Lecture 27 – Course Review

COSE212: Programming Languages

Jihyeok Park

2023 Fall

Goal of This Course

PLRG

Learn **Essential Concepts** of **Programming Languages**

- Why?
  - To **learn new programming languages** quickly.
  - To **evaluate** and pick the best language for a given task.
  - To design a **specialized language** for a specific task.
- How?

By Implementing **Interpreters** using **Scala**

- You will learn how to define **syntax** and **semantics** of target languages.
- You will implement **interpreters** of the target languages.
- You will use **Scala** as an implementation language.

Summary

(Part 1) Untyped Languages	(Part 2) Typed Languages
Arithmetic Expressions **AE** (Lecture 2 & 3)	

Summary

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(Part 1) Untyped Languages	(Part 2) Typed Languages

Arithmetic Expressions

AE

(Lecture 2 & 3)

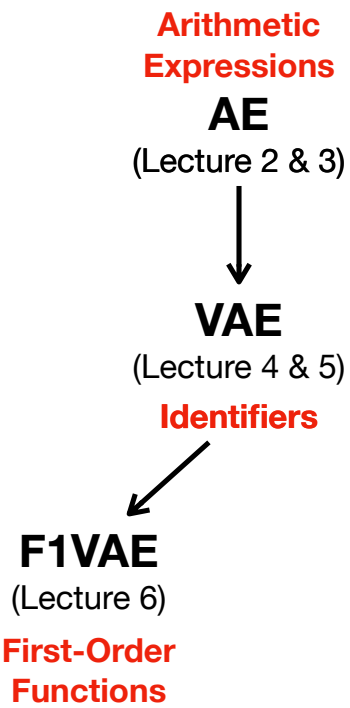
VAE

(Lecture 4 & 5)

Identifiers

Summary

(Part 1) Untyped Languages	(Part 2) Typed Languages



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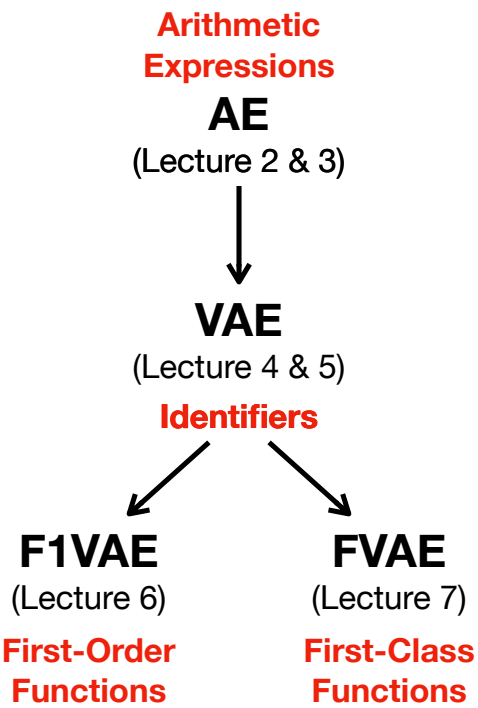

