalters entsteht. Das ist zunächst eine junge, ungefestigte, nicht stabile Form, deren Funktionen noch nicht voll wirksam werden. Deshalb ist die Diskrepanz zwischen dem inneren und dem äußeren Sprechen ein überaus typisches Charakteristikum des Denkens des Schulkindes. Das Schulkind muß, um denken zu können, laut und in Anwesenheit eines anderen sprechen. Wie wir wissen, wird das äußere Sprechen, das ein Mittel des Verkehrs ist, beim Kind früher sozialisiert als das innere, das es noch nicht unter Kontrolle hat. (1931, 158, 331)

[Pedologija podrostrka. Zadanija 9 – 16 [Pädologie des frühen Jugendalters. Aufgaben 9 – 16]. Moskva, Leningrad 1931, 331.]

27.

Wir sehen also, dass das innere Sprechen im Schulalter nicht lediglich das nach innen verlagerte Sprechen ist, das seinen äußeren Teil des lauten Sprechens weggeworfen bzw. verloren hat. Es kann keine falschere Definition des inneren Denkens geben als die bekannte Formel: ‚Gedanke ist Sprache minus Laut‘. Dem Faktum der Diskrepanz zwischen innerem und äußerem Sprechen beim Schulkind können wir entnehmen,

wie unterschiedlich die Grundlagen sind, auf denen sich inneres und äußeres Sprechen in diesem Alter entwickeln, wie das innere Sprechen noch die Besonderheiten des egozentrischen Denkens beibehält und sich auf der Ebene der synkretischen Assimilation von Gedanken bewegt, während das äußere Sprechen bereits ausreichend sozialisiert und bewusst ist und so gesteuert wird, dass es sich auf logischer Ebene bewegen kann. (1931, 158, 331)

[Pedologija podrostrka. Zadanija 9 – 16 [Pädologie des frühen Jugendalters. Aufgaben 9 – 16]. Moskva, Leningrad 1931, 331.]

28.

3) Das schriftliche Sprechen⁸ steht in einer anderen Beziehung zum inneren Sprechen: Wenn das äußere Sprechen⁹ in seiner Entwicklung vor in seiner Entwicklung vor dem inneren Sprechen kommt, dann entsteht das schriftliche Sprechen erst nach ihm und setzt sein Vorhandensein bereits voraus; das schriftlichen Sprechen ist nach Head der Schlüssel zum inneren Sprechen, das heißt, das schriftliche Sprechen ist eine situativ nicht motivierte Sprache¹⁰, das heißt, sie wird in ihrem Verlauf bestimmt durch – a) die innere Motivation – für das Gedächtnis, für die Mitteilung, für sich selbst (Tagebuch) etc., es ist ein absolut anderes funktionales System, was die Motivation und die Einstellung zum Sprechen betrifft; b) die innere Struktur des Bedeutungsfeldes – man muss ein Feld schaffen, um schreiben zu können; aus diesem Grund erfordert das schriftliche Sprechen eine enorme innere Arbeit; c) die Syntax des inneren Sprechens, die sich gänzlich von der Syntax des äußeren Sprechens unterscheidet; der Einfluss der Bedeutung: Das innere Sprechen ist ein maximal zusammengezoogenes Sprechen, das schriftliche Sprechen ist das maximal entfaltete und formal abgeschlosseneres Sprechen als das äußere Sprechen (es hat keine Ellipsen, das innere Sprechen lebt davon), das schriftliche Sprechen ist die Übersetzung des inneren Sprechens, das dem Gesprächspartner unverständlich bleibt, das heißt, er kennt das psychische Feld nicht, auf welchem es sich ausbreitet; gerade deswegen ist das schriftliche Sprechen expliziter als das äußere Sprechen; auf dem Feld eines weißen Blatt Papiers ist es schwieriger zu begreifen, als in einer anschaulichen Situa-

⁸ [Im Original „pis'mennaja reč“.]

⁹ [Im Original „vnešnjaja reč“.]

¹⁰ [Im Original: „reč' javljaetsja reč'ju situacionno-nemotivirovannoj“.]

tion oder bei einem konkreten, lebendigen Gespräch. Man muss alles aussprechen. (1932, 174, 60f.)

