The Cambridge Handbook of Cultural-Historical Psychology

The field of cultural-historical psychology originated in the work of Lev Vygotsky and the Vygotsky Circle in the Soviet Union more than eighty years ago, and has now established a powerful research tradition in Russia and the West. *The Cambridge Handbook of Cultural-Historical Psychology* is the first volume to systematically present cultural-historical psychology as an integrative/holistic developmental science of mind, brain, and culture. Its main focus is the inseparable unity of the historically evolving human mind, brain, and culture, and the ways to understand it. The contributors are major international experts in the field, and include authors of major works on Lev Vygotsky, direct collaborators and associates of Alexander Luria, and renowned neurologist Oliver Sacks. The handbook will be of interest to students and scholars in the fields of psychology, education, humanities, and neuroscience.

**Anton Yasnitsky** is an independent researcher who specializes in the “Vygotsky–Luria Circle”

**René van der Veer** is Professor of Education in the Department of Education at Leiden University

**Michel Ferrari** is a professor in the Department of Applied Psychology and Human Development in the Ontario Institute for Studies in Education at the University of Toronto
Contents

List of figures  page viii
List of tables  x
List of contributors  xi

Introduction: What is this book and what is it about?  1
ANTON YASNITSKY AND RENÉ VAN DER VEER

Part I. Theory
1 Introducing Vygotsky's cultural-historical psychology  9
RONALD MILLER
2 Vygotsky's idea of psychological tools  47
JANETTE FRIEDRICH
3 The problem of consciousness in Vygotsky's cultural-historical psychology  63
EKATERINA ZAVERSHNEVA

Part II. Method
4 Methodology of cultural-historical psychology  101
AARO TOOMELA
5 Dynamic assessment in search of its identity  126
ALEX KOZULIN
6 Encountering the border: Vygotsky's zona blizhaishego razvitia and its implications for theories of development  148
JAAN VALSINER AND RENÉ VAN DER VEER

Part III. Child
7 Developmental education  177
GALINA ZUCKERMAN
Contents

8 Tracing the untraceable: the nature-nurture controversy in cultural-historical psychology
ELENA L. GRIGORENKO

9 The “magic of signs”: developmental trajectory of cultural mediation
IGOR M. ARIEVITCH AND ANNA STETSENKO

Part IV. Language and culture

10 Inner form as a notion migrating from West to East: acknowledging the Humboldtian tradition in cultural-historical psychology
MARIE-CÉCILE BERTAU

11 A review of inner speech in cultural-historical tradition
ANKA WERANI

12 Luria and Vygotsky: challenges to current developmental research
EUGENE SUBBOTSKY

Part V. Brain

13 There can be no cultural-historical psychology without neuropsychology. And vice versa
AARO TOOMELA

14 Cultural-historical neuropsychological perspective on learning disability
TATIANA AKHUTINA AND GARY SHERESHEVSKY

15 Cultural-historical theory and cultural neuropsychology today
BELLA KOTIK-FRIEDGUT AND ALFREDO ARDILA

Part VI. Beyond psychology: cultural-historical psychology and other disciplines

16 Cultural-historical psychotherapy
ALEXANDER VENGER AND ELENA MOROZOA

17 From expressive movement to the “basic problem”: the Vygotsky–Luria–Eisensteinian theory of art
OKSANA BULGAKOVA

18 The need for a dialogical science: considering the legacy of Russian-Soviet thinking for contemporary approaches in dialogic research
MARIE-CÉCILE BERTAU
<table>
<thead>
<tr>
<th></th>
<th>Contents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Cognition and its master: new challenges for cognitive science</td>
<td>474</td>
</tr>
<tr>
<td></td>
<td>MARIA V. FALIKMAN</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Cultural-historical theory and semiotics</td>
<td>488</td>
</tr>
<tr>
<td></td>
<td>VYACHESLAV V. IVANOV</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Luria and “Romantic Science”</td>
<td>517</td>
</tr>
<tr>
<td></td>
<td>OLIVER SACKS</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Index</strong></td>
<td>529</td>
</tr>
</tbody>
</table>
Figures

