DB usability
as if

HYTRADBOI Feb 28, 2025

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https://alarmingdevelopment.org

1. Displaying relationships

Ultorg https://www.ultorg.com/

Eirik Bakke and David R. Karger. 2016. Expressive Query Construction through Direct Manipulation of Nested Relational Results. In Proceedings of the 2016 International Conference on Management of Data (SIGMOD '16). Association for Computing Machinery, New York, NY, USA, 1377–1392. https://doi.org/10.1145/2882903.2915210

2. Interactive schema evolution
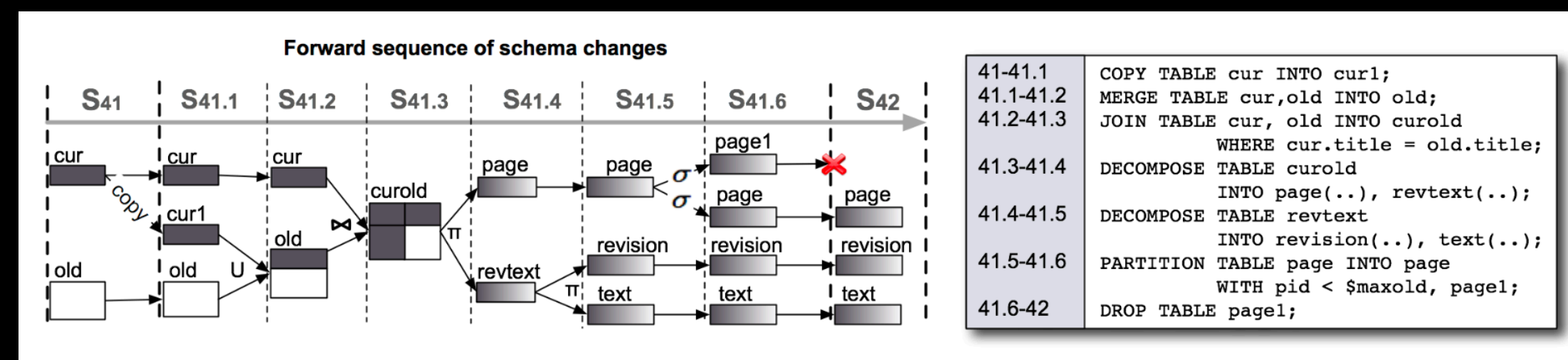
Carlo A. Curino, Hyun J. Moon, and Carlo Zaniolo. 2008. Graceful database schema evolution: the PRISM workbench. Proc. VLDB Endow. 1, 1 (August 2008), 761–772. https://doi.org/10.14778/1453856.1453939
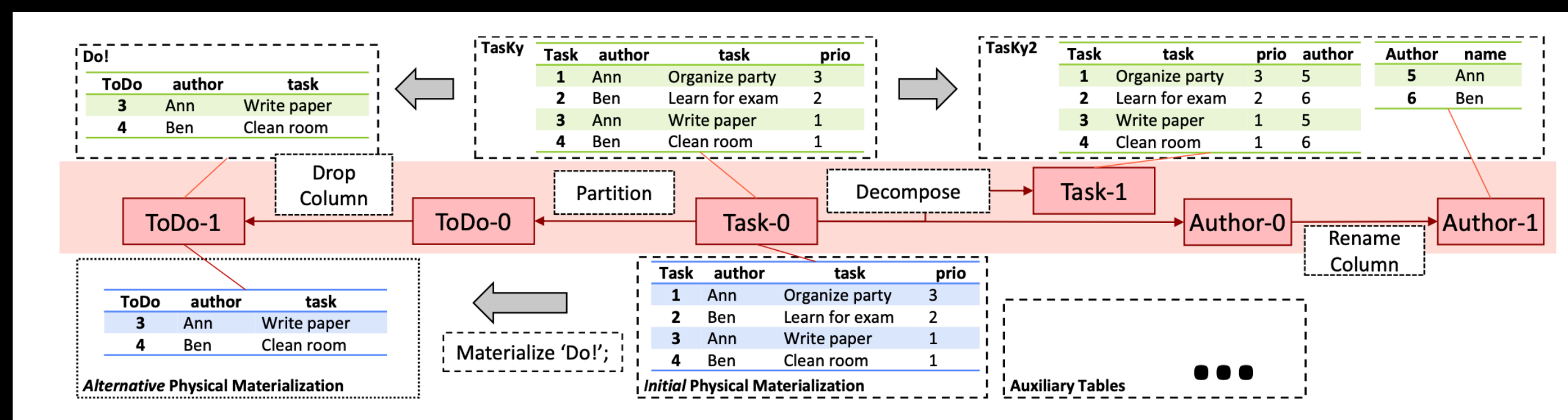
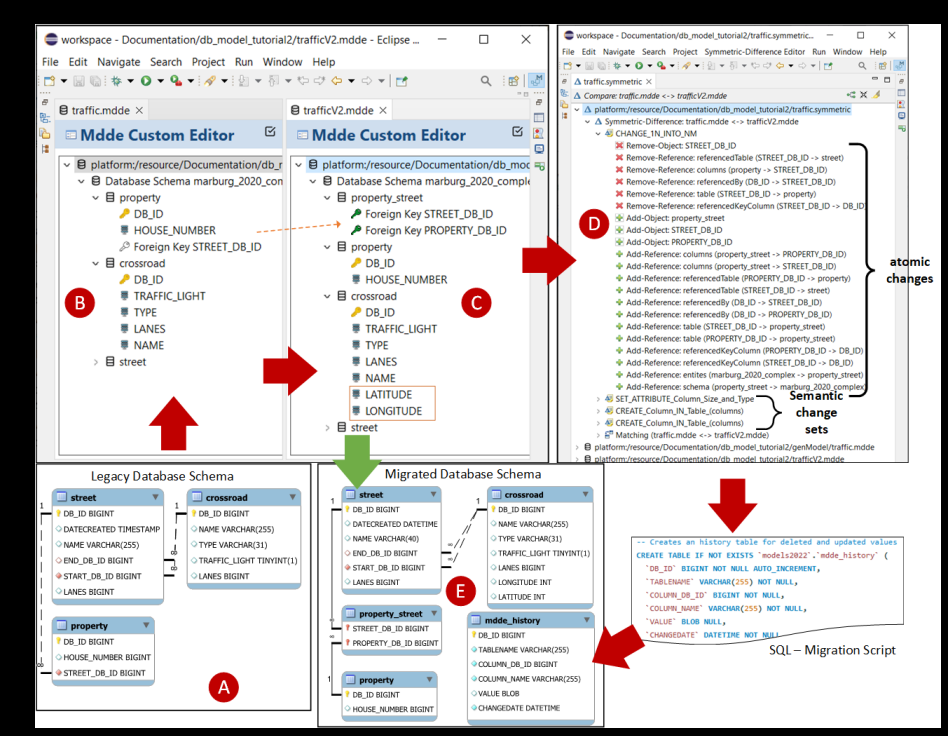Kai Herrmann, Hannes Voigt, Torben Bach Pedersen, and Wolfgang Lehner. 2018. Multi-schema-version data management: data independence in the twenty-first century. The VLDB Journal 27, 4 (August 2018), 547–571. https://doi.org/10.1007/s00778-018-0508-7