[O pis'mennoj reči. Knižnaja zametka L.S. Vygotskogo 1932 goda [Über das schriftliche Sprechen. Notiz L.S. Vygotskijs von 1932]. In: Vestnik Moskovskogo gosudarstvennogo universiteta. 1/1982, 60f.]

29.

Im inneren Sprechen ist das Nichtzusammenfallen zwischen der semantischen und der phasischen Seite des Sprechens noch markanter.

Was ist inneres Sprechen?

1) Sprechen minus Laut (das heißt, alles, was der Phonation vorausgeht). (Man muß zwischen nicht ausgesprochenem¹¹ und innerem Sprechen unterscheiden (hierin Haben sich Jackson und Head getäuscht)).

2) Innerliches¹² Aussprechen von Wörtern. [...] Hier fällt die Lehre von den Typen des inneren Sprechens mit Typen der Vorstellungen (des Gedächtnisses) zusammen. Sie ist irgendeine Vorbereitung des äußeren Sprechens.

3) Gegenwärtiges (unser) Verständnis des inneren Sprechens.

Das innere Sprechen wird ganz anders aufgebaut als das äußere Sprechen. In ihm gibt es ein ganz anderes Verhältnis zwischen semantischen und phasischen Momenten.

Das innere Sprechen ist in zwei Beziehungen abstrakt: a) Es ist abstrakt im Verhältnis zur gesamten lautlichen Seite des Sprechens, das heißt, es gibt nur seine semasiologisierten phonetischen Züge wieder (zum Beispiel: drei r im Wort RRRevolution) und b) es ist agrammatisch; jedes Wort des inneren Sprechens ist prädikativ. Die Grammatik ist ganz anders als die Grammatik des semantischen, äußeren Sprechens: Im inneren Sprechen sind die Bedeutungen untereinander anders verbunden als im äußeren Sprechen; die Verschmelzung im inneren Sprechen vollzieht sich nach dem Typ der Agglutination.

(Die Agglutination von Wörtern ist möglich gerade dank der inneren Agglutination.) (Idiome sind im inneren Sprechen sehr häufig.)

¹¹ [Im Original „neproiz]

¹² [Im Original „myslennoe“ – gedanklich.]

Einfluss der Bedeutung: Das Wort wird im Kontext sowohl eingeschränkt als auch bereichert. Das Wort saugt in sich die Bedeutung der Kontexte auf = Agglutination. Das folgende Wort beinhaltet das vorhergegangene.

„Das innere Sprechen ist prädikativ aufgebaut.“

(Die Schwierigkeit der Übersetzung hängt vom schwierigen Weg des Übergangs von einem Plan in einen anderen ab: vom Gedanken über die Bedeutung zum phasischen äußeren Sprechen.)

Schlussbemerkung: Das innere Sprechen ist eine ganz neue Sprachform, in der alles anders ist. (1933, 187, 191f.)

[Iz podgovitel'noj raboty po tezicam K diskussii 1933-134g [Aus den vorbereitenden Arbeiten zu den Thesen für die Diskussion 1933-1934]. Zapis' vystuplenij L.S. Vygotskogo 5. i 9. 12. 1933gg. In: Psihologija grammatiki. Pod redakcij A.A. Leont'eva i T.V. Rjabovoj. Moskva 1968, 191f.]

30.

Das innere Sprechen ist kürzer, stenographischer, es ist auf anderen Strukturen aufgebaut als das äußere Sprechen. Das innere Sprechen ist von seiner syntaktischen Struktur her ein Sprechen, das sich des Telegrammstils bedient. Eine lückenhafte Bemerkung ist, das ist allgemein bekannt, agrammatisch, sie ist fast ausschließlich prädikativ, das heißt, sie besteht nur aus Prädikaten. Wenn ich aber irgendetwas erzähle, so muss mein Satz Subjekt und Prädikat enthalten, manchmal sogar ein Attribut bzw. ein Objekt usw. Was nun das innere Sprechen betrifft, so kenne ich meine Gedanken, ich weiß, worüber ich denke, deshalb besteht mein inneres Sprechen aus einer Kette von Prädikaten. (1933, 196, 443)

[O pedologičeskom analize pedagogičeskogo processa [Zur pädologischen Analyse des pädagogischen Prozesses]. In: L.S. Vygotskij, Umstvennoe razvitie detej v processe obučenija [Die geistige Entwicklung des Kindes im Unterrichtsprozeß]. Sbornik statej. Moskva, Leningrad 1935, 116-134. Hier zitiert nach: L.S. Vygotskij, Umstvennoe razvitie detej v processe obučenija [Die geistige Entwicklung des Kindes im Unterrichtsprozeß]. Pod redakcij i so vstupitel'noj statej V.V. Davydova i s kommentarijami V.V. Davydova, N.V. Elizarovoj, G.A. Cukermana. Moskva ²/1991, 443.]