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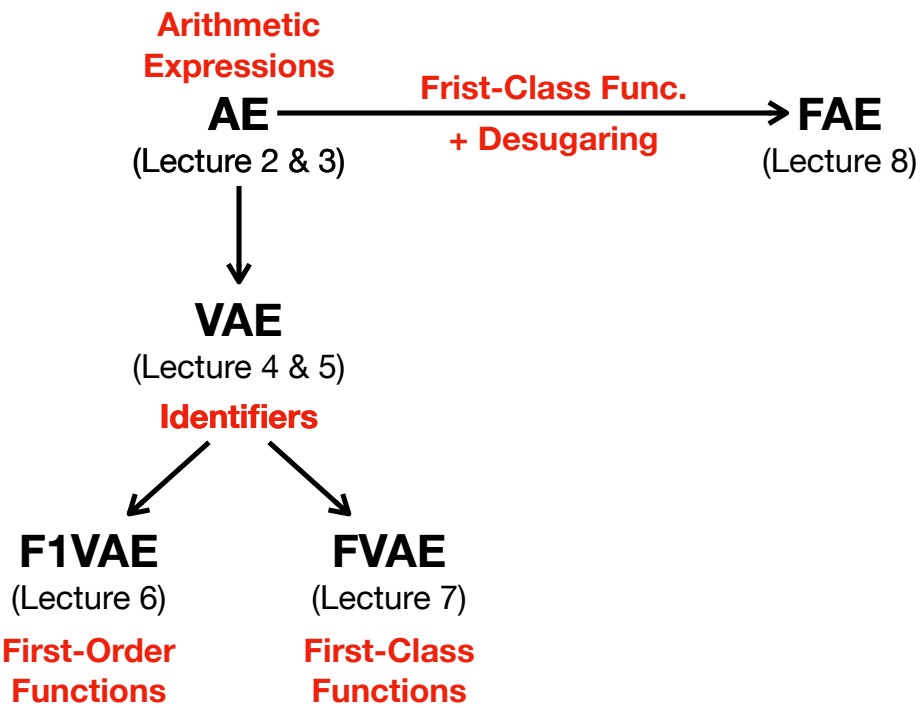
Untyped Languages



(Part 2)
Typed Languages

Summary

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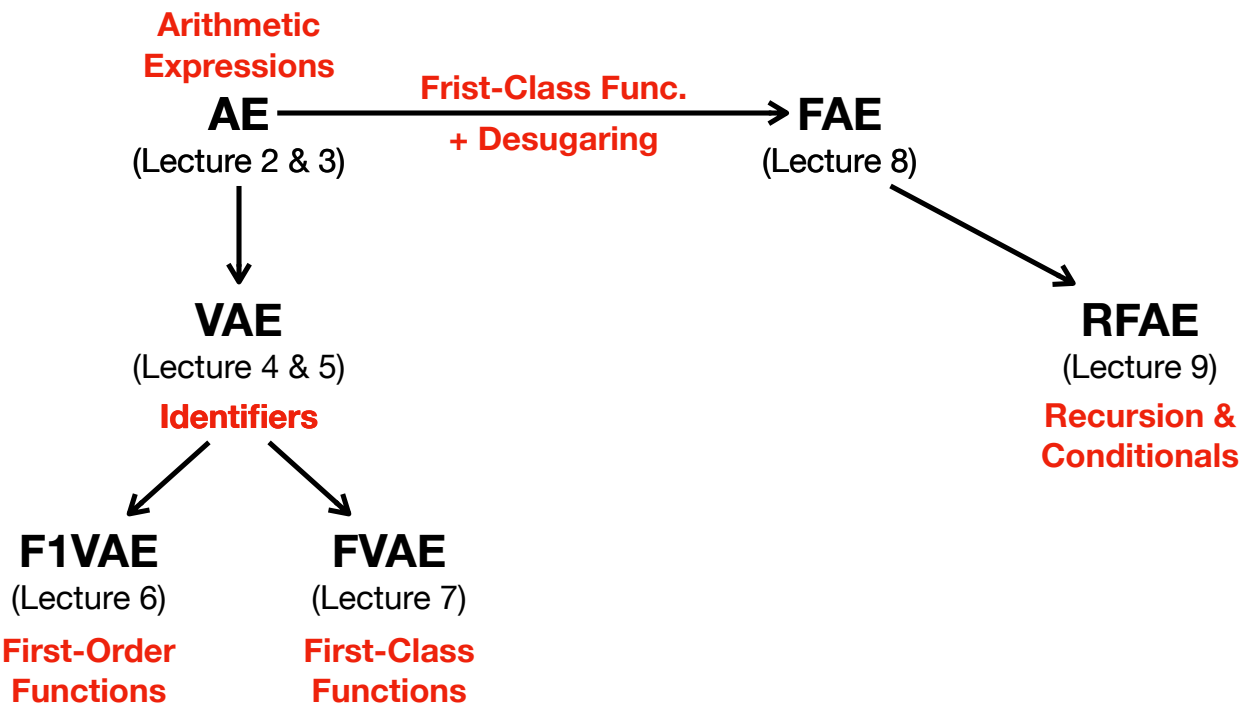
Untyped Languages