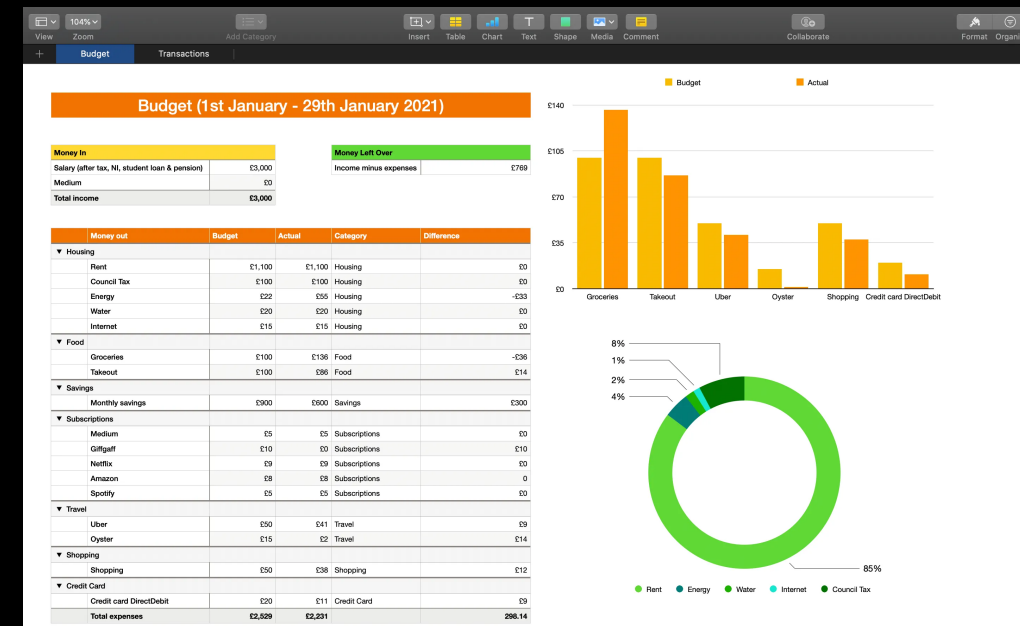Torben Eckwert, Michael Guckert, and Gabriele Taentzer. 2022. EvolveDB: a tool for model driven schema evolution. 25th International Conference on Model Driven Engineering Languages and Systems (MODELS '22). https://doi.org/10.1145/3550356.3559095

