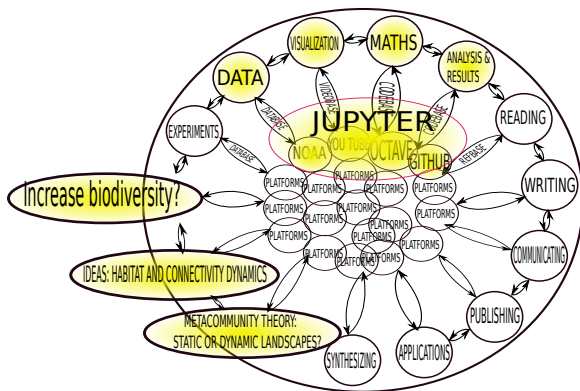


# The reproducible research ecosystem

By Dr. Melihaan

1<sup>st</sup> Reproducible Research Workshop, Kastanienbaum, February 7, 2018





- ▶ Exponential growth in number of publications



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- ▶ Disconnections within and between disciplines

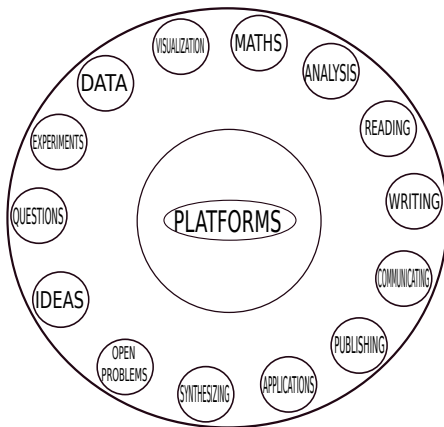
- ▶ Exponential growth in number of publications
- ▶ Disconnections within and between disciplines
- ▶ Protocols not always easy to reproduce



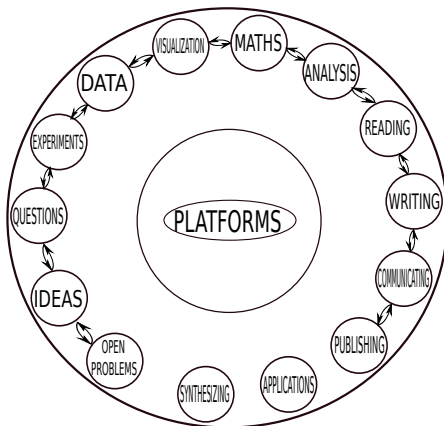
- ▶ Exponential growth in number of publications
- ▶ Disconnections within and between disciplines
- ▶ Protocols not always easy to reproduce
- ▶ **Methods and data not always reusable**

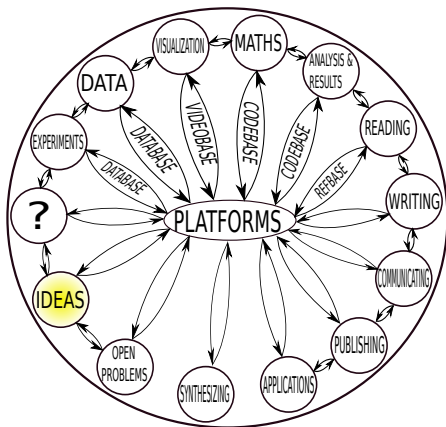
- ▶ Exponential growth in number of publications
- ▶ Disconnections within and between disciplines
- ▶ Protocols not always easy to reproduce
- ▶ Methods and data not always reusable
- ▶ Re-inventions of the wheel?

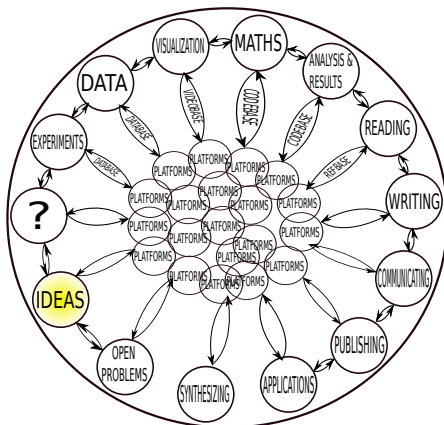
Which is the structure of the life cycle that improves reproducibility, novelty, innovation and healthy ecosystems?



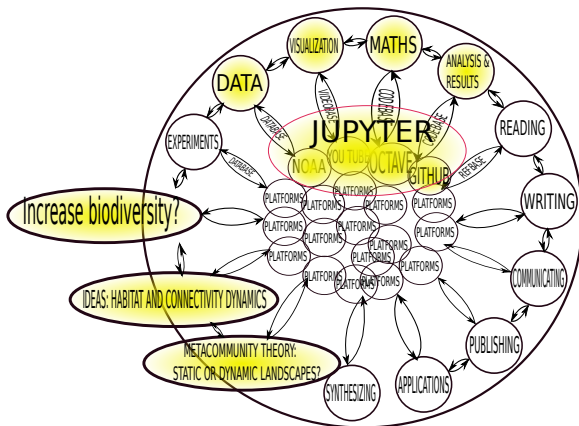












- ▶ Open science platforms integrating raw data, animations, algorithms and models to facilitate reproducibility of final products in science

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- ▶ User friendly tools to facilitate intra and inter domain-collaborations

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- ▶ User friendly tools to facilitate intra and inter domain-collaborations
- ▶ User friendly structure of platforms facilitating testability of data driven experiments and theories