(Part 2)
Typed Languages



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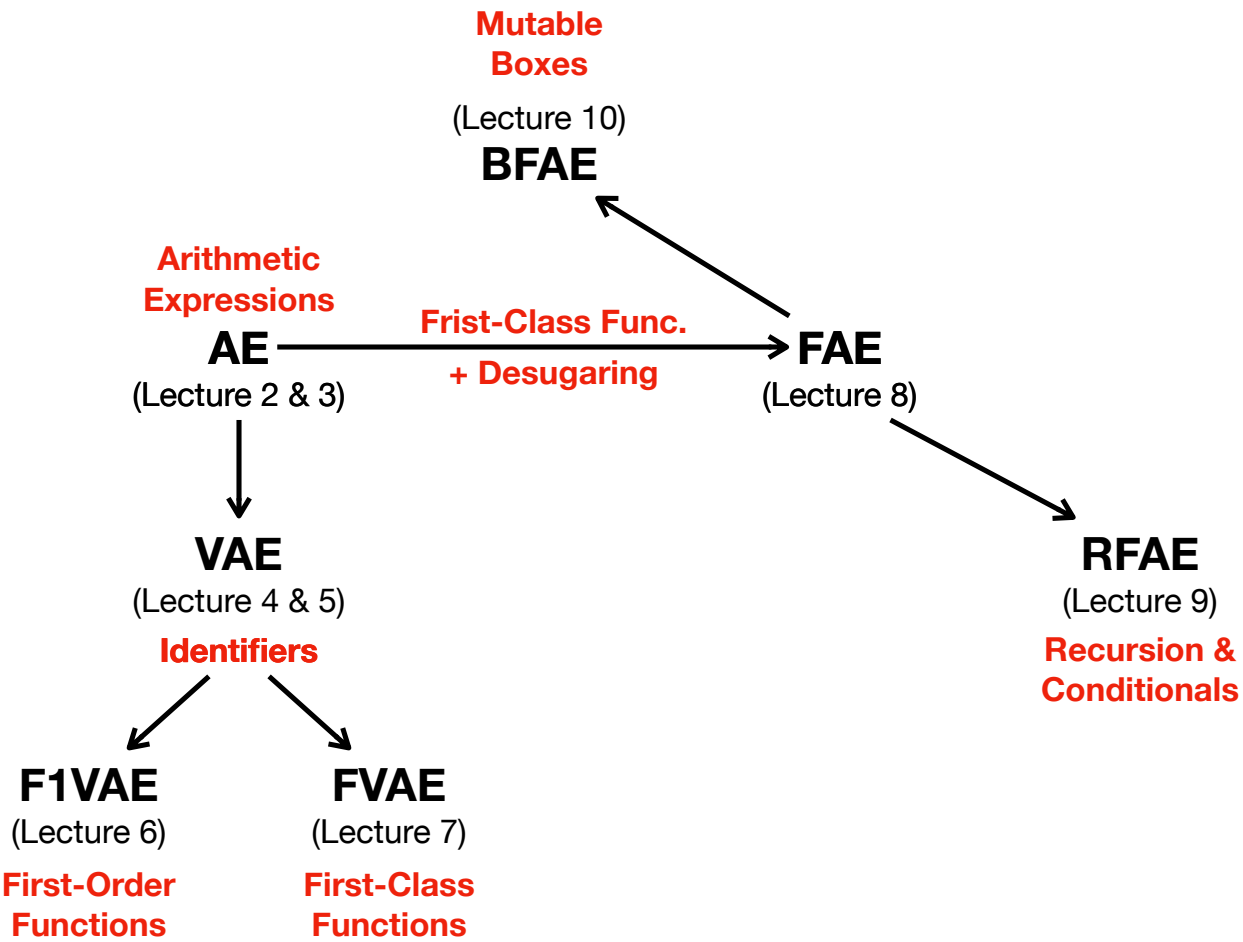