31.

Das erste, was das innere Sprechen des Erwachsenen dem egozentrischen Sprechen des Vorschulkindes verwandt macht, ist die Gemeinsamkeit der Funktionen: Das eine wie auch das andere ist ein Sprechen für sich selbst, das sich von dem die Aufgabe des Verkehrs und der Verbindung mit den Mitmenschen erfüllenden, sozialen Sprechen losgelöst hat. [...]

Das zweite, was das innere Sprechen des Erwachsenen und das egozentrische des Kindes verwandt macht, sind seine strukturellen Besonderheiten. [...] Es ist nur für den Sprechenden verständlich, es ist verkürzt und zeigt die Tendenz zu Auslassungen bzw. Kurzschlüssen, es lässt das fort, was sich vor den Augen befindet, es erfährt also komplizierte strukturelle Veränderungen. (1934, 210, 41)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakcij i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 41.]

32.

Das innere Sprechen ist ein maximal zusammengedrücktes, verkürztes, stenographisches Sprechen. Das schriftliche Sprechen ist ein maximal entfaltetes Sprechen, formal vollendeter als selbst das äußere Sprechen. Es hat keine Ellipsen. Das innere Sprechen ist voll davon. Es ist in seinem syntaktischen Bau fast ausschließlich prädikativ. Ähnlich wie unsere Syntax im äußeren Sprechen dann prädikativ wird, wenn das Subjekt und die dazu gehörigen Satzglieder in gewisser Weise den Gesprächspartnern bekannt sind, besteht das innere Sprechen, bei dem das Subjekt, die Sprechsituation dem denkenden Menschen immer bekannt sind, fast nur aus Prädikaten. Uns selbst brauchen wir niemals mitzuteilen, wovon die Rede ist. Das wird stets stillschweigend vorausgesetzt und bildet den Hintergrund des Bewusstseins. Uns bleibt lediglich zu sagen, dass daraus der prädikative Charakter des inneren Sprechens resultiert. Daher würde das innere Sprechen, selbst wenn es dem Außenstehenden hörbar gemacht würde, allen außer dem Sprechenden selbst unverständlich bleiben, da niemand das psychische Feld kennt, auf dem es verläuft. Das innere Sprechen ist daher voller idiomatischer Wendungen. Dagegen ist das geschriebene Sprechen, bei dem eine Situation in allen Einzelheiten reproduziert werden muß, um dem Gesprächspartner verständlich zu werden, am meisten entfaltet, und darum

muss sogar das, was im mündlichen Sprechen¹³ weggelassen wird, im geschriebenen Sprechen unbedingt erwähnt werden. Es ist auf eine maximale Verständlichkeit für andere Personen gerichtetes Sprechen. Alles muss darin bis zum Ende gesagt werden. Der Übergang vom maximal zusammengedrängten inneren Sprechen, dem Sprechen für den Sprechenden selbst, in das maximal entfaltete geschriebene Sprechen, das Sprechen für eine andere Person, erfordert daher auch vom Kind komplizierteste Operationen des willkürlichen Aufbaus von Sinnzusammenhängen. (1934, 210, 211)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakcij i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 211.]

33.

Ein richtigeres Verständnis des inneren Sprechens muss davon ausgehen, dass das innere Sprechen ein seiner psychologischen Natur nach besonderes Gebilde, eine besondere Form der sprachlichen Tätigkeit ist. [...] Das innere Sprechen ist ein Sprechen für den Sprechenden selbst. (1934, 210, 278ff.)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakcij i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 278ff.]

34.

