



In the Shadows of the Iron Curtain: The Forgotten Legacy of Vygotsky's Defectology

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Abstract • Vygotsky's ideas on disability, termed "defectology," influenced special education in state-socialist countries but were marginalised in the West due to negative connotations and links to outdated welfare systems. This study reconstructs the conceptual history of Vygotsky's defectology and explores its neglect compared to his other work. It examines how his defectology shaped post-war educational approaches to disability and why his methods faced barriers in various countries. Using a mixed-methods approach, it combines a literature review with semi-structured interviews from 2024 with scholars in Germany, Romania, and Russia. Findings indicate that Soviet defectology diverged from Vygotsky's ideas after his death in 1934, contributing to their marginalisation. The study highlights ideological and practical challenges shaping the reception of Vygotsky's defectology in Eastern and Western contexts.

Keywords • Vygotsky, defectology, disability studies, special education

Introduction and aims

Lev Semyonovich Vygotsky (1896–1934), renowned as one of the most influential psychologists of the twentieth century, experienced posthumous obscurity until the post-war period. Western scholars began translating and popularising Vygotsky's works in the 1960s; however, his significant contributions to disability studies and special education, gathered under the term defectology, remain obscured.¹ While the field of defectology and the profession of defectologists gained prominence in state socialist countries, in the West, the term faced discrediting due to negative connotations and perceived misalignment with allegedly progressive approaches to disability. As William McCagg put in 1989, the legacy of defectology is "puzzling" for many as it seemingly "incorporates negative attitudes toward the disabled that would not survive for three minutes in a discussion of the handicapped in the Western world today."² Alex Kozulin

¹ Robert W. Rieber and Aaron S. Carton, eds., *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)* (New York: Plenum Press, 1993).

² William O. McCagg, "The Origins of Defectology," in *The Disabled in the Soviet Union: Past and Present, Theory and Practice*, ed. William O. McCagg and Lewis H. Siegelbaum (Pittsburgh: University of Pittsburgh Press, 1989), 40.

and Boris Gindis have similarly argued that “a foreign observer would not be able to understand the nature of Russian ‘defectology’ out of the context of Vygotsky’s ideas.”³

This article aims to reconstruct the intricate conceptual history of Vygotsky’s defectology and explores why this legacy remained relatively neglected compared to his other prominent studies. Through a literature review and semi-structured interviews, we illuminate this overlooked legacy without aiming for definitive conclusions or generalisability. Instead, we seek to enhance understanding of Vygotsky’s defectology, its reception, and to inspire further discussion. To reconstruct Vygotsky’s legacy as described above, our study will be guided by the following research questions:

- How has the dissemination of Lev Vygotsky’s works on defectology influenced scholarly approaches to disability since the post-war period?
- In what ways did the reception and integration of Vygotsky’s defectology differ among state-socialist and liberal-democratic countries during the post-war period, particularly in Germany, Romania, and Russia?
- What were the main barriers and facilitators to the adoption of Vygotsky’s approach to disability in special education and disability studies from the post-war period onwards?

The conceptual roots of Vygotsky’s defectology

Vygotsky’s biography and intellectual evolution have been extensively documented elsewhere and cannot be fully addressed here, but a few remarks on his defectological writings are essential.⁴ The term defectology was already employed in pre-revolutionary Russia, having been introduced by the Russian child psychologist Vsevolod Kashchenko (1870–1943), who was strongly influenced by German curative pedagogy (*Heilpädagogik*).⁵ However, Vygotsky’s sociocultural outlook on education in general, and on disability in particular, diverged significantly from that of the “old guard” of Russian psychologists, who overemphasised biological or hereditary factors. Vygotsky distanced himself from paradigms that focused on “correcting” children inspired by orthopaedic metaphors such as “corrective pedagogy” (*korrektionnaia pedagogika*). Instead, he emphasised the pivotal role of social relations over the notion of “curing” disabilities.⁶ In contrast to the contentious terminology he employed, such as “diffi-

3 Alex Kozulin and Boris Gindis, “Sociocultural Theory and Education of Children with Special Needs: From Defectology to Remedial Pedagogy,” in *The Cambridge Companion to Vygotsky*, ed. Harry Daniels, Michael Cole and James V. Wertsch (Cambridge: Cambridge University Press, 2007), 334.

4 Anton Yasnitsky, *Vygotsky. An Intellectual Biography* (Abingdon: Routledge, 2018); René van der Veer, *Lev Vygotsky* (London: Continuum, 2007); Alex Kozulin, *Vygotsky’s Psychology: A Biography of Ideas* (Cambridge, MA: Harvard Univ. Press, 1999).

5 McCagg (1989), 48.

6 Andy Byford, *Science of the Child in Late Imperial and Early Soviet Russia* (Oxford: Oxford University Press, 2020), 164.

cult children" (*trudnye deti*),⁷ or child "primitivism,"⁸ which are products of their time, Vygotsky's ideas principally departed from the above-mentioned deficit-oriented perspective. Envisioning the idea of disability as diversity, and challenging notions of normality and abnormality, Vygotsky emphasised, for instance that "a child whose development is impeded by a defect is not simply a child less developed than his peers but is a child who has developed differently."⁹ Embracing a perspective on disability that was deeply intertwined with the cultural-historical framework he developed alongside his associates such as Alexandre Luria, Vygotsky asserted that "in psychology and in pedagogy the problem of a child's handicap must be posed and comprehended as a social problem, because the social aspect formerly diagnosed as secondary and derivative, in fact, turns out to be primary and major,"¹⁰ thus anticipating the social model of disability.¹¹

Moreover, Vygotsky criticised the medical gaze, opposing the use of mental tests to measure children's disabilities and advocating for a qualitative, holistic approach.¹² Although influenced by broader Western scholarship, he also critiqued pre-revolutionary "bourgeois" approaches to disability, which he called the "philanthropic, invalid-oriented point of view."¹³ Instead, he promoted a future-oriented, utopian perspective where disabled individuals would develop to the point that their impairments would no longer be distinguishable: "If we create such a country...where blindness will not mean abnormality, then blindness will not be seen as a handicap there."¹⁴ As van der Veer and Valsiner have emphasised, these notions of social progress "could be easily combined with the prevailing Soviet ideology of the plasticity of human beings and the idea of the 'new man'."¹⁵ But despite affinities with the Soviet project, Vygotsky's work fell into obscurity after his death in 1934, remaining so until the end of Stalin's

⁷ Lev S. Vygotsky, "Difficult Children," in *Vygotsky's Notebooks: A Selection*, ed. Ekaterina Zavershneva and René van der Veer (Singapore: Springer), 437–58.

⁸ Lev S. Vygotsky, "Introduction. Fundamental Problems of Defectology," in *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, ed. Robert W. Rieber and Aaron S. Carton (New York: Plenum Press, 1993a), 43–45.

⁹ Vygotsky (1993a), 30.

¹⁰ Lev S. Vygotsky, "Principles of Education for the Deaf-Mute Child," in *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, ed. Robert W. Rieber and Aaron S. Carton (New York: Plenum Press, 1993d), 112.

¹¹ Peter Hick, "Reframing Psychology for Inclusive Learning within Social Justice Agendas," in *Psychology for Inclusive Education New Directions in Theory and Practice*, ed. Peter Hick, Ruth Kershner, and Peter Farrell (London: Routledge, 2009), 169.

¹² René van der Veer and Jaan Valsiner, *Understanding Vygotsky. A Quest for Synthesis* (Oxford: Blackwell, 1994), 58.

¹³ Lev S. Vygotsky, "The Psychology and Pedagogy of Children's Handicaps," in *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, ed. Robert W. Rieber and Aaron S. Carton (New York: Plenum Press, 1993b), 75.

¹⁴ Lev S. Vygotsky, "The Blind Child," in *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, ed. Robert W. Rieber and Aaron S. Carton (New York: Plenum Press, 1993c), 93.

¹⁵ van der Veer and Valsiner (1994), 77.

regime. Some scholars challenge the narrative of a “Vygotsky ban,”¹⁶ arguing instead that this decline was primarily due to Vygotsky’s early death and publication constraints within the field of pedology,¹⁷ pointing to the so-called “Pedology Decree” a decision from 1936, in which the Central Committee enunciated “pedagogical distortions.”¹⁸ Irrespective of these historical intricacies, Vygotsky’s works remained obscure until the post-war period, when his legacy gradually resurfaced in both East and West.¹⁹ Vygotsky’s defectological writings from the 1920s and 1930s were first comprehensively translated into English in 1993, alongside posthumous, undated, and previously unpublished manuscripts.²⁰ Van der Veer and Valsiner conclude that “Vygotsky’s defectological writings formed an important and integral part of his whole theoretical approach.”²¹

Data collection process and terminology

In this study, we employed a mixed-method approach, integrating a literature review with semi-structured interviews. The literature review followed PRISMA guidelines for systematically screening studies and it draws upon the most utilised databases in the fields of education, psychology, history and disability studies.²² The search terms were “Vygotsky” and “Defectology” with the equivalent translation in Swedish, German, French and Romanian. Accordingly, various truncations, such as “defectolo*” were employed to ensure a comprehensive search. Studies published in scholarly journals between 1974 and 2024 were reviewed, with 1974 selected as the start date because it marks the earliest relevant article found based on our criteria.

¹⁶ Jennifer Fraser and Anton Yasnitsky, “Deconstructing Vygotsky’s Victimization Narrative: A Re-Examination of the ‘Stalinist Suppression’ of Vygotskian Theory,” *History of the Human Sciences*, no. 2 (2015), 128–53.

¹⁷ In the early Soviet Union, “pedology” was a multidisciplinary field that combined elements of psychology, education, and child development to scientifically study children. The field emerged as part of a broader attempt to apply scientific principles to various aspects of social life, including education. See: Byford (2020).