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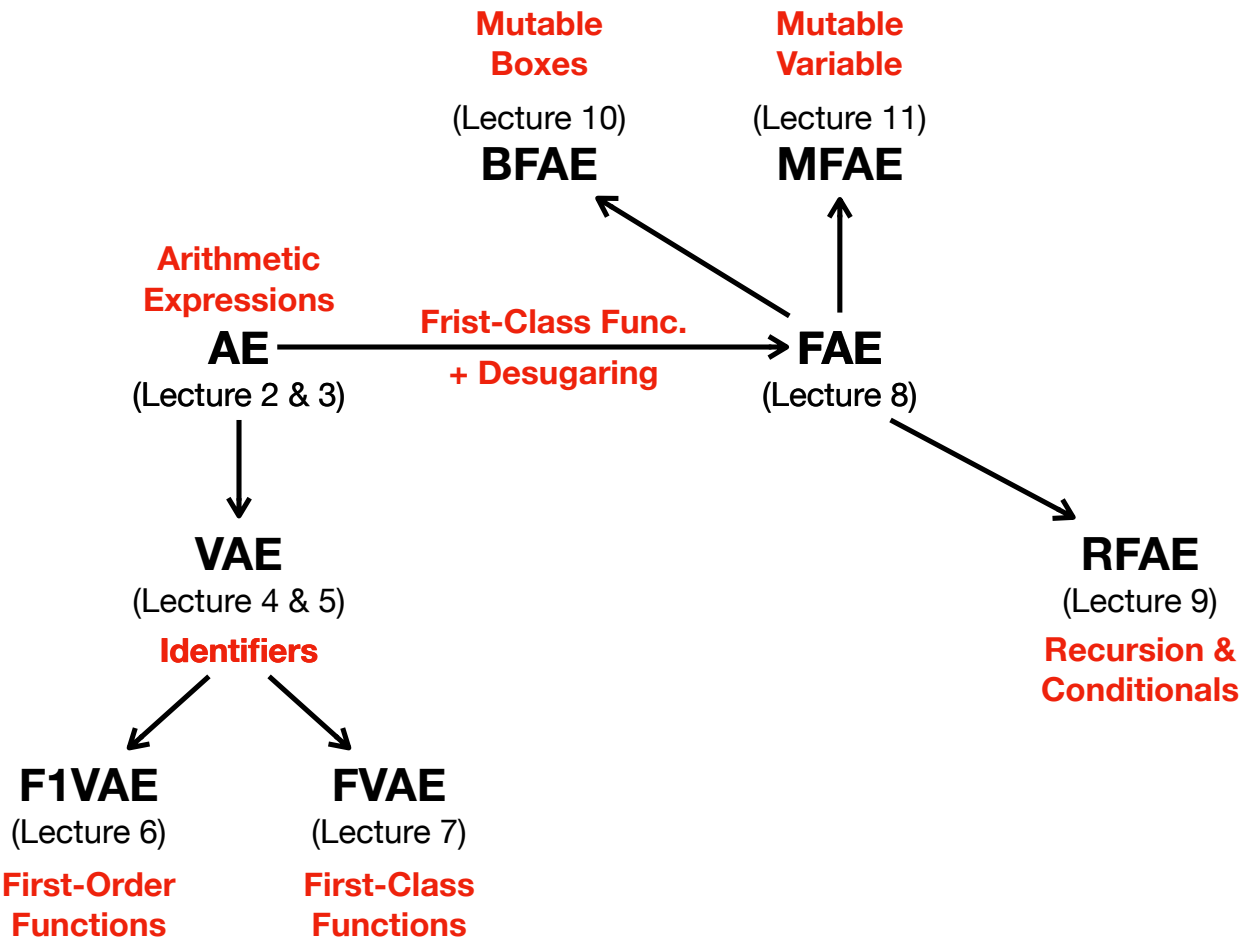