In gewissem Sinne kann gesagt werden, dass das innere Sprechen nicht dem äußeren vorausgeht oder dieses im Gedächtnis reproduziert, sondern dem äußeren Sprechen entgegen gesetzt ist. Das äußere Sprechen ist die Verwandlung eines Gedankens in Worte, seine Materialisierung und Objektivierung. Hier aber handelt es sich um einen entgegengesetzt verlaufenden Prozess, der von außen nach innen verläuft, eine Verdampfung der Sprache in den Gedanken. Daraus ergibt sich auch die Struktur dieses Sprechens mit all seinen Unterschieden zur Struktur des äußeren Sprechens. (1934, 210, 279)

¹³ [Im Original „ustnaja reč'“.]

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 278ff.]

35.

Wir haben bereits alle grundsätzlichen Überlegungen dargelegt, die uns zu dem Schluss führen, dass das egozentrische Sprechen eine Stufe darstellt, die der Entwicklung des inneren Sprechens vorausgeht. Erinnern wir uns daran, dass diese Erwägung unter drei Aspekten gemacht wurde: dem funktionellen (wir haben herausgefunden, dass das egozentrische ähnlich dem inneren Sprechen intellektuelle Funktionen ausübt), dem strukturellen (wir haben herausgefunden, dass sich das egozentrische Sprechen in seinem Aufbau dem inneren nähert) und dem genetischen (wir haben der von Piaget festgestellten Tatsache, dass das egozentrische Sprechen beim Eintreten in das Schulalter abstirbt, eine Reihe von Ergebnissen gegenüber gestellt, die den Beginn der Entwicklung des inneren Sprechens für den gleichen Augenblick anzusetzen zwangen, und wir folgerten daraus, dass das egozentrische Sprechen an der Schwelle des Schulalters nicht abstirbt, sondern in das innere Sprechen übergeht, in das innere Sprechen hineinwächst). Diese Arbeitshypothese über die Struktur, die Funktion und das Schicksal des egozentrischen Sprechens ermöglichten uns nicht nur, die Lehre vom egozentrischen Sprechen radikal umzubauen, sondern auch tief in die Natur des inneren Sprechens einzudringen- Wenn unsere Annahme zutrifft, daß das egozentrische Sprechen eine frühe Form des inneren Sprechens darstellt, dann ist damit die Frage der Methode der Untersuchung des inneren Sprechens gelöst.

Das egozentrische Sprechen ist in diesem Fall der Schlüssel zur Untersuchung des inneren Sprechens. Sein erster Vorteil besteht darin, dass es noch ein vokalisiertes Sprechen ist, ein tönendes Sprechen,¹⁴ das heißt ein seiner Erscheinungsform nach äußeres, seiner Funktion und Struktur nach jedoch zugleich inneres Sprechen ist. [...] Der zweite Vorzug dieser Methode besteht darin, dass sie es ermöglicht, das egozentrische Sprechen nicht statisch, sondern dynamisch, in seiner Entwicklung, der allmählichen Abnahme bestimmter und der langsamen Zunahme anderer Eigenarten zu untersuchen. Dadurch wird es möglich, die Entwicklungstendenzen des inneren Sprechens zu beurteilen und sowohl zu analysieren, was für es unwesentlich ist und

¹⁴ [Im Original „zvučšašu rec““.]

während der Entwicklung abnimmt, als auch das, was für sie wesentlich ist und während der Entwicklung verstärkt und heranwächst. (1934, 210, 280)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 280.]

36.

Die Abnahme der äußeren Erscheinungsmerkmale des egozentrischen Sprechens muß als Symptom der sich entwickelnden Abstraktion von der lautlichen Seite des Sprechens betrachtet werden, die eines der wichtigsten konstituierenden Merkmale des inneren Sprechens darstellt, weil eine fortschreitende Differenzierung zwischen dem egozentrischen und dem kommunikativen Sprechen erfolgt und weil das Kind fähig wird, sich Wörter zu denken und vorzustellen, anstatt sie auszusprechen, d.h. mit dem Bild eines Wortes statt mit dem Wort selbst zu operieren. Darin liegt die positive Bedeutung des Abfalls des Egozentrismuskoeffizienten. Das Absinken hat einen ganz bestimmten Sinn: Es erfolgt in einer bestimmten Richtung, das heißt in der gleichen Richtung, in der die Entwicklung funktioneller und struktureller Besonderheiten des egozentrischen Sprechens verläuft, nämlich in der Richtung zum inneren Sprechen. Der grundlegende Unterschied zwischen dem inneren und dem äußeren Sprechen besteht im Fehlen der Vokalisation. (1934, 210, 285)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 285.]