3. Version control for data and schema

"Frieda"

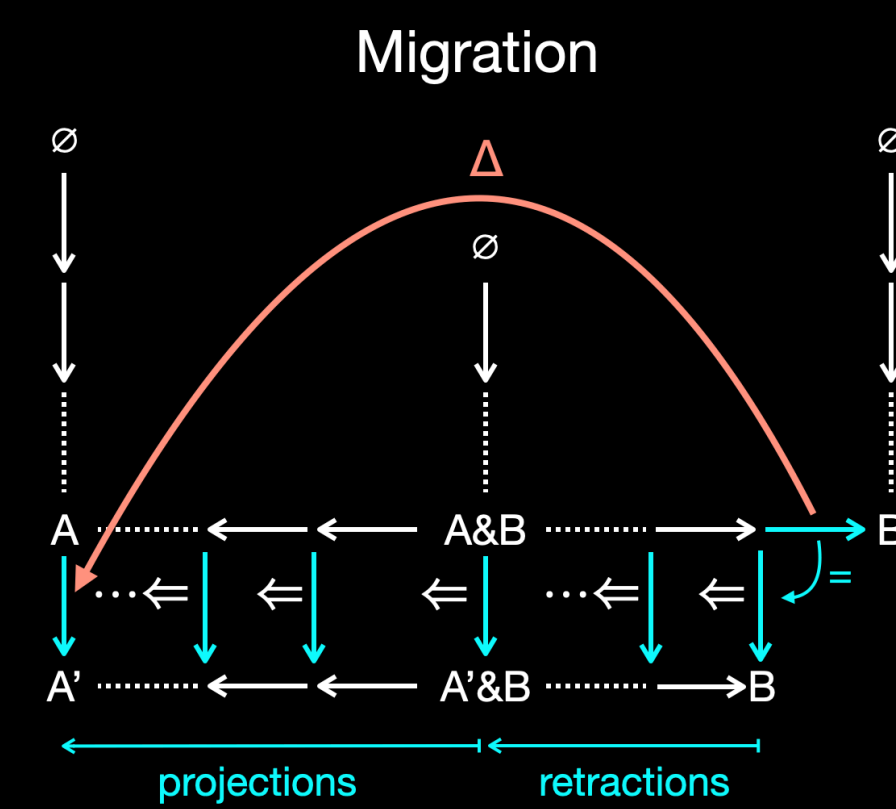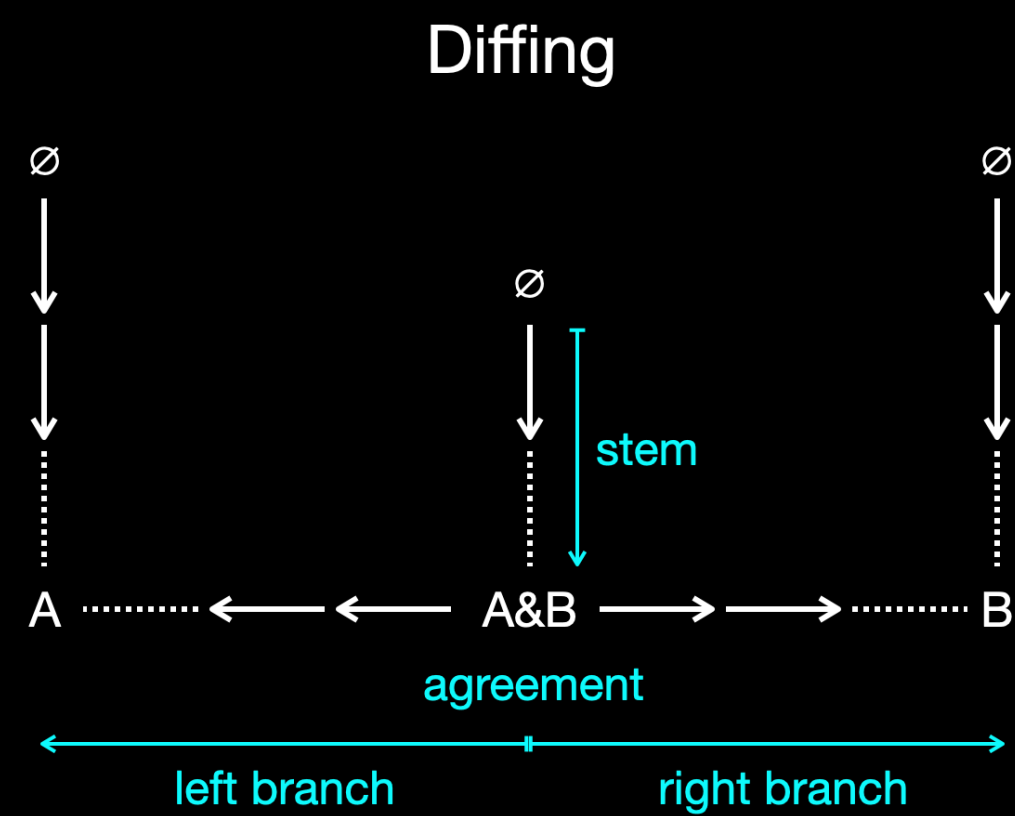Budget-Official-2013

Budget-Official-2014

2014 revisions →

2013 customizations ↓

2014 customizations ↓

Budget-Custom-2013

Budget-Custom-2014

Margaret M. Burnett and Brad A. Myers. 2014. Future of end-user software engineering: beyond the silos. In Future of Software Engineering Proceedings (FOSE 2014). Association for Computing Machinery, New York, NY, USA, 201–211. https://doi.org/10.1145/2593882.2593896