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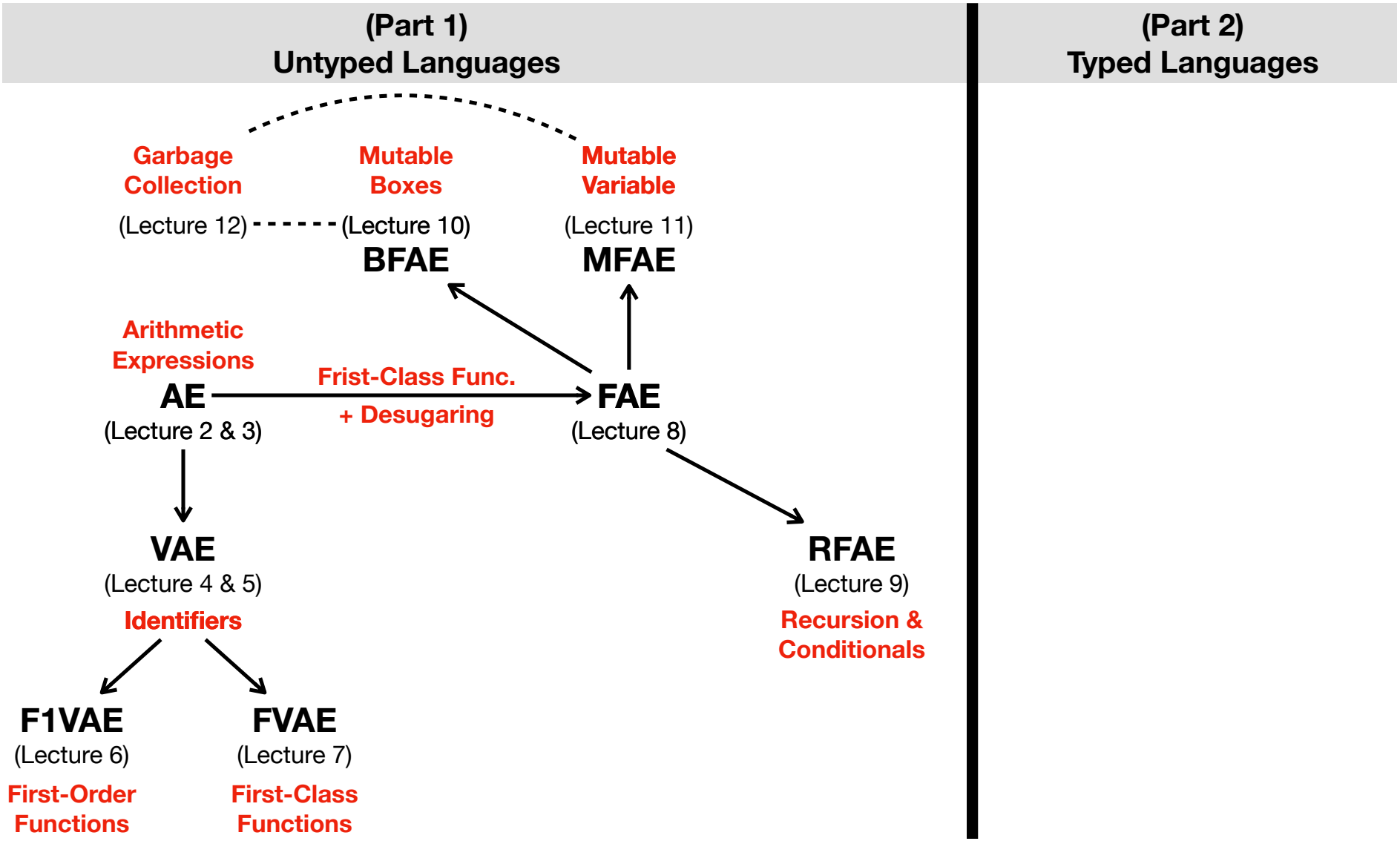
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+ Desugaring
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First-Class Functions