37.

Das innere Sprechen ist ein stummes Sprechen. Das ist sein Hauptunterschied. Aber gerade in diese Richtung, das heißt in Richtung des allmählichen Anwachsens dieses Unterschiedes, verläuft auch die Evolution des egozentrischen Sprechens. Seine Vokalisation fällt auf Null, es wird zu einem stummen Sprechen. [...] In Wirklichkeit verbirgt sich hinter dem Fallen des Koeffizienten die positive Entwicklung einer der Hauptbesonderheiten des inneren Sprechens – nämlich die Abstraktion von der lautlichen Seite des Sprechens und die endgültige Differenzierung zwischen äußerem und innerem Sprechen. [...] Das egozentrische Sprechen entwickelt sich in Richtung zum inneren Sprechen, und seine Entwicklung kann nur als ein allmähliches, progressives

Anwachsen aller Eigenschaften des inneren Sprechens verstanden werden. (1934, 210, 285f.)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakcij i so vstupil'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 285f.]

38.

Die erste und wichtigste Eigenart des inneren Sprechens ist seine ganz spezielle Syntax. Bei der Untersuchung der Syntax des inneren Sprechens anhand des egozentrischen Sprechens des Kindes fanden wir eine wesentliche Besonderheit, fanden wir die offensichtliche, dynamische Tendenz heraus, die in dem Maße anwächst, wie sich das egozentrische Sprechen entwickelt. Diese Besonderheit besteht in der scheinbaren Zusammenhangslosigkeit, dem fragmentarischen Charakter und der Verkürzung des inneren Sprechens im Vergleich zum äußeren. (1934, 210, 292)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakcij i so vstupil'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 292.]

39.

Die genetische Untersuchung zeigt unmittelbar, wie und woraus die Verkürzung entsteht, die wir als erstes und selbständiges Phänomen festhalten. In Form eines allgemeinen Gesetzes könnten wir sagen, dass das egozentrische Sprechen in dem Maße, wie es sich entwickelt, eine einfache Tendenz zur Verkürzung der Phrase und des Satzes zeigt unter Beibehaltung des Prädikats und der sich auf das Prädikat beziehenden Teile des Satzes beim gleichzeitigem Wegfall des Subjekts und der sich auf das Subjekt beziehenden Teile des Satzes. Diese Tendenz zum prädikativen Charakter der Syntax des inneren Sprechens zeigt sich in allen unseren Versuchen mit einer strengen und fast ausnahmslosen Regelmäßigkeit und Gesetzmäßigkeit, so daß wir schließlich zuletzt unter Verwendung der Interpolationsmethode den reinen und absolut prädikativen Charakter als syntaktische Grundform des inneren Sprechens annehmen müssen. (1934, 210, 293)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakcij i so vstupil'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 293.]

40.

Wir haben gesehen, dass im mündlichen Sprechen die Tendenz zur Verkürzung und zum rein prädikativen Charakter der Aussage in zwei Fällen eintritt: Erstens, wenn die Situation beiden Gesprächspartnern klar ist, und zweitens, wenn der Sprechende den psychologischen Kontext des Gesprochenen durch die Intonation ausdrückt. Beide Fälle sind im geschriebenen Sprechen ausgeschlossen. Daher lässt das geschriebene Sprechen keine Tendenz zum Prädikativen erkennen und ist selbst somit die entfaltetste Form des Sprechens. Aber wie steht es in dieser Hinsicht mit dem inneren Sprechen? Wir sind so ausführlich auf die Tendenz zum Prädikativen im mündlichen Sprechen eingegangen, weil die Analyse dieser Erscheinung es mit aller Klarheit möglich macht, eine sehr unklare, verworrene und komplizierte These, zu der wir als Ergebnis unserer Untersuchung über das innere Sprechen gekommen sind, auszudrücken, eben die bedeutende These vom prädikativen Charakter des inneren Sprechens. Diese These hat zentrale Bedeutung für alle mit diesem Problem zusammenhängenden Fragen. Während die Tendenz zum Prädikativen im mündlichen Sprechen in gewissen Fällen ziemlich häufig und gesetzmäßig entsteht, im geschriebenen Sprechen dagegen niemals, ist sie im inneren Sprechen immer aufzuweisen. Das Prädikative ist die einzige Grundform des inneren Sprechens. Das innere Sprechen besteht fast nur aus Prädikaten. Dabei haben wir es hier nicht mit einer relativen Beibehaltung des Prädikats auf Kosten der Auslassung des Subjekts zu tun, sondern mit einem absolut prädikativen Charakter. Das geschriebene Sprechen besteht aus gesetzmäßig entfalteteten Subjekten und Prädikaten, aber das innere Sprechen lässt ebenso gesetzmäßig das Subjekt aus und besteht nur aus Prädikaten. (1934, 210, 300f.)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 300f.]

