

Parsing composed grammars with language boxes



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Our problem

- Languages are constantly evolving

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- More features, flexibility, expressiveness

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- Languages are constantly evolving
- More features, flexibility, expressiveness
- Problem: more complex, harder to grasp

We want **better**, but better seems to end up **bigger**.

A solution?

Language composition
△
mixing languages together

Should be easy, right?

- **LR**
- **Generalised**
- **PEG**

- **LR** undefined.
- **Generalised**
- **PEG**

- **LR** undefined.
- **Generalised** composition can be ambiguous.
- **PEG**

Parsing composition

- **LR** undefined.
- **Generalised** composition can be ambiguous.
- **PEG** composition can shadow.

The only choice?

Syntax Directed Editors

Challenge:
SDE's power + a text editor feel?

Demo

VMIL

Unipycation: A Case Study in Cross-Language Tracing
Edd Barrett, Carl Friedrich Bolz and Laurence Tratt

28. October, 11:30am

Thank you for listening

<http://soft-dev.org/>