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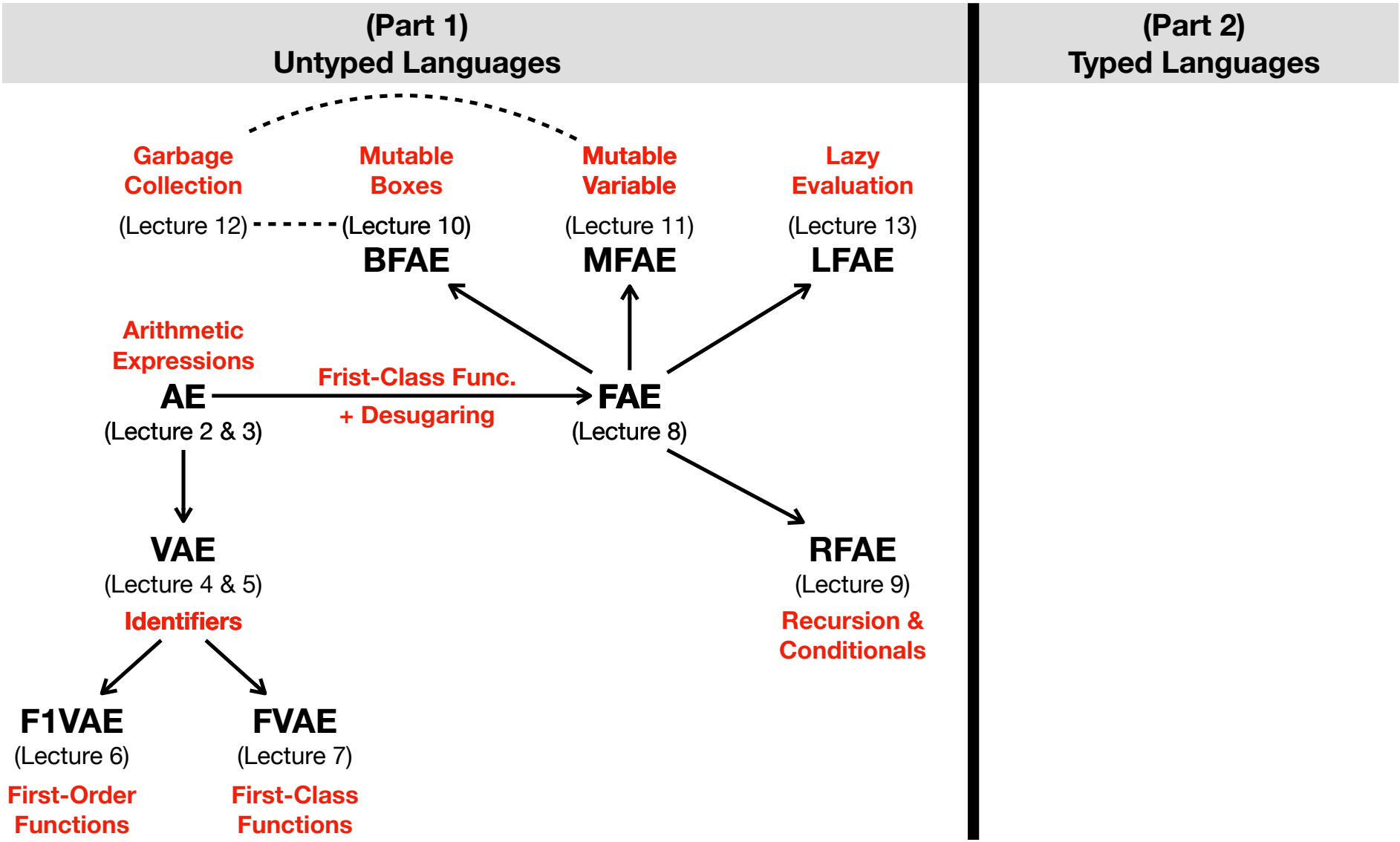
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