

The multi-level situatedness of complex, flexible, and dynamic LLS

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Language learning strategies ...



“... are complex, dynamic thoughts and actions, selected and used by learners with some degree of consciousness in specific contexts in order to regulate multiple aspects of themselves (such as cognitive, emotional, and social) for the purpose of (a) accomplishing language tasks; (b) improving language performance or use; and/or (c) enhancing long-term proficiency. Strategies are mentally guided but may also have physical and therefore observable manifestations. Learners often use strategies flexibly and creatively; combine them in various ways, such as strategy clusters or strategy chains; and orchestrate them to meet learning needs. Strategies are teachable. Learners in their contexts decide which strategies to use. Appropriateness of strategies depends on multiple personal and contextual factors.” (Oxford, 2017, p. 48)

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The application of LLS ...

... is influenced by a multitude of factors, which relate to

- ▶ the language learner (e.g., individual learner differences),
- ▶ the immediate learning situation (e.g., a specific learning task),
- ▶ the learning environment (e.g., technology in the classroom), and
- ▶ the general learning context (e.g., educational policies).

The interplay between those factors is flexible and dynamic.

Complex Dynamic Systems Theory



- ▶ comes from natural sciences like physics, biology, and meteorology.
- ▶ takes a comprehensive approach rather than isolating individual aspects of L2 learners (e.g., emotions, beliefs), learning processes (e.g., strategy use, turn taking), or learning contexts (e.g., teaching materials, educational policies).
- ▶ takes into account interconnected personal features such as self-concepts, individual preferences, anxieties and inhibitions, and motivation.
- ▶ takes into account identities outside the L2 classroom and integrates social, psychological, and environmental processes.

Complex Systems



- ▶ are “composed of at least two but usually a multitude of interrelated components which may themselves be complex systems” (Mercer, 2011, p. 63).
- ▶ are nested within each other (Bronfenbrenner, 1995, 2005; Davis & Sumara, 2006; Oxford, 2017; Oxford & Amerstorfer, 2018).
- ▶ have blurry boundaries that do not clearly demarcate one system from related systems and the context.
- ▶ can attain so-called “attractor states” or simply “attractors,” which describe what a system is doing at a specific moment (Hiver, 2015).
- ▶ are in a constant state of flux.
- ▶ can reach and retain a form of equilibrium or “dynamic stability” (Larsen-Freeman & Cameron, 2008, p. 43).

Complex Dynamic Systems Theory



- ▶ enables researchers to analyze the complexity and dynamism of L2 development.
- ▶ can bring order to what may seem chaotic.
- ▶ is suited to analyze the combination and relation of multiple components.

Reanalysis of previous data

Original study (Amerstorfer, 2016):

- ▶ 15-year-old EFL learner (Sabrina)
- ▶ 4 weeks
- ▶ Strategy inventory, classroom observations, (stimulated recall) interviews

Reanalysis (Amerstorfer, forthcoming):

- ▶ What are the purposes of the LLS used by the learner?
- ▶ To what degree is the complex and dynamic nature of LLS observable?
- ▶ What new insights does the complexity approach reveal that were not gained in the original study?

Data analysis

- ▶ Identify all expressions of strategic L2 learning.
- ▶ Categorize them according to their types and functions (Oxford, 2011).
- ▶ Define their specific intended purposes.

No significant added value!

Problems

- ▶ Some strategies did not fit in the typology, for example, strategies for successful and rewarding learner cooperation.
- ▶ Some strategies had multiple purposes and could therefore not be clearly categorized.
- ▶ Some strategies occurred in combination with other strategies.

**A complexity approach can only
add practical value if the attention is on
practically relevant issues!**

Methodology



- ▶ Hypothesis 1: Due to their flexible and dynamic nature, the participant's strategies can have varying purposes depending on contextual influences.
- ▶ Hypothesis 2: Psychological influences such as emotions, self-confidence, and motivation affect the participant's strategic actions.

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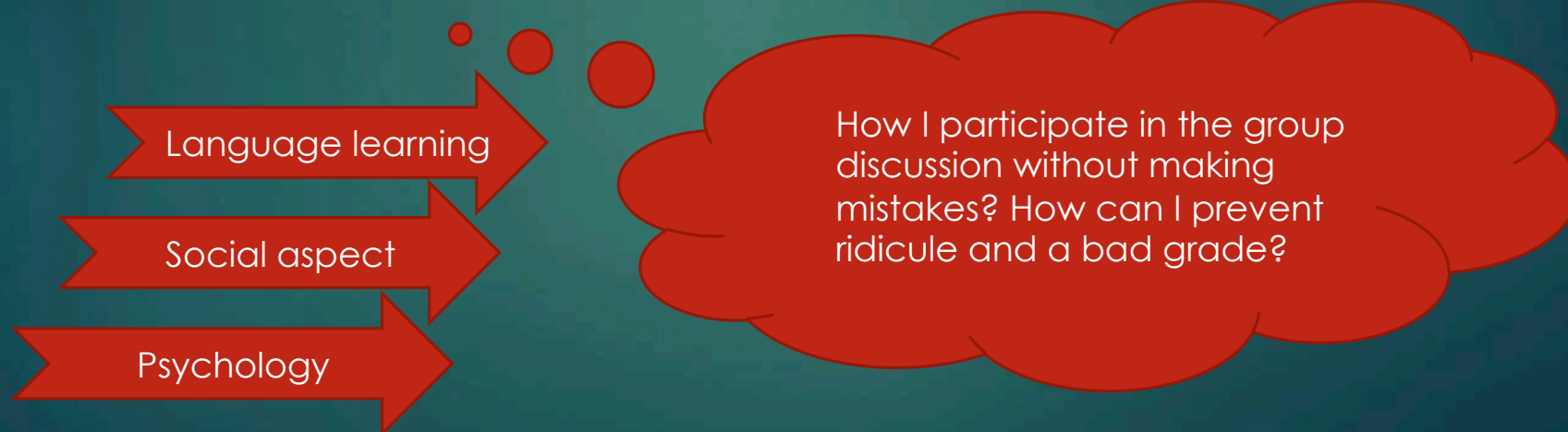
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What are the practical
implications of complexity
theory in strategy research?

Example

- ▶ Sabrina translated unknown phrases into German (L1) and then searched for “simpler” expressions in English.
- ▶ Sabrina was already planning strategic actions for a group discussion in the future.



Sabrina's strategic way of handling new phrases

- ▶ helps her understand what an expression means.

But ...

- ▶ it is not ideal for her L2 development.
- ▶ it hinders vocabulary growth.
- ▶ it impacts conversational skills and variety.

Conclusions

- ▶ One article that revises a single case is not enough.
- ▶ Complexity theory can generate new, profound information about strategic language learning.
- ▶ Complexity theory can add practical value to strategy research if the focus is on practically relevant issues.

Thank you.

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