¹⁸ Irina Sirotnina and Roger Smith, “Russian Federation,” in *Oxford Handbook of the History of Psychology*, ed. David B. Baker (Oxford: Oxford University Press, 2012), 413; Jane E. Knox and Carol Stevens, “Vygotsky and Russian Defectology. An Introduction,” in *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, ed. Robert W. Rieber and Aaron S. Carton (New York: Plenum Press, 1993), 7; Kozulin (1999), 243.

¹⁹ For a comprehensive and critical discussion of the “Pedology decree,” see: Byford (2020), 248–54.

²⁰ A translation of Volume 5 from the six-volume series published in Russian between 1982 and 1984.

²¹ van der Veer and Valsiner (1994), 76–77.

²² APA PsycInfo, Cinahl with Full Text, Education Collection, MEDLINE, SCOPUS, Sociological Abstracts, Web of Science Core Collection, SwePub, SHBd - *Svensk historisk bibliografi* (Swedish historical bibliography).

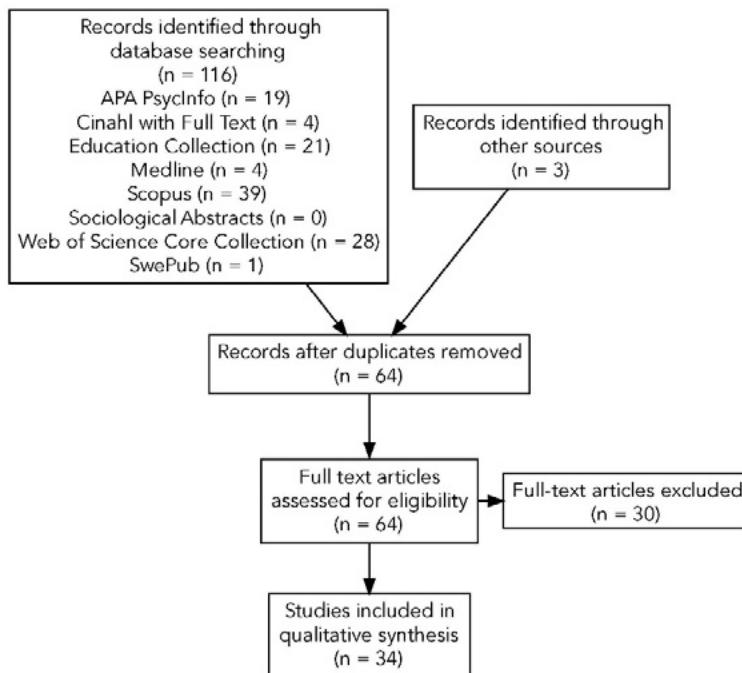


Figure 1. PRISMA flow diagram

The initial search resulted in 116 records. After the initial review, 71 records were transferred to Rayyan for title and abstract (TIAB) screening and for conducting a double-blind evaluation. After possible duplicates were resolved the remaining 64 records were evaluated for inclusion and exclusion criteria. The inclusion criteria were: 1. Studies must involve Vygotsky and his work in defectology; 2. Studies must be in English, Swedish, French, and Romanian. The exclusion criterion was studies on topics other than Vygotsky and his work in defectology. After having conducted a double-blind evaluation, 31 records were included in the literature review. Given the limitations of these databases – such as their temporal constraints and the exclusion of other types of publications from their indexes – we manually added three records identified from other sources to our literature review, bringing the total to 34 records (See Fig. 1).²³

²³ We extend our sincere gratitude to Paola Violasdotter Nilsson for her invaluable assistance in conducting searches and systematically selecting the relevant articles with professional expertise.

Table 1. List of selected papers.

Author(s), year	Title
Ajdinski, Ljupco, and Lani Florian (1997)	Special Education in Macedonia
Böttcher, Louise, and Jesper Dammeyer (2012)	Disability as a Dialectical Concept: Building on Vygotsky Defectology
Böttcher, Louise, and Jesper Dammeyer (2013)	Disability as a Risk Factor? Development of Psychopathology in Children with Disabilities
Böttcher, Louise (2021)	Supporting Unusual Development through Moral Imagination
Cook, Leslie S., and Peter Smagorinsky (2014)	Constructing Positive Social Updrafts for Extranormative Personalities
De Rezende Mendonça, Fabiana Luiza et.al (2020)	Mediation in the Classroom in the Construction of Knowledge in Inclusive Schools
De Souza, Flávia Faissal, and Débora Dainez (2022)	Defectology and School Education: Implications for the Human Rights Field
Ferreira, Marcello, et al. (2023)	Time and Cognitive Development: From Vygotsky's Thinking to Different Notions of Disability in the School Environment
Gindis, Boris (1995)	The Social/Cultural Implication of Disability: Vygotsky's Paradigm for Special Education
Gindis, Boris (1995)	Viewing the Disabled Child in the Sociocultural Milieu: Vygotsky's Quest
Gindis, Boris (1999)	Vygotsky's Vision: Reshaping the Practice of Special Education for the Twenty-First Century
Günther, Klaus B. (2011)	Zur Bedeutung Lev Semjonovic Vygotskijs für die 'Defektologie' im Allgemeinen und die 'Surdopädagogik' im Besonderen
Hausstätter, Rune, and Stine Vik (2021)	Inclusion and Special Needs Education: A Theoretical Framework of an Overall Perspective of Inclusive Special Education
Holowinsky, Ivan Z. (1988)	Vygotsky and the History of Pedology
Joubert, Roelien, and Ingrid Harrington (2020)	Inclusive Education: Origins, 'Defectology', and Kosovo's Experiences of Inclusive Education
Knox, Jane, and Alex Kozulin (1987)	Vygotskian Tradition in the Psychological Study of Handicapped, Particularly Deaf Children
Kozulin, Alex, and Boris Gindis (2007)	Sociocultural Theory and Education of Children with Special Needs: From Defectology to Remedial Pedagogy

- Kravtsova, Elena E. (2010) In Memoriam: Gita L'vovna Vygodskaya
Lubovsky, Vladimir I. (1974) Defectology: The Science of Handicapped Children
- Mecacci, Luciano (2021) Vygotsky and Psychology as Normative Science
Paul, Peter V. (2023) Perhaps This Is Everything You Wanted to Know About Vygotsky, but Were Afraid to Ask
- Pedagogika Editorial Staff (1983) L. S. Vygotsky and Contemporary Defectology
Potier, Katie R., and Heidi Givens (2023) Synthesizing Vygotsky's Sociocultural Theory and Deaf Pedagogy Framework toward Deaf Education Reform: Perspectives from Teachers of the Deaf
- Sandomirskaja, Irina (2019) Das blinde Kind: Lew Vygotskijs Defektologie als poetische und politische Allegorie
- Skyer, Michael E. (2020) Invited Article: The Bright Triad and Five Propositions: Toward a Vygotskian Framework for Deaf Pedagogy and Research
- Skyer, Michael E. (2023) Vygotskian Perspectives in Deaf Education: An Introduction in Two Movements
- Smagorinsky, Peter (2012a) Every Individual Has His Own Insanity: Applying Vygotsky's Work on Defectology to the Question of Mental Health as an Issue of Inclusion
- Smagorinsky, Peter (2012b) Vygotsky, 'Defectology,' and the Inclusion of People of Difference in the Broader Cultural Stream
- Smagorinsky, Peter, and Merida Lang (2023) Learning to Create Environments for Deafness among Hearing Preservice Teachers: A Defectological Approach
- van der Veer, René, and Ekaterina Zavershneva (2011) To Moscow with Love: Partial Reconstruction of Vygotsky's Trip to London
- Willicheva, Kristina, and Wyatte C. Hall (2023) From Vicious Circles to Virtuous Cycles: Vygotskian-Inspired Conclusions for Biomedicine and Deaf Education
- Yasnitsky, Anton (2011) Lev Vygotsky: Philologist and Defectologist, a Sociointellectual Biography
- Zaitseva, Galina, Michael Pursglove, and Susan Gregory (1999) Vygotsky, Sign Language, and the Education of Deaf Pupils
- Zaretskii, Viktor K. (2016) Vygotsky's Principle 'One Step in Learning - One Hundred Steps in Development': From Idea to Practice

The semi-structured interviews aimed to uncover nuances in the reception of Vygotsky's work that might not emerge from a literature review alone. Conducted in 2024, these interviews involved six senior scholars in special education or psychology – two from Germany, one from Romania, and three from Russia – all with expertise in Vygotsky's defectology. All respondents are or have been university researchers, with expertise ranging from extensive publications on defectology to substantial teaching experience and collaboration with practitioners in special education or psychology. Our selection combined convenience and purposive sampling: while Vygotsky specialists are numerous, few have deep knowledge of his defectological writings. Thus, all respondents were chosen based on their extensive engagement with this aspect. Additionally, we included scholars from both Eastern and Western Europe to highlight Vygotsky's influence beyond the former state socialist countries. The aim was not to achieve representativeness or generalisability – unfeasible with a small sample or respondents – but rather to deepen our analysis and add an additional layer of complexity to the literature review. Including scholars from three countries enriched, rather than fragmented, our study by capturing diverse academic traditions. Russia's inclusion was essential for engaging with Vygotsky's work in its original linguistic and cultural context, while Germany and Romania were selected partly for practical reasons, as our fluency in these languages facilitated both literature integration and interviews. Our initial aim was to include Swedish scholars, but as Roger Säljö observed, the lesser-known status of Vygotsky's defectological writings in Sweden compared to concepts such as the zone of proximal development led to the absence of identified Swedish scholars in this area: "Vygotsky devoted much time to defectology, and this term has likely deterred many from connecting with this particular aspect...many [Swedish scholars] have been alienated by the term defectology."²⁴

Most interviews were conducted online, each lasting about an hour, while two respondents preferred to provide written answers. All participants were fully informed about the study's scope and gave their consent beforehand. To maintain confidentiality, all interviewees were assigned pseudonyms, and the recordings and transcripts were securely stored on the university's server in accordance with GDPR and the Swedish Research Council's ethical guidelines. The authors handled all translations into English. We conducted a thematic analysis of both the literature review and the interview transcriptions, adhering to Braun and Clarke's framework, which encompassed familiarisation, coding, and the identification, definition, and naming of themes.²⁵ While the themes, derived inductively from the literature review and interview transcriptions and subsequently informing the article's headings, differ due to the distinct nature of their empirical material, they are cohesively integrated through Koselleck's overarching theoretical framework. Koselleck's four dimensions (see below) serve as a lens for both the analysis and the concluding discussion, enabling a more nuanced interpretation of the findings.