41.

Betrachten wir die Umstände, die zur Verkürzung des inneren Sprechens beitragen, näher. Wir möchten noch einmal daran erinnern, daß im mündlichen Sprechen Elisionen und Verkürzungen dann entstehen, wenn das Subjekt der Aussage beiden Gesprächspartnern von vornherein bekannt ist. Eine derartige Sachlage ist für das innere Sprechen nun absolut und ständig vorhanden. Wir wissen im inneren Sprechen immer, worum es geht. Wir sind stets über unsere innere Situation im Bilde. Das

Thema unseres inneren Dialogs ist uns immer bekannt. Wir wissen, woran wir denken. Das Subjekt unserer inneren Aussage ist in unseren Gedanken immer vorhanden. [...] Aber was sich im mündlichen Sprechen als mehr oder weniger vage Tendenz bemerkbar macht, tritt im inneren Sprechen als absolute Form, als maximale syntaktische Vereinfachung, als absolute Verdichtung des Gedankens, als völlig neue syntaktische Struktur in Erscheinung. Diese Struktur bedeutet streng genommen die völlige Aufhebung der Syntax des mündlichen Sprechens und den rein prädikativen Satzaufbau. (1934, 210, 301f.)

[Myšlenie i reč'. Psihologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 301f.]

42.

Wenn wir uns von diesem Vergleich des mündlichen Sprechens mit dem äußeren Sprechen der direkten Untersuchung der strukturellen Eigenarten des inneren Sprechens zuwenden, können wir das Anwachsen des prädikativen Charakters Schritt für Schritt verfolgen. Anfangs ist das egozentrische Sprechen in struktureller Hinsicht noch vollkommen mit dem sozialen Sprechen verschmolzen. Aber in dem Maß, wie es sich als selbständige Form des Sprechens entwickelt und ausgliedert, lässt sich immer mehr die Tendenz zur Verkürzung, zur Abschwächung der syntaktischen Gliederung und zur Verdichtung erkennen. Bei seinem Absterben und dem Übergang in das innere Sprechen macht es bereits den Eindruck eines fragmentarischen Sprechens, den Eindruck, dass es fast völlig einer rein prädikativen Syntax untergeordnet ist. Das Experiment zeigt jeweils, wie und aus welcher Quelle diese neue Syntax des inneren Sprechens entsteht. Das Kind spricht über das, womit es im Augenblick beschäftigt ist, was es gerade tut und was sich vor seinen Augen befindet. Darum lässt es immer mehr weg, verkürzt, verdichtet das Subjekt und die darauf bezüglichen Wörter; es reduziert sein Sprechen immer mehr auf das Prädikat allein. Eine bemerkenswerte Gesetzmäßigkeit, die wir im Ergebnis unserer Versuche feststellen konnten, besteht in Folgendem: Je mehr die funktionelle Bedeutung des egozentrischen Sprechens im Vordergrund steht, umso deutlicher treten ihre syntaktischen Eigenarten im Sinne der Vereinfachung und des prädikativen Charakters der Syntax hervor. (1934, 210, 303)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 303.]

43.

In erster Linie ist hier das Reduzieren der phonetischen Momente des Sprechens zu nennen, auf die wir schon in einigen Fällen der Verkürzung des mündlichen Sprechens gestoßen sind. [...] Hier sehen wir am Anfang der Herausbildung des inneren Sprechens ein vollkommen analoges Verfahren der Verkürzung und Reduktion der phonetischen Seite des Sprechens auf die Anfangsbuchstaben [...] Im inneren Sprechen besteht nie die Notwendigkeit, das Wort bis zum Ende auszusprechen. (1934, 210, 303f.)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 303f.]

