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SUMMARY OF THE DOCTORAL DISSERTATION IN ENGLISH

Title of the dissertation:

Socio-cognitive development in context: Theory of mind, folk psychology, and culture from an interactivist perspective

Summary of the dissertation:

This dissertation addresses the role of socio-cultural factors in the development of human social cognition. The argumentation presented is situated within the context of the research paradigm of Theory of Mind (ToM) and the philosophical discussion surrounding its theoretical foundations. The dissertation examines the classical models of Theory of Mind – the modular-nativist approach, the rational-constructivist approach, and the two-systems approach – in light of empirical findings. Recent research highlights cross-cultural diversity in the development of socio-cognitive abilities, including those measured by traditional ToM tests (e.g., the false-belief task). The critique of these approaches and the alternative model proposed in the dissertation draw on dynamicist and pragmatist theories, particularly Mark Bickhard's interactivist model. The argumentation in the dissertation also engages with broader debates in the philosophy of cognitive science regarding the ontological foundations of theories of cognition.

The first aim of the dissertation is to demonstrate that the dominant models of Theory of Mind currently prevalent in the literature fail to adequately account for the influence of culture on the development of social cognition. This is argued to be due to conceptual limitations stemming from their adopted ontology of the mind. The second main aim is to develop an alternative account of the development of social cognition, rooted in a different ontology that, as argued, overcomes these limitations. I contend that the traditional Theory of Mind models suffer from fundamental conceptual flaws that translate into further problems within their corresponding empirical programs, particularly in the context of cultural influences on the developmental process. As an alternative to Theory of Mind models, I propose an interactivist account of social cognition — a theoretical approach rooted in an entirely different ontology of the mind. I argue that this perspective provides an appropriate model for investigating social cognition in its diverse cultural aspects, free from the problems I attribute to Theory of Mind models. Finally, I explore the theoretical and empirical implications of the interactivist perspective for research on social cognition.

The dissertation consists of five published academic articles and two short commentaries:



- 1. **Mirski, R.** (2018). Współczesne trudności i wyzwania w myśleniu o teorii umysłu: Perspektywa międzykulturowa. In A. Gut & Z. Wróblewski (Eds.), Filozofować eksperymentalnie: Umysł w świecie kultury (pp. 53–73). Wydawnictwo KUL.
- 2. **Mirski, R.**, & Gut, A. (2020). Action-based versus cognitivist perspectives on sociocognitive development: culture, language and social experience within the two paradigms. *Synthese*, 28(2), 96. https://doi.org/10.1007/s11229-018-01976-y
- 3. **Mirski, R.**, & Bickhard, M. H. (2021). Conventional minds: An interactivist perspective on social cognition and its enculturation. *New Ideas in Psychology*, 62, 100856. https://doi.org/10.1016/j.newideapsych.2021.100856
- 4. **Mirski, R.** (2019). Krytyka natywizmu jawnego i ukrytego w badaniach nad dziecięcymi teoriami umysłu. *Psychologia Rozwojowa*, 24(2), 15–28. https://doi.org/10.4467/20843879PR.19.007.10890
- 5. Allen, J. W. P., **Mirski, R.**, & Bickhard, M. H. (2024). Beyond the mirror: an action-based model of knowing through reflection. *Frontiers in Developmental Psychology*, 2, Article 1449705. https://doi.org/10.3389/fdpys.2024.1449705
- 6. **Mirski, R.,** & Bickhard, M. H. (2019). Encodingism is not just a bad metaphor. *Behavioral and Brain Sciences*, 42, e237. https://doi.org/10.1017/S0140525X19001286
- 7. **Mirski, R.,** Bickhard, M. H., Eck, D., & Gut, A. (2020). Encultured minds, not error reduction minds. *Behavioral and Brain Sciences*, 43, e109. https://doi.org/10.1017/S0140525X19002826

The first article introduces the core issues of this dissertation. It presents the three traditional models of Theory of Mind and discusses them in the context of cross-cultural data, arguing that there are numerous problems associated with the interpretations of findings proposed by the traditional models. The second article goes beyond the discussion of the challenges faced by these theoretical approaches in light of cross-cultural data, and offers a foundational critique of their ontological assumptions, drawing on Mark Bickhard's general critique of "encodingism." This article introduces a preliminary outline of an interactivist interpretation of empirical data, which is fully developed and slightly modified in the third article, which presents the most comprehensive version of the positive model developed in this dissertation. The fourth article addresses the problem of the innateness hypothesis regarding the mechanism of Theory of Mind in the traditional models, a topic that is only briefly mentioned in the other articles. The final article on the list elaborates on the interactivist model of reflection and, among other things, discusses it in the context of sociocognitive development and its cultural nature. The two short commentaries address encodingism in neuroscience and a predictive coding account of social cognition, respectively.

The objectives of the dissertation were achieved through a thorough analysis and critique of the traditional Theory of Mind models, particularly concerning their interpretation of cross-cultural data. I identified weaknesses in the traditional approaches, especially regarding their ontological assumptions, and proposed an alternative in the form of an interactivist model of social cognition.



In the course of this analysis, I presented not only theoretical arguments but also empirical implications for further research on socio-cognitive development. Thus, the dissertation not only offers a theoretical alternative to existing models but also integrates empirical data from the perspective of the proposed interactivist approach, emphasizing the role of culture and language in shaping socio-cognitive abilities.

The dissertation makes several novel contributions to the field of socio-cognitive development. First, it provides a unique review and analysis of empirical data on the development of theory of mind across cultures, expanding and complementing previous studies. Second, it conducts a critique of dominant theoretical models in this research area that has not been presented before. This critique has two aspects: first, it applies the general critique of encodingism developed by Bickhard to the specific domain of Theory of Mind. The main objection concerns the logically necessary vet untenable assumption of foundationalism as a basis for conceptual development of social cognition. A common counterargument to critiques of foundationalism is the claim that necessary conceptual foundations are innate. Therefore, I further argue that the notion of innateness is also untenable in this context. Third, I present a positive account of social cognition and theory of mind grounded in the interactivist ontology. This constitutes a promising alternative to the existing theories, offering numerous new implications for research on socio-cognitive development – for example, it involves the claim of close connections between socio-cognitive abilities and social ontology. Fourth, the dissertation engages to some extent with other partially convergent models currently under development (e.g., enactivism, predictive coding). Lastly, despite its many advantages, interactivism remains a largely overlooked and often misunderstood theory of cognition. By presenting the model in this dissertation, I modestly hope to provide an accessible introduction to this theory.

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