A few caveats regarding terminology are necessary: We use "defectology" as a comprehensive label for Vygotsky's diverse writings on disability. This choice is made

²⁴ Personal communication with Roger Säljö, 26 October 2023.

²⁵ Virginia Braun and Victoria Clarke, *Thematic Analysis: A Practical Guide* (Los Angeles: SAGE, 2022).

despite many scholars preferring more mainstream concepts like “cultural-historical psychology” or “sociocultural theory” when discussing Vygotsky’s legacy. Others place defectology within the developing discipline of Soviet pedology in the 1920s, or within the Soviet “science of the child.”²⁶ As the literature review will demonstrate, Vygotsky’s views on disability are often reframed using contemporary terminology, such as the “dialectical cultural-historical approach”²⁷ or the “strengths-based approach” to disability.²⁸ We retain the term defectology for two main reasons: Vygotsky himself used it, though with a meaning different from today’s, and we aim to thoroughly explore the term’s conceptual origins and restore its original Vygotskian meaning.

Conceptual history: a theoretical perspective

Conceptual history, as articulated by Reinhart Koselleck (1923–2006), explores the historical use of political and social concepts, emphasising the relationship between history and language.²⁹ At the core of Koselleck’s framework is the idea that historical experience and change is condensed in concepts, and that conceptual shifts signify moments of historical novelty. As Koselleck stated, conceptual history “seeks to comprehend the process by which experiences came to be registered in concepts and – as far as possible – to identify the theories included in such concepts.”³⁰ As all concepts contain an “internal temporal structure,”³¹ conceptual history also holds present-day relevance, as scrutinizing “the historical background and meanings of words will illuminate today’s expressions and slogans. Definitions need no longer remain ahistorical or excessively abstract because of ignorance of what they may have meant in the past.”³²

Koselleck distinguishes four aspects that characterise historical concepts, which simultaneously serve as a methodological tool for scrutinizing their meaning and change over time. The first characteristic of modern concepts pertains to their **democratisation** (*Demokratisierung*), positing that the modern era introduced a broader distribution of concepts that were no longer confined to those in power but circulated among a wider population. The second characteristic is the introduction of a **temporalisation** (*Verzeitlichung*) of concepts, meaning that social order was no longer perceived as something closed, stable, and unchangeable.³³ Instead, modern concepts began to

²⁶ Byford (2020), 185–217.

²⁷ Louise Böttcher and Jesper Dammeyer, “Beyond a Biomedical and Social Model of Disability: A Cultural-Historical Approach,” in *Development and Learning of Young Children with Disabilities. A Vygotskian Perspective* (Springer International Publishing, 2016), 3–23.

²⁸ Wil H.E. Buntinx, “Understanding Disability: A Strengths-Based Approach,” in *The Oxford Handbook of Positive Psychology and Disability*, ed. Michael L. Wehmeyer (Oxford: Oxford University Press, 2013), 7–18.

²⁹ Although conceptual history initially focused on the German context, the lexicon includes studies of broader semantic changes in other European countries. In addition to *Geschichtliche Grundbegriffe*, Koselleck further refined this theoretical approach in subsequent studies, ultimately culminating in his last book: Reinhart Koselleck, *Begriffsgeschichten: Studien zur Semantik und Pragmatik der politischen und sozialen Sprache* (Frankfurt am Main: Suhrkamp, 2006).

³⁰ Reinhart Koselleck, “Introduction,” in *Global Conceptual History. A Reader*, ed. Margrit Pernau and Dominic Sachsenmaier (London: Bloomsbury, 2016), 41.

³¹ Koselleck (2006), 100.

³² Koselleck (2016), 41.

³³ Koselleck (2006), 77–85.

revolve around the idea of progress and future orientation, becoming “infused with a sense of expectation that they had not had before.”³⁴ The third characteristic pertains to the **ideologisation** (*Ideologisierbarkeit*) of concepts. Koselleck argues that pre-modern particularity was replaced by a more abstract and universal outlook, which he coined “collective singulars,” becoming more general, but also more ambiguous, thus easily integrated into ideologies. “In this sense,” Koselleck wrote, “a structural transformation becomes evident: a growing trend away from life in settings of manageable size and relative stability, and towards new horizons of possible experiences.”³⁵ The fourth characteristic, which is interconnected with the previous ones, is the **politicisation** (*Politisierung*) of concepts. As the masses began appropriating concepts and became politically mobilised, this led to an increase in the use of oppositions (*Gegenbegriffe*), such as “revolutionary” versus “reactionary.” These four dimensions allow us to apply conceptual history as a theoretical and methodological lens, making it particularly relevant for studying the evolution and reception of Vygotsky’s defectology.

Literature review

The following literature review on the reception of Vygotsky’s defectology underscores its impact on contemporary research across special education, and disability studies. In analysing core ideas from the selected 34 key articles, we emphasise, clarify, or illustrate core ideas with references to Vygotsky’s original texts on defectology.

To revive the overlooked legacy of Vygotsky’s defectology, scholars have explored his archives,³⁶ revisited translations, and offered new historical and theoretical insights. As Yasnitsky notes, “among the pioneers of psychology, Lev Vygotsky (1896–1934) may be the best known of those who are least understood”³⁷ – a view we find equally true of his defectology. Knox and Kozulin underscore concepts they describe as “the trademark of Vygotskian tradition” and illustrate “the links between Vygotsky the theorist, Vygotsky the clinician and Vygotsky the pedagogue.”³⁸ Lubovsky credits him with laying “the foundation for serious theoretical work in the area of defectology.”³⁹ while Kozulin and Gindis highlight that “not many theories formulated more than seventy years ago continue to attract attention and provoke controversy.”⁴⁰

³⁴ Koselleck (2016), 36.

³⁵ Koselleck (2016), 39.

³⁶ Elena E. Kravtsova, “In Memoriam Gita Lvovna Vygodskaya (1925–2010),” *Journal of Russian & East European Psychology*, no. 4 (2010),

³⁷ Anton Yasnitsky, “Lev Vygotsky: Philologist and Defectologist, A Sociointellectual Biography,” in *Portraits of Pioneers in Developmental Psychology*, ed. Wade Pickren, Donald A. Dewsbury, and Michael Wertheimer (Psychology Press, 2011), 109.

³⁸ Jane E. Knox and Alex Kozulin, “Vygotskian Tradition in the Psychological Study of Handicapped, Particularly Deaf Children,” (paper presented at the Biennial Meeting of the Society for Research and Development in Children, Baltimore, MD, April 23–26, 1987).

³⁹ Vladimir I. Lubovsky, “Defectology: The Science of Handicapped Children,” *International Review of Education* 20 (1974), 298–305.

⁴⁰ Kozulin and Gindis (2007), 361.

Vygotsky's defectology in contemporary special education and inclusive education

While the influence of Vygotsky's defectological work is acknowledged, there remains significant potential for its broader application in special education, especially when compared to the widespread use of his developmental psychology.⁴¹ Vygotsky's contribution to defectology is unquestionably important as he "elevated 'defectology' to the status of a science, with a coherent theory, body of scientific data, relevant methods, organisational institutions, and a cohort of enthusiastic researchers and practitioners"⁴² and, for example, scholars highlight the role of his ideas in contemporary deaf education⁴³ and ground their interventions in his theories.⁴⁴ Concepts and theories outlined in Vygotsky's defectological writings are relevant to contemporary special education⁴⁵ and disability studies; for example, Vygotsky's Cultural-Historical Theory, the Theory of Dysontogenesis and the positive differential approach are discussed in theoretical papers, book chapters or used as a point of departure in research articles.

Gindis acknowledges the relevance of Vygotsky's defectology to special education because it offers "a theoretical framework that might integrate all branches of contemporary special education;"⁴⁶ however, Vygotsky's concepts differ from those of special education, covering fewer categories like intellectual disability, visual and auditory impairments, and autism, while contemporary special education includes more (e.g., learning difficulties). Although his work with disabled children shaped his theories, Vygotsky did not extensively detail the methodology, teaching methods, or their effects on learning.⁴⁷

While most articles focus on special education and psychology,⁴⁸ Sandomirskaja departs from this pattern and scrutinises the ideological and political implications of Vygotsky's defectology, portraying it as deeply intertwined with Marxist utopian ideals. Vygotsky's concepts of "defect," "childhood," and "blindness" go beyond technical terms, serving as metaphors for broader political and historical narratives. Sandomirskaja argues that Vygotsky's defectology symbolises the revolutionary transformation of society, where true equality under socialism abolishes the distinction between the

41 Louise Böttcher and Jesper Dammeyer, "Disability as a dialectical concept: building on Vygotsky's defectology," *European Journal of Special Needs Education* 27, no. 4 (2012), 433–46; Boris Gindis, "Vygotsky's Vision: Reshaping the Practice of Special Education for the 21st Century," *Remedial and Special Education* 20, no. 6 (1999), 333–40.