44.

Beide Phänomene weisen darauf hin, dass wir im inneren Sprechen überhaupt eine ganz andere Beziehung zwischen semantischer und äußerer Seite vorfinden als im mündlichen Sprechen. Die phasische Seite des Sprechens seine Syntax und seine Phonetik werden reduziert, maximal vereinfacht und verdichtet. In den Vordergrund rückt die Wortbedeutung. Das innere Sprechen operiert vorwiegend mit der Semantik und nicht mit der Phonetik des Sprechens. Die relative Unabhängigkeit der Bedeutung des Wortes von seiner lautlichen Seite tritt im inneren Sprechen sehr deutlich zutage. [...] Im mündlichen Sprechen gehen wir in der Regel von den stabilen und beständigen Elementen des Sinns, von seiner konstanten Zone, das heißt von der Bedeutung des Wortes zu seiner fließenden Zone über, wir gehen von der Bedeutung des Wortes zu seinem Sinn im Ganzen über. Im inneren Sprechen dagegen ist die Vorherrschaft des Sinns über die Bedeutung – eine Vorherrschaft, die wir im mündlichen Sprechen in einzelnen Fällen mehr oder weniger schwach beobachten – bis zum Extrem geführt und absolut vertreten. Hier ist die Hegemonie des Sinns über die Bedeutung, des Satzes über das Wort, des ganzen Kontextes über den Satz keine Ausnahme, sondern eine durchgehende Regel. (1934, 210, 304f.)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 304f.]

45.

Etwas Analoges beobachten wir auch im egozentrischen Sprechen des Kindes. In dem Maße, wie es sich dem inneren Sprechen nähert, tritt die Agglutination als Verfahren zur Bildung einheitlicher zusammengesetzter Wörter, zum Ausdruck zusammengesetzter Begriffe immer häufiger und deutlicher in Erscheinung. Das Kind lässt in seinen egozentrischen Äußerungen parallel zum Absinken des Koeffizienten des egozentrischen Sprechens immer häufiger diese Tendenz zur asyntaktischen Verschmelzung der Wörter erkennen. [...]

Ihr Wesen besteht darin, dass der Sinn des Wortes, der dynamischer und breiter ist als die Bedeutung des Wortes, nach anderen Gesetzen vereinigt und verschmolzen wird als jene, die wir bei der Verschmelzung und Vereinigung der Wortbedeutung beobachten können. [...] Die Sinneinheiten fließen gleichsam in einander über und beeinflussen einander, so dass die vorangehenden im letzten enthalten sind oder es modifizieren. [...]

Etwas Ähnliches beobachten wir – wiederum in extremer Form – im inneren Sprechen. Hier saugt das Wort gleichsam den Sinn der vorhergehenden und der folgenden Wörter in sich auf und erweitert seinen Bedeutungsumfang fast ins Grenzenlose. Im inneren Sprechen ist das Wort viel stärker mit dem Sinn geladen als im äußeren. (1934, 210, 307f.)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 307f.]

46.

Diese Unverständlichkeit des inneren Sprechens ist – ebenso wie seine Verkürztheit – eine Tatsache, die zwar von allen Autoren festgestellt aber noch nie analysiert worden ist. Die Analyse zeigt, dass die Unverständlichkeit des inneren Sprechens ebenso wie seine Verkürztheit von vielen Faktoren abhängt, sie sind der summarische Ausdruck verschiedenster Faktoren. Die besondere Syntax des inneren Sprechens, die Reduktion seiner phonetischen Seite, sein besonderer semantischer Aufbau erklären