Diffing

Migration

Jonathan Edwards. 2024. Operational Version Control https://vimeo.com/944945281/536e1e0d31
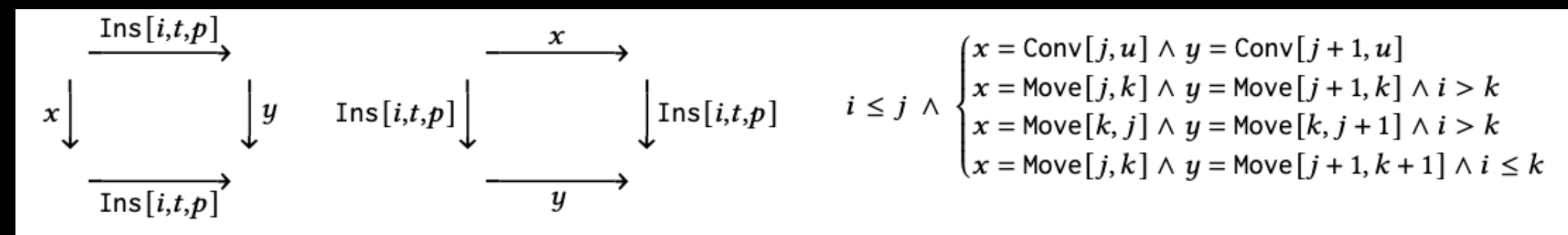
Jonathan Edwards and Tomas Petricek. 2021. Typed Image-based Programming with Structure Editing.
Human Aspects of Types and Reasoning Assistants (HATRA'21), Oct 19, 2021, Chicago, US
https://arxiv.org/abs/2110.08993
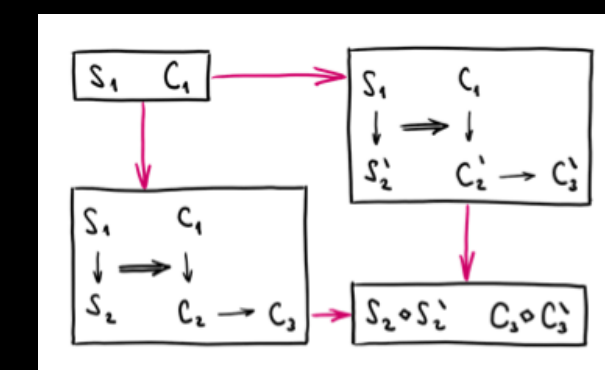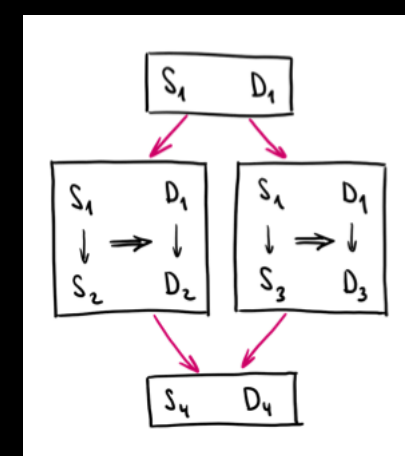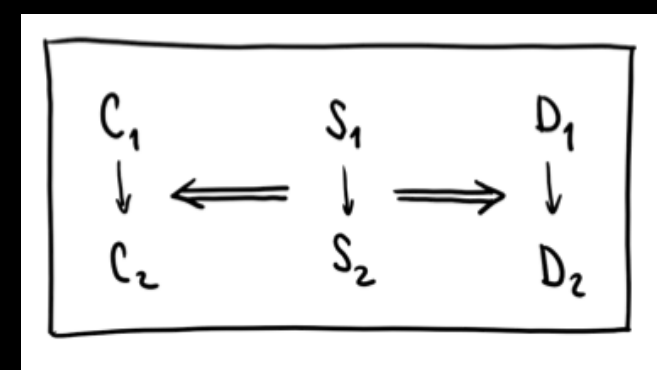
Jonathan Edwards, Tomas Petricek, Tijs van der Storm, Geoffrey Litt. Schema Evolution in Interactive Programming Systems. The Art, Science, and Engineering of Programming, 2025, Vol. 9, Issue 1, Article 2 https://arxiv.org/abs/2412.06269