42 Boris Gindis, "Viewing the Disabled Child in the Sociocultural Milieu: Vygotsky's Quest," *School Psychology International* 16, no. 2 (1995), 156.

43 Galina Zaitseva, Michael Pursglove, and Susan Gregory, "Vygotsky, Sign Language, and the Education of Deaf Pupils," *Journal of Deaf Studies and Deaf Education* 4, no. 1 (1999), 9–15.

44 Viktor K. Zaretskii, "Vygotsky's Principle 'One Step in Learning - One Hundred Steps in Development': From Idea to Practice," *Kul'turno-istoricheskaya psichologiya = Cultural-Historical Psychology* 12, no. 3 (2016), 149–88.

45 Ljupco Ajdinski and Lani Florian, "Special Education in Macedonia," *European Journal of Special Needs Education* 12, no. 2 (1997), 116–26; Boris Gindis, "The Social/Cultural Implication of Disability: Vygotsky's Paradigm for Special Education," *Educational Psychologist* 30, no. 2 (1995), 77–81.

46 Gindis (1999), 339.

47 Michael E. Skyer, "Vygotskian Perspectives in Deaf Education: An Introduction in Two Movements," *American Annals of the Deaf*, 168, no. 1 (2023), 12–36.

48 Luciano Mecacci, "Vygotsky and Psychology as Normative Science," *Integrative Psychological & Behavioral Science* 55, no. 4 (2021), 728–34.

”normal” and “defective,” enabling all citizens to fully contribute to the collective.⁴⁹ This interpretation highlights how Vygotsky’s defectology reflects Koselleck’s temporalisation, linking it to social progress, and ideologisation, as it sought broader societal impact beyond the ivory tower of academic psychology.

The extent to which Vygotsky’s defectology transcended the narrow boundaries of academic research, aligning with Koselleck’s conceptual categories, is further corroborated by evidence from other studies that illustrate its broader societal and ideological implications. Hausstätter and Vik highlight key Vygotskian concepts in defectology that resonate with Biesta’s *Pädagogik*, offering valuable insights for inclusive education. These perspectives connect knowledge with culture, primary and secondary disabilities, and compensation, framing education as a social process that transforms attitudes toward children with disabilities.⁵⁰ In a similar vein, Smagorinsky emphasises Vygotsky’s “interest in creating a more inclusive society for people of difference as among the most compelling aspects of his theory of human development”⁵¹ and points out the relevance of Vygotsky’s conceptualisation of secondary disability to contemporary education and for the inclusion⁵² and support of people with mental health issues.⁵³ Joubert and Harrington critically examine inclusive education in Kosovo and Russia through the lens of Vygotsky’s defectology.⁵⁴ In a qualitative study of collaborative work sequences that include a student with Down syndrome, a nondisabled student and the teacher, the researchers refer to Vygotsky’s theory of compensation, the role of the class collective and the role of the teacher as a mediator and facilitator in knowledge production and use these ideas in their analyses.⁵⁵

Vygotsky’s influence on deaf education

Several contemporary studies explore the relevant, yet not fully known legacy of Vygotsky’s defectology in deaf studies and education. Zaitseva, Pursglove, and Gregory discuss Vygotsky’s impact on the education of deaf children in the Soviet Union,

49 Irina Sandomirskaja, “Das blinde Kind: Lew Vygotskij’s Defektologie als poetische und politische Allegorie,” in *Sehstörungen. Grenzwerte des Visuellen in Künsten und Wissenschaften*, ed. Anne-Kathrin Reulecke and Margarete Vöhringer (Berlin: Kulturverlag Kadmos, 2019), 85–105.

50 Rune Hausstätter and Stine Vik, “Inclusion and special needs education. A theoretical framework of an overall perspective of inclusive special education,” in *Dialogues between Northern and Eastern Europe on the Development of Inclusion: Theoretical and Practical Perspectives*, ed. Natallia Bahdano-vitch Hanssen, Sven-Erik Hansén, and Kristina Ström (Routledge, 2021), 18–32.

51 Peter Smagorinsky, “Vygotsky, ‘Defectology,’ and the Inclusion of People of Difference in the Broader Cultural Stream,” *Journal of Language and Literacy Education [Online]* 8, no. 1 (2012), 1–25. Available at <http://jolle.coe.uga.edu/wp-content/uploads/2012/05/Vygotsky-and-Defectology.pdf>

52 Peter Smagorinsky, “Every Individual Has His Own Insanity:’ Applying Vygotsky’s Work on Defectology to the Question of Mental Health as an Issue of Inclusion,” *Learning, Culture and Social Interaction* 1, no. 2 (2012), 67–77.

53 Leslie Susan Cook and Peter Smagorinsky, “Constructing Positive Social Updrafts for Extranormative Personalities,” *Learning, Culture and Social Interaction* 3, no. 4 (2014), 296–308.

54 Roelien Joubert and Ingrid Harrington, “Inclusive Education: Origins, ‘Defectology,’ and Kosovo’s Experiences of Inclusive Education,” *International Journal of Higher Education* 9, no. 1 (2020), 52–59.

55 Fabiana Luiza de Rezende Mendonça et al., “Mediation in the Classroom in the Construction of Knowledge in Inclusive Schools,” *Psicología Escolar e Educacional [Online]* 24, (2020).

among other things in the creation of a Soviet model of bilingual education.⁵⁶ Vygotsky increasingly recognised the importance of sign language in deaf children's cognitive and social development, a view further explored by Günther.⁵⁷ Skyer synthesises the contributions and limitations of Vygotsky's work on deaf education, contextualising it with contemporary research to make his writings more accessible to those interested in this field,⁵⁸ since "yet for all of Vygotsky's fame, his role in research and theory in deaf pedagogy is virtually unknown."⁵⁹ In 2023, *The American Annals of the Deaf* dedicated a special issue to Vygotsky and his influence in deaf studies. In the editorial,⁶⁰ Paul recognises that "there is little doubt that Vygotsky's ideas have influenced the thinking and research of a number of scholars in our field and in other areas of special education."⁶¹, while Skyer reviews Vygotsky's contributions to deaf studies and discusses current developments inspired by his theories framed as "a neo-Vygotskian, postmodern defectological revival."⁶² In their concluding article of this special issue, Willicheva and Hall synthesises Vygotsky's contribution to the field and argue in favour of a "biosocial accountability in deaf education" with a focus on professional accountability.⁶³ From a teacher training perspective, Smagorinsky and Lang use a Vygotskian lens when they analyse and discuss the results of a study with teacher candidates.⁶⁴

Strengths-Based approaches, disability studies, and Vygotsky's dialectical theory of development

Vygotsky's "positive differential approach" to intellectually disabled children,⁶⁵ is reflected by Gindis who recognises the focus on the identification of strengths as a 'trademark of Vygotsky's approach.'⁶⁶ Other authors consider that his "insistence on

56 Zaitseva et al. (1999), 9–15.

57 Klaus B. Günther, "Zur Bedeutung Lev Semjonovic Vygotskis für die 'Defektologie' im Allgemeinen und die 'Surdopädagogik' im Besonderen," *Das Zeichen*, no. 25 (2011), 218–33.

58 Michael E. Skyer, "Invited Article: The Bright Triad and Five Propositions: Toward a Vygotskian Framework for Deaf Pedagogy and Research," *American Annals of the Deaf* 164, no. 5 (2020), 577–91.

59 Skyer (2020), 578.

60 Peter V. Paul, "Perhaps This Is Everything You Wanted to Know About Vygotsky, but Were Afraid to Ask," *American Annals of the Deaf* 168, no. 1 (2023), 7–11.

61 Paul (2023), 7.

62 Skyer (2023), 27.

63 Kristina Willicheva and Wyatte C. Hall, "From vicious circles to virtuous cycles: Vygotskian-inspired conclusions for biomedicine and deaf education," *American Annals of the Deaf* 168, no. 1 (2023), 162–76.

64 Peter Smagorinsky and Merida Lang, "Learning to Create Environments for Deafness Among Hearing Preservice Teachers: A Defectological Approach," *Learning, Culture and Social Interaction* 38 (2023).

65 Lev S. Vygotsky, "Compensatory Processes in the Development of the Retarded Child," in *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, ed. Robert W. Rieber and Aaron S. Carton (New York: Plenum Press, 1993e), 123.

66 Gindis (1995b), 164.

the search for positive abilities and a qualitative uniqueness in the development of the abnormal child dominates his works.”⁶⁷ Knox and Kozulin contend that:

only a truly differentiated learning environment can fully develop a deaf child’s cognitive skills and overall personality because only in the specially manipulated setting proposed by Vygotsky and his followers will the entire staff be able to exclusively serve the individual needs of a handicapped child, building on strengths and uniqueness, not on handicaps.⁶⁸

The influence of Vygotsky’s defectology on disability studies is particularly evident in Böttcher and Dammeyer’s cultural-historical dialectical model of disability. This model emphasises that, while disability may stem from one or more biological factors, it must always be studied as a phenomenon that emerges within specific physical, social, and cultural-historical contexts.⁶⁹ By using as a point of departure the theory of dialectical nature of child development and the theory of incongruence, Böttcher and Dammeyer open up new avenues in disability research as illustrated in their qualitative study with a child who has cerebral palsy and cortical visual impairment,⁷⁰ in a review of the associations between childhood disability and psychopathology,⁷¹ and in a qualitative study with a girl without verbal speech.⁷² The authors situate Vygotsky’s defectology outside the medical model of disability when they conclude that:

usual institutional settings and activities might be unsuitable for the majority of children with disabilities. [...] The dialectical cultural-historical approach to understanding disability highlights that even though the disability arises from one or more biological defects, it is at all times necessary to study disability as a phenomenon that has emerged within specific physical, social and cultural-historical contexts.⁷³

Vygotsky’s theory of dialectical development is discussed by Souza and Dainez, who focus on what they term “social education” while analysing the right to education for disabled people in Brazil, particularly in relation to inclusive education and the social

67 Pedagogika Editorial Staff, “L. S. Vygotsky and Contemporary Defectology,” *Journal of Soviet Psychology* 21, no. 4 (1983), 89. (Original work published in 1982).