6.1 A hierarchical relationship between levels of organization (after Gilbert Gottlieb’s model of probabilistic epigenesis) page 150
6.2 The “broom of time” (after Anisov, 2002) 151
6.3 The locus of development and education 152
6.4 The location of the ZPD notion in the context of human development 153
6.5 Construction of ZBR on the basis of not-yet-established functions (D, E, F) that can be established in interaction (ZPD) 159
6.6 A dynamic hierarchical field model of ZBR (extending Zaretskii) 163
6.7 Trajectory Equifinality Model (TEM) 166
7.1 Two measures for first-graders to build various quantities 188
7.2 Five ways of building quantity “M” 191
7.3 Actual development of the first-grader immersed in a specific educational system 196
7.4 Actual development of the student in a specific pedagogical environment at the beginning and end of elementary school 197
7.5 Different systems of education provide different affordances for human development 198
13.1 Luria’s parallelogram task for assessing analysis of figures with mental rotation (adapted from Luria, 1969, p. 371) 319
13.2 Version of the parallelogram task used in the Luria–Nebraska Neuropsychological Battery (adapted from Golden, Purisch, and Hammeneke, 1985) 320
14.1 Writing difficulties caused by the weakness of auditory information processing functions 362
14.2 Writing errors caused by the weak holistic (right-hemisphere) strategy of visual spatial information processing 362
14.3 Writing problems of first-grade pupil caused by the weak holistic (right-hemisphere) strategy of visual spatial information processing 363
16.1 Development of psychological syndrome 411
16.2 Development of social disorientation 412
17.1 Child drawing (published by Vygotsky and Luria in Etiudy po istorii povedenii, 1930, p. 143) 443
17.2 Redrawing of Sharaku’s (active 1794–1795) woodblock print that Eisenstein published in his essay *Za kadrom* (*Beyond the shot*) (1929) 444

18.1 Vygotsky’s understanding of inner speech: conceptual relationships and background influences 458
## Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>English equivalents of the Russian words “soznanie” (consciousness) and “smysl” (sense, meaning), and their derivatives</td>
<td>76</td>
</tr>
<tr>
<td>11.1</td>
<td>Overview of the genesis, structure, and function of inner speech according to Soviet psychology</td>
<td>282</td>
</tr>
</tbody>
</table>
Contributors

TATIANA AKHUTINA, Moscow State University
ALFREDO ARDILA, Florida International University
IGOR M. ARIEVITCH, City University of New York
MARIE-CÉCILE BERTAU, University of Munich, Germany
OKSANA BULGAKOWA, Filmwissenschaft und Mediendramaturgie der Johannes Gutenberg-Universität Mainz
MARIA V. FALIKMAN, Moscow State University and Higher School of Economics, Moscow
JANETTE FRIEDRICH, Université de Genève
ELENA L. GRIGORENKO, Yale University and Moscow State University for Psychology and Education
VYACHESLAV V. IVANOV, Russian State University for the Humanities in Moscow and the University of California, Los Angeles
BELLA KOTIK-FRIEDGUT, David Yellin College of Education, Jerusalem
ALEX KOZULIN, Achva College and Feuerstein International Institute for the Enhancement of Learning Potential, Jerusalem
RONALD MILLER, University of KwaZulu-Natal, South Africa
ELENA MOROZOVA, Russian Medical Academy of Postgraduate Education, Moscow
OLIVER SACKS, New York University School of Medicine
GARY SHERESHEVSKY, Staten Island University Hospital, Department of Rehabilitation Medicine, New York
ANNA STETSENKO, City University of New York
EUGENE SUBBOTSKY, Lancaster University
AARO TOOMELA, Tallinn University, Estonia
JAAV VALSINER, Clark University
List of contributors

RENE VAN DER VEEER, Leiden University
ALEXANDER VENGER, International University of Nature, Society and Man, Dubna
anke werani, University of Munich, Germany
ANTON YASNITSKY, independent researcher
EKATERINA ZAVERSHNEVA, Moscow State University of Medicine and Dentistry
GALINA ZUCKERMAN, Psychological Institute, Russian Academy of Education