Parsing composed grammars with language boxes

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• Languages are constantly evolving
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• More features, flexibility, expressiveness
Our problem

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

We want **better**, but better seems to end up **bigger**.
Language composition
≜
mixing languages together
Parsing composition

Should be easy, right?
- LR
- Generalised
- PEG
- LR undefined.
- Generalised
- PEG
• LR undefined.
• Generalised composition can be ambiguous.
• PEG
• LR undefined.
• Generalised composition can be ambiguous.
• PEG composition can shadow.
Syntax Directed Editors
Challenge:
SDE’s power + a text editor feel?
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/