68 Knox and Kozulin (1987), 28.

69 Böttcher and Dammeyer (2016) 9; A key element in Vygotsky’s theory on the dialectic nature of development is the incongruence between the biological or natural development and the cultural development of the disabled child. Whereas in the case of nondisabled children “[b]oth lines of development—natural and cultural—coincide and merge one into the other,” in the case of a disabled child “...the two lines of development will diverge substantially from one another. The degree and character of the divergence will be determined and measured in each case by the different qualitative and quantitative effects of the defect on each of the two lines.” Vygotsky (1993a), 42–43.

70 Louise Böttcher and Jesper Dammeyer, “Disability as a Dialectical Concept: Building on Vygotsky’s Defectology,” *European Journal of Special Needs Education* 27, no. 4 (2012), 433–46.

71 Louise Böttcher and Jesper Dammeyer, “Disability as a Risk Factor? Development of Psychopathology in Children with Disabilities,” *Research in Developmental Disabilities* 34, no. 10 (2013), 3607–17.

72 Louise Böttcher, “Supporting Unusual Development Through Moral Imagination,” *Learning, Culture and Social Interaction*, 30 (2021).

73 Böttcher and Dammeyer (2012), 436.

model of disability.⁷⁴ In other studies, Vygotsky's sociocultural theory is used as a lens to critically analyse deaf education in the United States, and some authors recommend actionable solutions that align with the principles of a strengths-based education⁷⁵ or call for more professional accountability and justice in deaf education.⁷⁶ Other authors review Vygotsky's dialectic development and the dynamic nature of disability through the concept of time and in so doing they rightly mention the timeliness of his defectology.⁷⁷

Following Koselleck's framework, these interpretations echo temporalisation and ideologisation, positioning defectology within a wider cultural-historical continuum that challenges deterministic scientific models, and advocates for a more inclusive and socially engaged conception of human development. The claimed timelessness of Vygotsky's defectology thus operates as a broad, universalised category, aligning with what Koselleck termed "collective singulars"—concepts that shape historical understanding and discourse.

Tracing the legacy and reception of Vygotsky's defectology

In this section, we will explore the legacy and reception of Vygotsky's defectology in both Eastern and Western contexts, drawing insights from semi-structured interviews with six scholars. To ensure confidentiality, we have assigned a pseudonym to each respondent, identified as Tamara, Marina and Valery (RU), Victor (RO), and Gerhard and Wilhelm (GER).

Trajectories of Vygotsky's defectology after Stalin

Following Vygotsky's death and the decline of his works after 1934, there was a gradual revival of interest in his writings after the collapse of Stalinism. In this context, Vygotsky's close collaborators, Luria and Leontiev, played a pivotal role in republishing and disseminating his defectological works during the post-war period.

Tamara became familiar with Vygotsky's works as a university student in the late 1960s. After graduating from Moscow State University, Tamara joined the Institute of Defectology, formerly Vygotsky's workplace, where she collaborated with his daughter, Gita Vygodskaya. Tamara's career illustrates how Vygotsky's works were passed on to the next generation of Soviet scholars.

Marina further elaborated on the reception of Vygotsky's defectological writings in the late Soviet period, shaped by the liberalisation of the academic and intellectual life under Glasnost and Perestroika: "It was a good time to promote [Vygotsky] because this was the time of Perestroika and following political changes...when all democratic and humanitarian theories were booming."

⁷⁴ Flávia Faissal de Souza and Débora Dainez, "Defectology and School Education: Implications for the Human Rights Field," *Educação e Realidade* 47 (2022), e116863.

⁷⁵ Katie R. Potier and Heidi Givens, "Synthesizing Vygotsky's Sociocultural Theory and Deaf Pedagogy Framework Toward Deaf Education Reform: Perspectives from Teachers of the Deaf," *American Annals of the Deaf* 168, no. 1 (2023), 102–27.

⁷⁶ Willicheva and Hall (2023), 162–76.

⁷⁷ Marcello Ferreira et al., "Time and Cognitive Development: From Vygotsky's Thinking to Different Notions of Disability in the School Environment," *Humanities & Social Sciences Communications* 10, no. 1 (2023), 768–78.

The rediscovery of Vygotsky's defectology in West Germany paralleled its timeline elsewhere but followed distinct development paths due to post-war influences from English-speaking scholars and limited contacts with the GDR. According to Gerhard, this process was deeply connected to debates about the Nazi past and Germany's division after 1949, and thus, "embedded in the founding of the Federal Republic of Germany." He explained that the 1968 movement led to a major split in special education. The so-called "march through the institutions," a strategy by the student movement to reform the political system, also targeted the special education system, "which we perceived as profoundly unsettling," as Gerhard remembers:

Many of those people operating within the special education system were former Nazi party members and involved in building and influencing the educational system.... Who could have made us aware of [other] scientific cultures that differ from this tradition?

In this context, Vygotsky's approach to disability was transmitted through the writings of his associates Luria and Leontiev, collectively referred to as the "Troika":

We were discussing Vygotsky based on English literature [or] translations [into German] that, of course, came from the GDR....And that was basically our fundamental approach regarding the whole Troika, of course.

Gerhard identified the psychologist Wolfgang Jantzen (1941–2020) as the key figure in introducing Vygotsky's defectology to West Germany, with Wilhelm confirming Jantzen's crucial role in shaping the reception of Vygotsky's work, particularly in activity theory and cultural-historical psychology. Gerhard also highlighted Joachim Lompscher (1932–2005), who studied in Moscow in the 1950s and later popularised Vygotsky's works at the Central German Pedagogical Institute in East Berlin.⁷⁸

Wilhelm similarly underscored the link between Lompscher and Jantzen, who became Wilhelm Wundt Professor at Karl Marx University (Leipzig) in 1987. He noted Jantzen's efforts to make Soviet literature accessible in West Germany via the Pahl-Rubenstein press, which published works by Vygotsky, Leontiev, Luria, and Galperin. Wilhelm agreed that interest in Vygotsky's defectology in West Germany rose in the 1980s, mirroring Soviet trends:

[Vygotsky's increased reception] started in the 70s and 80s... The importance of Vygotsky in that context was only recognised relatively late. The Americans were simply faster than the Europeans.

During this period, a loosely organised group of leftist scholars, centred around Jantzen, emerged in West Germany in the 1960s. As Gerhard put it, "Back then, we could only spread our ideas through 'grey literature' and through the development of special education, where we could make an impact." This group actively challenged the segregationist approach to disability, advocating for a more inclusive approach inspired by Vygotsky.

⁷⁸ Hartmut Giest, ed., *Erinnerungen für die Zukunft – Pädagogische Psychologie in der DDR* (Berlin: Lehmanns, 2006).

In Romania, the reception of Vygotsky followed a similar path. Victor describes how the Soviet-inspired field of defectology was introduced through Babes-Bolyai University in Cluj-Napoca, with the first centre of defectology established in 1960 under Alexandru Roșca.⁷⁹ As a student between 1966 and 1971, Victor encountered Vygotsky's defectology "through Russian and Romanian sources, though only some of his works were translated." Vygotsky's *zone of proximal development* began to permeate Romanian academia in the early 1960s, but his defectological works remained relatively unknown. The first introduction of Vygotsky's ideas about disability to a Romanian audience came with Paul Popescu-Nevezanu's book *Psychology in the USSR*, followed by additional translations in the 1970s, although Vygotsky's defectological writings remained marginal in Romania.

Competing paradigms, ideologisation, and politicisation

Despite the revitalisation of Vygotsky's work since the 1950s, many noted that his ideas remained marginal, often challenged by dominant paradigms that differ by country. Marina highlighted how defectology was redefined under the Soviet system as a segregated form of special education, diverging from Vygotsky's original ethos:

[Vygotsky] was also mostly ignored because his ideas are very humanitarian, right? So, what he basically said is that...you don't have to segregate, you don't have to build any special schools or whatever. ...But in Soviet Russia...defectology was based on segregation. That is why I think Vygotsky's ideas were not popular at that time...And still now, we have people with this old kind of approach...for them, any person with a disability is kind of doomed...

Tamara painted a similar picture, contending that regarding the idea of inclusive education, "which Vygotsky dreamed of, [the field] began to be really divided in the 1970s and 1980s." She reminisced that in the 1970s, the ideas of inclusive education grew louder and louder. However, these approaches were "still very far from the widespread implementation of these ideas in practice." Tamara's account thus confirms that the term defectology was dissociated from Vygotsky's thought, despite his foundational contributions to the field.

Marina argued that "the idea of segregation will die only when these people die, [representing this] old type of education." She also identified ongoing power struggles within her discipline, noting that Vygotsky's theories are now challenged by Western models like *Applied Behavior Analysis (ABA)*, which have gained popularity in Russia and significantly challenge Vygotsky's legacy:

⁷⁹ On the origins of Romanian defectology, see: Radu Harald Dinu, "Medical Discourses on Dis/ability in State Socialist Romania: A Critical Genealogy," in *Dis/ability in Media, Law and History: Intersectional, Embodied and Socially Constructed?* ed. Micky Lee, Frank Rudy Cooper, and Pat Reeve (London: Routledge, 2022), 76–89.

look, a good teacher, a good psychologist, a good clinician [sic!] does a lot of things built on his professional experience and professional intuition. For example, clinical thinking... You cannot put clinical thinking in protocols. You can develop it as a quality as a very good professional quality, but it is not something which you can formalise.... So here I think, uh, [there is a] different philosophy behind it. It is difficult to change a philosophy just like that.