die psychologische Natur dieser Unverständlichkeit in ausreichendem Maße. Wir möchten aber noch auf zwei Momente hinweisen, die diese Unverständlichkeit mehr oder weniger bedingen. Das erste ist gewissermaßen eine integrale Folge aller oben aufgezählten Momente und ergibt sich aus der besonderen Funktion des inneren Sprechens. Seiner eigentlichen Funktion nach ist dieses Sprechen nicht zur Mitteilung bestimmt, es ist ein Sprechen für den Sprechenden, das unter völlig anderen inneren Bedingungen verläuft als das äußere und vollkommen andere Funktionen erfüllt. Daher wundert es nicht, dass sie unverständlich ist, sondern dass eine Verständlichkeit des inneren Sprechens erwartet werden kann. [...] Die Wörter verändern hier ihren üblichen Sinn und ihre gewöhnliche Bedeutung und nehmen eine spezifische Bedeutung an, die ihnen durch bestimmte Umstände ihrer Entstehung verliehen wird. Unter den Bedingungen des inneren Sprechens entsteht ebenfalls notwendigerweise ein derartiger innerer Dialekt. Jedes Wort nimmt im inneren Gebrauch allmählich andere Nuancen, andere Sinnschattierungen an, die sich allmählich zu einer neuen Wortbedeutung wandeln. Die Versuche zeigen, dass die Wortbedeutungen im inneren Sprechen immer Idiome sind, die nicht in das äußere Sprechen übersetzt werden können. Es sind immer individuelle Bedeutungen, die nur im Rahmen des inneren Sprechens verständlich sind, welches ebenso voller ‚Idiomatismen‘ ist wie voller Ellisionen und Auslassungen. Im Grunde stellt die Verschmelzung eines vielfältigen Sinngehaltes zu einem einzigen Wort jedes Mal die Bildung einer individuellen, unübersetzbaren Bedeutung. Das heißt eines Idioms dar. (1934, 210, 309f.) [Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakcij i so vstupil'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 309f.]

47.

Alle von uns oben erwähnten Besonderheiten des inneren Sprechens können keinen Zweifel an der Richtigkeit der von uns aufgestellten >These lassen, nämlich die, dass das innere Sprechen eine besondere, selbständige, autonome und eigenständige Funktion des Sprechens ist. Wir haben es tatsächlich mit einem Sprechen zu tun, das sich unter allen Gesichtspunkten vom äußeren Sprechen unterscheidet. So sind wir berechtigt, es als besondere innere Ebene des sprachlichen Denkens¹⁵ aufzufassen,

¹⁵ [Im Original: „rečevogo myšlenija“.]

die die dynamische Beziehung zwischen dem Gedanken und dem Wort vermittelt. Nach allem, was wir über die Natur des inneren Sprechens,, über seine Struktur und über seine Funktion gesagt haben, gibt es keinen Zweifel darüber dass der Übergang vom inneren Sprechen zum äußeren keine direkte Übersetzung von einer Sprache in eine andere¹⁶, keine einfache Vokalisation des inneren Sprechens darstellt, sondern eine Umstrukturierung des Sprechens, die Verwandlung einer völlig eigenständigen Syntax, der semantischen und der lautlichen Struktur des inneren Sprechens in andere Strukturformen, die dem äußeren Sprechen zu eigen sind. Genauso wie das innere Sprechen nicht Sprechen minus Laut ist, ist auch das äußere Sprechen nicht inneres Sprechen plus Laut. Der Übergang vom inneren zum äußeren Sprechen stellt eine komplizierte dynamische >Transformation dar – die Verwandlung eines prädikativen und idiomatischen Sprechens in ein syntaktisch gegliedertes und anderen verständliches Sprechen. (1934, 210, 349f.)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 349f.]

48.

Während das äußere Sprechen der Prozess der Verwandlung des Gedankens in Worte, die Materialisierung und Objektivierung des Gedankens ist, beobachten wir hier einen entgegen gesetzten Prozess, der gewissermaßen von außen nach innen verläuft, eine Verdampfung des Sprechens im Denken. Doch das Sprechen verschwindet in seiner inneren Form durchaus nicht. Das Bewusstsein verdampft nicht und löst sich nicht in reinen Geist auf. Das innere Sprechen bleibt dennoch ein Sprechen, das heißt ein mit dem Wort verbundenes Denken. Doch während sich der Gedanke im äußeren Sprechen im Wort verkörpert, stirbt das Wort im inneren Sprechen und gebiert dabei den Gedanken. Das innere Sprechen ist in beträchtlichem Maße ein Denken mit reinen Bedeutungen [...].(1934, 210, 311)

[Myšlenie i reč'. Psichologičeskie issledovanija [Denken und Sprechen. Eine psychologische Untersuchung]. Pod redakciej i so vstupitel'noj statej V.N. Kolbanovskogo. Moskva, Leningrad 1934, 311.]

¹⁶ [Im Original: „s odnogo jazika na drugoj]

ISSN 2191-6667