Unlike the Soviet context, the reception of Vygotsky's ideas on disability in West Germany and the development of special education paradigms like *Heilpädagogik* and *Sonderpädagogik* took a unique path. Gerhard argues that scholars like Jantzen aimed to reform the "traditional" special education system in West Germany, which often labeled disabled children as "uneducable, unteachable, unable to attend school." To challenge this "traditional approach," Gerhard and his associates founded the *Zeitschrift Behindertenpädagogik*,⁸⁰ which is still published today. According to him, this move was conducted as an act of opposition against the *Zeitschrift für Heilpädagogik*,⁸¹ which, according to Gerhard, represented the "conservative and reactionary" view. The post-war special education system in West Germany was reinforced by the Association of Special Schools (*Verband der Sonderschulen*), now known as the Association of Special Education (*Verband Sonderpädagogik*), "a powerful organization with over 10,000 members." According to Gerhard, this association

dictated politically what was to be considered as curative and special education. They [proposed] 10 types of special schools...an absurd theatre. They attacked us vehemently. [As] dialectical materialism was their number one enemy, we started from scratch to resist the entire established curative and special pedagogic mafia, as I consciously call them, who built institutions, psychiatric facilities, and state hospitals for the exclusion and confinement of people.

The term "mafia" highlights the fierce power struggles between mainstream special education and the Vygotskyan tradition. Gerhard also noted how Vygotsky's legacy was distorted in West German special education, where the term defectology "was immediately picked up by the seemingly progressive forces." He recalled how critics, claiming to be progressive, opposed Soviet frameworks:

They said, "we want to move away from this deficit-oriented thinking toward individuals' capabilities, and now they are pushing this defectology." This means that what the term defectology signifies in the cultural-historical tradition, was not understood at all here but was immediately taken as a superficial term to dismiss everything.

In this context, Wilhelm interestingly used defectology to criticise his academic adversaries. This highlights how contested the term was among West German special educators: "As to the term 'defectology' in Germany, it's more accurately represented in the

⁸⁰ In English: Journal for Disability Pedagogy.

⁸¹ In English: Journal of Curative Pedagogy. <https://www.verband-sonderpaedagogik.de/zeitschrift/aktuelle-ausgabe/>

context of curative pedagogy [*Heilpädagogik*], or synonymously with disability pedagogy [*Behindertenpädagogik*].”

Wilhelm emphasised that Vygotsky’s defectology was central to his academic training in the 1980s, “although it was not named as such at the time.” Even after graduation, while working at a special school, he continued engaging with “what you now call defectology.” These phrases suggest that proponents of Vygotsky’s philosophy distanced themselves from the term, indicating that in the 1970s and 1980s in West Germany, it carried a similar stigma as in other countries.

Both German respondents acknowledged their inability to establish the Vygotskyan tradition as a recognised field, due to its limited practical implementation in special education, as well as competition from dominant academic paradigms. Many of these struggles centred at the University of Bremen, where Jantzen and his colleagues promoted inclusive approaches to disability based on Vygotsky’s ideas. According to Gerhard, the university’s reformist foundation enabled such efforts in the 1970s,⁸² but by the 1980s, these attempts were gradually “destroyed.”

the University of Bremen was ... left-leaning, even bordering on socialist positions beyond a social democratic stance. When the state of Bremen became financially dependent on federal state funding through Bavaria, these structures were significantly dismantled.

The implementation of Vygotsky-inspired inclusive ideas faced challenges on multiple levels. On the university campus, the presence of intellectually disabled people caused fear among others, as Gerhard emphasised, because many colleagues “were not accustomed to people who behave differently. They said it could no longer be considered scientific what I was doing...and this led other universities to avoid such initiatives.”

Gerhard also described the challenges he and his colleagues faced in implementing inclusive education at upper-secondary schools in Bremen during the 1990s: “Many people said that if we start to include intellectually disabled people in mainstream schools, the future managers, who are desperately needed to lead Bremen out of the financial crisis would refrain from going to a school where...intellectually disabled children are enrolled.” These instances exemplify how Vygotskyan-inspired methods permeated both academic discourse and educational practice, frequently provoking debate and resistance.

As the literature review showed that Vygotsky’s defectology was interpreted through varying ideological lenses across countries—a view echoed in the interviews, where German respondents described the challenges to its association with Soviet ideology. Wilhelm noted that Vygotsky’s faced resistance in both the Soviet Union and abroad: “During the Stalin era, it was particularly problematic because his ideas did not align with what dogmatic materialism represented, [and even] in the former GDR, Vygotsky and activity theory were not necessarily part of the mainstream.” In Germany, Vygotsky’s legacy encountered significant challenges, reflecting the ideologisation of his thought during the post-war period: “Because, to put it cautiously, Vygotsky was very ideologically charged. The mere fact that he came from the Soviet Union led to

⁸² The University of Bremen was founded in 1971.

prejudices, so that ultimately, you see, discussions were never really about the content but always ideologically driven.” As Wilhelm emphasised, Vygotsky’s contributions thus remain “ideologically overloaded” in German discourses on disability, and he also contended that there are “systematic and deliberate efforts to negate his work.” This exclusion “extends to the dimensions of his theories, shifting the debate from substance to ideological stances,” making it “incredibly difficult” for Vygotsky’s approach to disability “to be considered on its own merits.”

Misconceptions of Vygotsky’s defectology

As discussed earlier, Soviet defectology diverged from its Vygotskian roots, evolving into a defect-oriented paradigm seen as outdated. This view was consistently echoed in interviews, either explicitly or implicitly. Valery, for example, avoided the term entirely, placing Vygotsky within the broader cultural-historical paradigm and linking “defectologists” to the “old Soviet system.” Marina echoed this view, stating, “defectologists are associated with the Soviet regime, and all this segregation system.” Tamara also attributed the marginalisation of Vygotsky’s defectology post-1945 to both his early death and the terminology he used: “I consider Vygotsky a very talented theorist who predicted the possibilities of inclusive education... But his life was very short, the works he wrote are quite difficult to understand even in Russian.”

Another reason for the varied (mis)interpretations of Vygotsky’s defectology is the difficulty of translating his work. Scholars note the challenge of finding accurate English equivalents for concepts written in 1920’s and 1930’s Russian, and van der Veer and Yasnitsky highlight gaps and errors in the existing translations.⁸³ This challenge is highlighted by both the translators of Vygotsky’s Collected Works and other studies.⁸⁴ As Gerhard put it, we were “dependent on translated literature from the GDR [which] was handled quite carelessly. Some statements were indeed problematic when we talked to colleagues who were proficient in Russian.” Wilhelm confirms the problem of translating Vygotskian terminology to other languages, stating:

overall, this was a huge problem... the problem of translation, because, you know... certain terms had different semantics... Some weren’t translated from Russian into German [and] translations from Russian into English were already problematic.

According to Gerhard, this distorted reception of Vygotsky, often omitting the wider historical and intellectual context of his oeuvre: “Even if Vygotsky’s approaches are indispensable today and can no longer be ignored by the mainstream, the alarming thing is that they are often received in a very fragmented way. The broader intellectual horizon is missing to develop them properly.” Ultimately, Wilhelm also points to the avant-garde potential in Vygotsky’s work that can partly explain why he was misunderstood: “What defined Vygotsky was that he always seemed to be in open contra-

⁸³ René van der Veer and Anton Yasnitsky, “Vygotsky in English: What Still Needs to Be Done,” *Integrative Psychological & Behavioral Science* 45, no. 4 (2011), 475–93.

⁸⁴ René Van der Veer and Anton Yasnitsky, “Translating Vygotsky. Some problems of transnational Vygotskian science,” in *Revisionist Revolution in Vygotsky Studies. The State of the Art*, ed. René Van der Veer and Anton Yasnitsky (London: Routledge, 2015), 142–74.

diction to his time. And by doing so, he set a development in motion. And this still holds true today.”

New wine into old wineskins

Another theme from the interviews was that many contemporary approaches, particularly the social model of disability, reflect Vygotsky’s work without acknowledging it. All respondents emphasised that he anticipated key frameworks now central to disability studies. As Tamara put it “the most significant ideas for me were also his understanding that a ‘defect’ is primarily a social and not an organic abnormality of behavior.” Wilhelm’s outlook echoes Tamara’s observation when stating that:

in disability studies...experts do not acknowledge that the social construction of disability was being discussed as early as 1924. Instead, they ultimately place it in the British context. This is not entirely accurate...well, that's scientifically dishonest, isn't it? Just to ignore it like that.

Furthermore, Wilhelm stressed that Vygotsky’s work anticipated the distinction between impairment and disability, “which is now recognized by the UNCRPD,”⁸⁵ Vygotsky “clearly spoke out against viewing disability solely as a biological phenomenon [and] emphasised that disability only becomes a problem within a social context.” Vygotsky’s proponents in Germany, which Wilhelm termed the school of “critical-materialistic disability pedagogy”,⁸⁶ adopted this view and argued that from this perspective:

there are no intellectually disabled people...there is no “right” and “wrong” ... Vygotsky’s idea [was] not to personalise and individualise systemic problems...And that’s the arrogance, excuse me for saying so, the arrogance of disability studies, isn’t it? Laying claim to that “only we are the ones who understood this.” It actually negates the fact that the debate between these rival paradigms has been ongoing for centuries.

In a similar vein, Victor also underlined that “some theoretical implications of Vygotsky’s defectology can be found in the social model of disability and the International Classification of Functioning, Disability and Health (ICF).”

According to Gerhard, Vygotsky’s core ideas on disability also resonate with other academic fields. Referring to Italian scholars, he mentioned Franco Basaglia, whose advocacy for closing mental hospitals, lead to the “Basaglia Law” and the broader Italian deinstitutionalisation movement: “what we published back then, we actually found reflected in Italian publications, which were partly based on the same [ideas], even though Vygotsky did not explicitly appear in them.”

While the literature review emphasised the temporalisation of Vygotsky’s ideas, their enduring relevance and adaptation over time, Marina’s interview reinforces this by illustrating how his concepts aligned with her work in psychiatric rehabilitation in Italy: “A lot of their ideas [overlap] with...Vygotsky. They were not inherited [and]

⁸⁵ UN Convention on the Rights of Persons with Disabilities (adopted on 12 December 2006, entered into force on 3 May 2008).

⁸⁶ *Kritisch-materialistische Behindertenpädagogik* in German.

they developed their own ideas, but there was a lot of similarity." Most respondents noted that Vygotsky's influence is evident in many modern disability approaches, yet his role is rarely recognised. German interviewees, in particular, saw this as a sign that disability studies often overlook their historical roots.

Vygotsky's defectology and its impact on various disciplines today

Although Vygotsky's work remains influential across various fields, especially his views on disability, respondents distanced themselves from the term "defectology," which they saw as tied to post-war Soviet special education rather than Vygotsky's original thinking. Marina noted that ISCAR plays a central role in advancing his legacy and that she applies concepts like the zone of proximal development in her work with disabled adults. She also shared a surprising moment when IT professionals at a conference recognised ideas from cultural-historical psychology, showing the broader reach of Vygotsky's influence today: "as one of them said, 'oh, I realise it resembles Agile [methodologies] in information technology!"

Additionally, according to Marina, Russian psychologists are drawing more on Vygotsky than special educators. She adds that families are more advanced in their thinking than special educators: "There is a lobby in Russia of the families of people with different kinds of disabilities who are lobbying for assisted living... So the idea of assisted living did not come from [researchers] or practitioners. It actually came from common people, from families." The two German respondents offered a historical overview, noting that Gerhard and his colleagues promoted the cultural-historical paradigm by organising conferences in West Germany on Leontiev, which also helped bring attention to Vygotsky's work. However, Gerhard acknowledged that only "a maximum of 50 people were involved, spread across the German-speaking region, including Austria." This loosely organised network aimed to promote Leontiev's and Vygotsky's frameworks through national conferences, which were productive, but attempts to formalise these into a structured school met resistance over fears of dogmatisation, ultimately preventing its establishment.

The only institutionalisation mentioned was the Luria Society founded in 1987, which still promotes these ideas. Wilhelm emphasised its key role in advancing cultural-historical theories alongside major research from the University of Bremen and said that "we practically demonstrated that every child, regardless of individual characteristics, is capable of education and development. ... Yes, and that is clearly also oriented towards Vygotsky."

Gerhard added that, despite the fact that "it was not possible to really establish these approaches at [West German] universities," his work bore fruit during 1990s: "We used to say, 'they can fight us, but they can no longer ignore what we have brought into the world."

Concluding discussion

Our findings reveal that Vygotsky's defectology faced significant challenges in state-socialist countries, where his inclusive and humanitarian approach was often overshadowed by the dominant segregationist Soviet special education system. In Russia, Vygotsky's ideas experienced a revival during the later years of the Soviet Union, particularly during Glasnost and Perestroika, which allowed for a more liberal interpretation of his work. In Romania, while his defectology was introduced through

Soviet influence, it remained marginal compared to his other theories, such as the zone of proximal development. In contrast, in West Germany, Vygotsky's ideas were integrated differently, shaped by post-war politicisation and the division of Germany. West German scholars actively challenged traditional segregationist approaches in special education, although Vygotsky's ideas were often received through a fragmented lens and met with resistance from established institutions.

Our study highlights the four key dimensions of Koselleck's framework as they pertain to Vygotsky's defectology. *Democratisation* was a significant theme, as Vygotsky's ideas spread beyond the Soviet Union and were integrated into special education and disability studies across diverse global contexts. This expansion was facilitated by translations and academic exchanges, particularly between East and West Germany. *Ideologisation* was evident in how scholars elevated Vygotsky's ideas into "collective singulars," linking them to terms like "inclusive education" and the "social model of disability," thus portraying his work as a tool for social change and ideological advancement. This framing was mirrored in the interview findings, where respondents from West Germany recounted the challenges posed by the association of Vygotsky's ideas with Soviet ideology. *Temporalisation* was evident in both the literature and interviews, which emphasised the forward-looking nature of Vygotsky's defectology. His ideas, originally developed in the early twentieth century, were presented as dynamic and future-oriented, anticipating modern concepts such as the social model of disability. Respondents, such as Marina, highlighted how Vygotsky's humanitarian approach contrasted with the segregationist tendencies of the Soviet special education system, further illustrating this temporal dimension. Finally, *politicisation* was observed in the political struggles surrounding Vygotsky's legacy, particularly in West Germany. Here, Vygotsky's inclusive ideas clashed with segregationist views, and his concepts were used within oppositional discourses to reform the special education system. The post-war student movements created a political climate that facilitated the spread of Vygotsky's ideas, underscoring how his work became politically charged. Notably, his approach has also left traces in contemporary frameworks, such as the biopsychosocial model of the International Classification of Functioning, Disability, and Health (ICF), which reflects ongoing debates about the interaction between individual impairments and societal barriers. In conclusion, despite the initial obscurity and misinterpretation of Vygotsky's defectology, its rediscovery and reinterpretation across different socio-political contexts underscore its lasting significance. Even if the concept, with its negative connotations, is reframed to suit modern sensibilities, Vygotsky's defectology has proven to be a dynamic and evolving framework that continues to inspire and challenge contemporary discussions on disability, special and inclusive education.

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References

- Ajdinski, Ljupco, and Lani Florian. "Special Education in Macedonia." *European Journal of Special Needs Education* 12, no. 2 (1997), 116–26.
- Böttcher, Louise, and Jesper Dammeyer. "Disability as a Dialectical Concept: Building on Vygotsky Defectology." *European Journal of Special Needs Education* 27, no. 4 (2012), 433–46.
- Böttcher, Louise, and Jesper Dammeyer. "Disability as a Risk Factor? Development of Psychopathology in Children with Disabilities." *Research in Developmental Disabilities* 34, no. 10 (2013), 3607–17.
- Böttcher, Louise, and Jesper Dammeyer. "Beyond a Biomedical and Social Model of Disability: A Cultural-Historical Approach." In *Development and Learning of Young Children with Disabilities. A Vygotskian Perspective*, edited by Louise Boettcher and Jesper Dammeyer, 3–23. Springer International Publishing, 2016.
- Böttcher, Louise. "Supporting Unusual Development through Moral Imagination." *Learning Culture and Social Interaction* 30 (2021). <https://doi.org/10.1016/j.lcsi.2020.100384>
- Braun, Virginia, and Victoria Clarke. *Thematic Analysis: A Practical Guide*. Los Angeles: SAGE, 2022.
- Byford, Andy. *Science of the Child in Late Imperial and Early Soviet Russia*. Oxford: Oxford University Press, 2020.
- Buntinx, Wil H.E. "Understanding Disability: A Strengths-Based Approach." In *The Oxford Handbook of Positive Psychology and Disability*, edited by Michael L. Wehmeyer, 7–18. Oxford: Oxford University Press, 2013.
- Cook, Leslie S., and Peter Smagorinsky. "Constructing Positive Social Updrafts for Extranormative Personalities." *Learning Culture and Social Interaction* 3, no. 4 (2014), 296–308.
- De Rezende Mendonça, Fabiana Luiza, Danielle Sousa da Silva, Franciene Soares Barbosa-Andrade, and Daniele Nunes Henrique Silva. "Mediation in the Classroom in the Construction of Knowledge in Inclusive Schools." *Psicologia Escolar e Educacional* 24 (2020). <https://doi.org/10.1590/2175-35392020193222>
- De Souza, Flávia Faissal, and Débora Dainez. "Defectology and School Education: Implications for the Human Rights Field." *Educação e Realidade* 47 (2022).
- Dinu, Radu Harald. "Medical Discourses on Dis/ability in State Socialist Romania: A Critical Genealogy." In *Dis/ability in Media, Law, and History: Intersectional, Embodied, and Socially Constructed?* edited by Micky Lee, Frank Rudy Cooper, and Pat Reeve, 76–89. London: Routledge, 2022.
- Ferreira, Marcello, Olavo Leopoldino da Silva Filho, Ana Bárbara da Silva Nascimento, and Alexandre Betinardi Strapasson. "Time and Cognitive Development: From Vygotsky's Thinking to Different Notions of Disability in the School Environment." *Humanities & Social Sciences Communications* 10, no. 1 (2023), 768–78.
- Fraser, Jennifer, and Anton Yasnitsky. "Deconstructing Vygotsky's Victimization Narrative: A Re-Examination of the 'Stalinist Suppression' of Vygotskian Theory." *History of the Human Sciences*, no. 2 (2015), 128–53.
- Giest, Hartmut, ed. *Erinnerungen für die Zukunft – Pädagogische Psychologie in der DDR*. Berlin: Lehmanns, 2006.

- Gindis, Boris. "The Social/Cultural Implication of Disability: Vygotsky's Paradigm for Special Education." *Educational Psychologist* 30, no. 2 (1995a), 77–81.
- Gindis, Boris. "Viewing the Disabled Child in the Sociocultural Milieu: Vygotsky's Quest." *School Psychology International* 16, no. 2 (1995b), 155–66.
- Gindis, Boris. "Vygotsky's Vision: Reshaping the Practice of Special Education for the 21st Century." *Remedial and Special Education* 20, no. 6 (1999), 333–40.
- Günther, Klaus B. "Zur Bedeutung Lev Semjonovic Vygotskijs für die 'Defektologie' im Allgemeinen und die 'Surdopädagogik' im Besonderen." *Das Zeichen*, no. 25 (2011), 218–33.
- Hausstätter, Rune, and Stine Vik. "Inclusion and Special Needs Education: A Theoretical Framework of an Overall Perspective of Inclusive Special Education." In *Dialogues between Northern and Eastern Europe on the Development of Inclusion*, edited by Natallia Bahdanovich Hanssen, Sven-Erik Hansén, and Kristina Ström, 18–32. London: Routledge, 2021.
- Holowinsky, Ivan Z. "Vygotsky and the History of Pedology." *School Psychology International* 9, no. 2 (1988), 123–28.
- Hick, Peter. "Reframing Psychology for Inclusive Learning within Social Justice Agendas." In *Psychology for Inclusive Education: New Directions in Theory and Practice*, edited by Peter Hick, Ruth Kershner, and Peter Farrell, 165–76. London: Routledge, 2009.
- Joubert, Roelien, and Ingrid Harrington. "Inclusive Education: Origins, 'Defectology', and Kosovo's Experiences of Inclusive Education." *International Journal of Higher Education* 9, no. 1 (2020), 52–59.
- Koselleck, Reinhart. *Begriffsgeschichten: Studien zur Semantik und Pragmatik der politischen und sozialen Sprache*. Frankfurt am Main: Suhrkamp, 2006.
- Koselleck, Reinhart. "Introduction." In *Global Conceptual History. A Reader*, edited by Margrit Pernau and Dominic Sachsenmaier, 31–54. London: Bloomsbury, 2016.
- Knox, Jane E., and Alex Kozulin. "Vygotskian Tradition in the Psychological Study of Handicapped, Particularly Deaf Children." Paper presented at the Biennial Meeting of the Society for Research and Development in Children, Baltimore, MD, April 23–26, 1987.
- Knox, Jane E., and Carol Stevens. "Vygotsky and Russian Defectology. An Introduction." In *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, edited by Robert W. Rieber and Aaron S. Carton, 1–28. New York: Plenum Press, 1993.
- Kozulin, Alex. *Vygotsky's Psychology: A Biography of Ideas*. Cambridge, MA: Harvard University Press, 1999.
- Kozulin, Alex, and Boris Gindis. "Sociocultural Theory and Education of Children with Special Needs: From Defectology to Remedial Pedagogy." In *The Cambridge Companion to Vygotsky*, edited by Harry Daniels, Michael Cole, and James V. Wertsch, 332–362. Cambridge: Cambridge University Press, 2007.
- Kravtsova, Elena E. "In Memoriam: Gita L'vovna Vygodskaya (1925–2010)." *Journal of Russian & East European Psychology* 48, no. 4 (2010), 4.
- Lubovsky, Vladimir I. "Defectology: The Science of Handicapped Children." *International Review of Education* 20 (1974), 298–305.

- McCagg, William O. "The Origins of Defectology." In *The Disabled in the Soviet Union: Past and Present, Theory and Practice*, edited by William O. McCagg and Lewis H. Siegelbaum. Pittsburgh: University of Pittsburgh Press, 1989.
- Mecacci, Luciano. "Vygotsky and Psychology as Normative Science." *Integrative Psychological & Behavioral Science* 55, no. 4 (2021), 728–34.
- Rieber, Robert W., and Aaron S. Carton, eds. *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*. New York: Plenum Press, 1993.
- Paul, Peter V. "Perhaps This Is Everything You Wanted to Know About Vygotsky, but Were Afraid to Ask." *American Annals of the Deaf* 168, no. 1 (2023), 7–11.
- Pedagogika Editorial Staff. "L. S. Vygotsky and Contemporary Defectology." *Soviet Psychology* 21, no. 4 (1983), 79–90.
- Potier, Katie R., and Heidi Givens. "Synthesizing Vygotsky's Sociocultural Theory and Deaf Pedagogy Framework Toward Deaf Education Reform: Perspectives from Teachers of the Deaf." *American Annals of the Deaf* 168, no. 1 (2023), 102–27.
- Sandomirskaja, Irina. "Das blinde Kind: Lew Vygotskijs Defektologie als poetische und politische Allegorie." In *Sehstörungen. Grenzwerte des Visuellen in Künsten und Wissenschaften*, edited by Anne-Kathrin Reulecke and Margarete Vöhringer, 85–105, 2019. Berlin: Kulturverlag Kadmos, 2019.
- Sirotkina, Irina, and Roger Smith. "Russian Federation." In *The Oxford Handbook of the History of Psychology: Global Perspectives*, edited by David B. Baker, 413–41. Oxford: Oxford University Press, 2012.
- Skyer, Michael E. "Invited Article: The Bright Triad and Five Propositions: Toward a Vygotskian Framework for Deaf Pedagogy and Research." *American Annals of the Deaf* 164, no. 5 (2020), 577–91.
- Skyer, Michael E. "Vygotskian Perspectives in Deaf Education: An Introduction in Two Movements." *American Annals of the Deaf* 168, no. 1 (2023), 12–36.
- Smagorinsky, Peter. "Every Individual Has His Own Insanity: Applying Vygotsky's Work on Defectology to the Question of Mental Health as an Issue of Inclusion." *Learning Culture and Social Interaction* 1, no. 2 (2012a), 67–77.
- Smagorinsky, Peter. "Vygotsky, 'Defectology,' and the Inclusion of People of Difference in the Broader Cultural Stream." *Journal of Language and Literacy Education* 8, no. 1 (2012b), 1–25. <http://jolle.coe.uga.edu/wp-content/uploads/2012/05/Vygotsky-and-Defectology.pdf>
- Smagorinsky, Peter, and Merida Lang. "Learning to Create Environments for Deafness Among Hearing Preservice Teachers: A Defectological Approach." *Learning Culture and Social Interaction* 38 (2023). <https://doi.org/10.1016/j.lcsi.2022.100670>.
- Smith, John Maynard. "The Origin of Altruism." *Nature* 393, no. 2 (1998), 639–40.
- van der Veer, René. *Lev Vygotsky*. London: Continuum, 2007.
- van der Veer, René, and Jaan Valsiner. *Understanding Vygotsky. A Quest for Synthesis*. Oxford: Blackwell, 1994.
- van der Veer, René, and Ekaterina Zavershneva. "To Moscow with Love: Partial Reconstruction of Vygotsky's Trip to London." *Integrative Psychological & Behavioral Science* 45, no. 4 (2011), 458–74.
- van der Veer, René, and Anton Yasnitsky. "Vygotsky in English: What Still Needs to Be Done." *Integrative Psychological & Behavioral Science* 45, no. 4 (2011), 475–93.

- van der Veer, René, and Anton Yasnitsky. "Translating Vygotsky: Some Problems of Transnational Vygotskian Science." In *Revisionist Revolution in Vygotsky Studies: The State of the Art*, edited by René van der Veer and Anton Yasnitsky, 142–74. London: Routledge, 2015.
- Vygotsky, Lev S. "Introduction. Fundamental Problems of Defectology." In *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, edited by Robert W. Rieber and Aaron S. Carton, 29–51. New York: Plenum Press, 1993a.
- Vygotsky, Lev S. "The Psychology and Pedagogy of Children's Handicaps." In *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, edited by Robert W. Rieber and Aaron S. Carton, 76–96. New York: Plenum Press, 1993b.
- Vygotsky, Lev S. "The Blind Child." In *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, edited by Robert W. Rieber and Aaron S. Carton, 97–109. New York: Plenum Press, 1993c.
- Vygotsky, Lev S. "Principles of Education for the Deaf-Mute Child." In *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, edited by Robert W. Rieber and Aaron S. Carton, 110–21. New York: Plenum Press, 1993d.
- Vygotsky, Lev S. "Compensatory Processes in the Development of the Retarded Child." In *The Collected Works of L.S. Vygotsky: Volume 2: Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, edited by Robert W. Rieber and Aaron S. Carton, 122–138. New York: Plenum Press, 1993e.
- Vygotsky, Lev S. "Difficult Children." In *Vygotsky's Notebooks: A Selection*, edited by Ekaterina Zavershneva and René van der Veer, 437–58. Singapore: Springer, 2018.
- WHO. International Classification of Functioning, Disability, and Health (ICF). Geneva: WHO, 2001.
- Willicheva, Kristina, and Wyatte C. Hall. "From Vicious Circles to Virtuous Cycles: Vygotskian-Inspired Conclusions for Biomedicine and Deaf Education." *American Annals of the Deaf* 168, no. 1 (2023), 162–76.
- Yasnitsky, Anton. "Lev Vygotsky: Philologist and Defectologist, a Sociointellectual Biography." In *Portraits of Pioneers in Developmental Psychology*, edited by Wade Pickren, Donald A. Dewsbury, and Michael Wertheimer, 109–34. New York: Psychology Press, 2011.
- Yasnitsky, Anton. *Vygotsky. An Intellectual Biography*. Abingdon: Routledge, 2018.
- Zaitseva, Galina, Michael Pursglove, and Susan Gregory. "Vygotsky, Sign Language, and the Education of Deaf Pupils." *Journal of Deaf Studies and Deaf Education* 4, no. 1 (1999), 9–15.
- Zaretskii, Viktor K. "Vygotsky's Principle 'One Step in Learning - One Hundred Steps in Development': From Idea to Practice." *Kul'turno-istoricheskaya psichologiya = Cultural-Historical Psychology* 12, no. 3 (2016), 149–88.