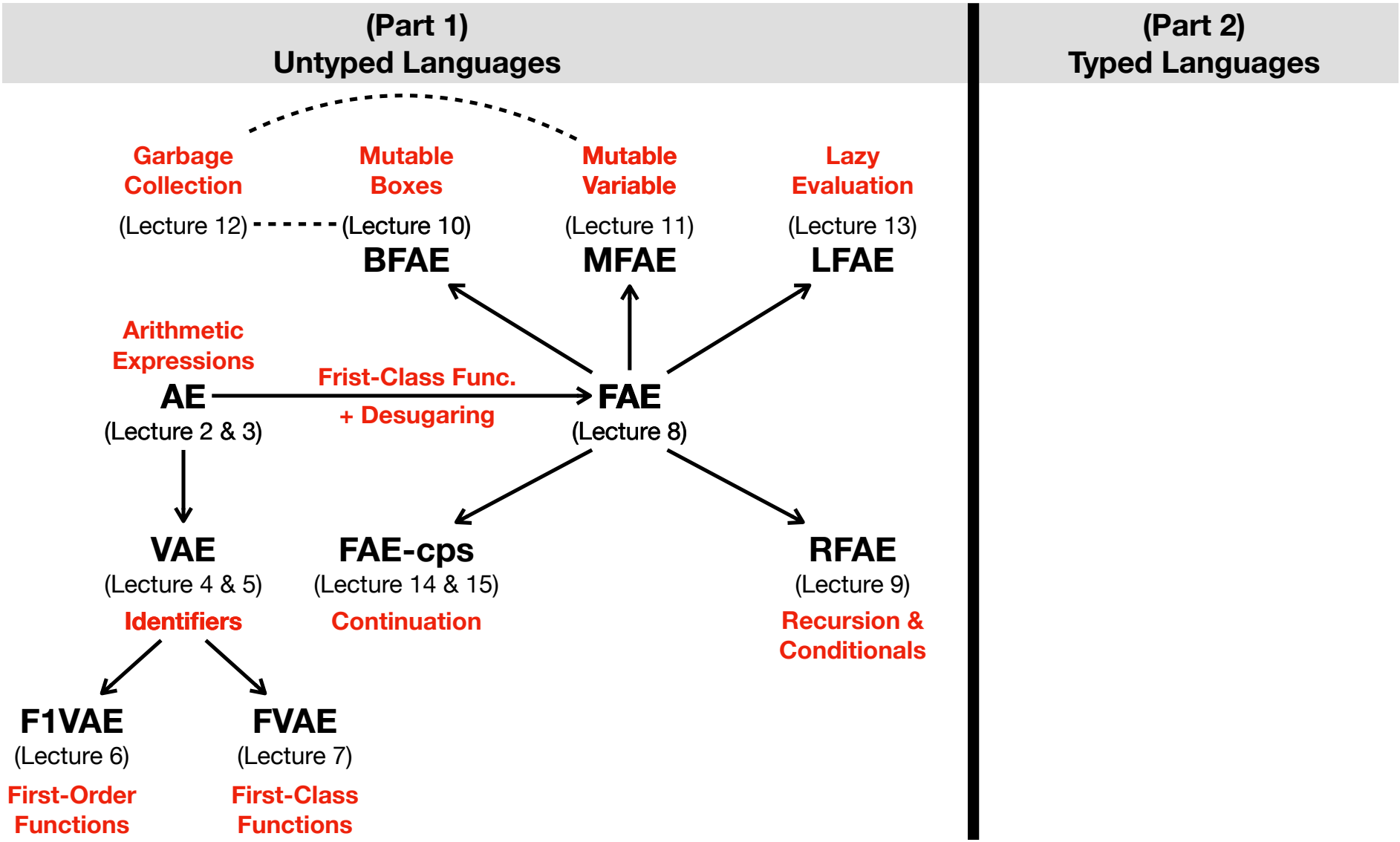

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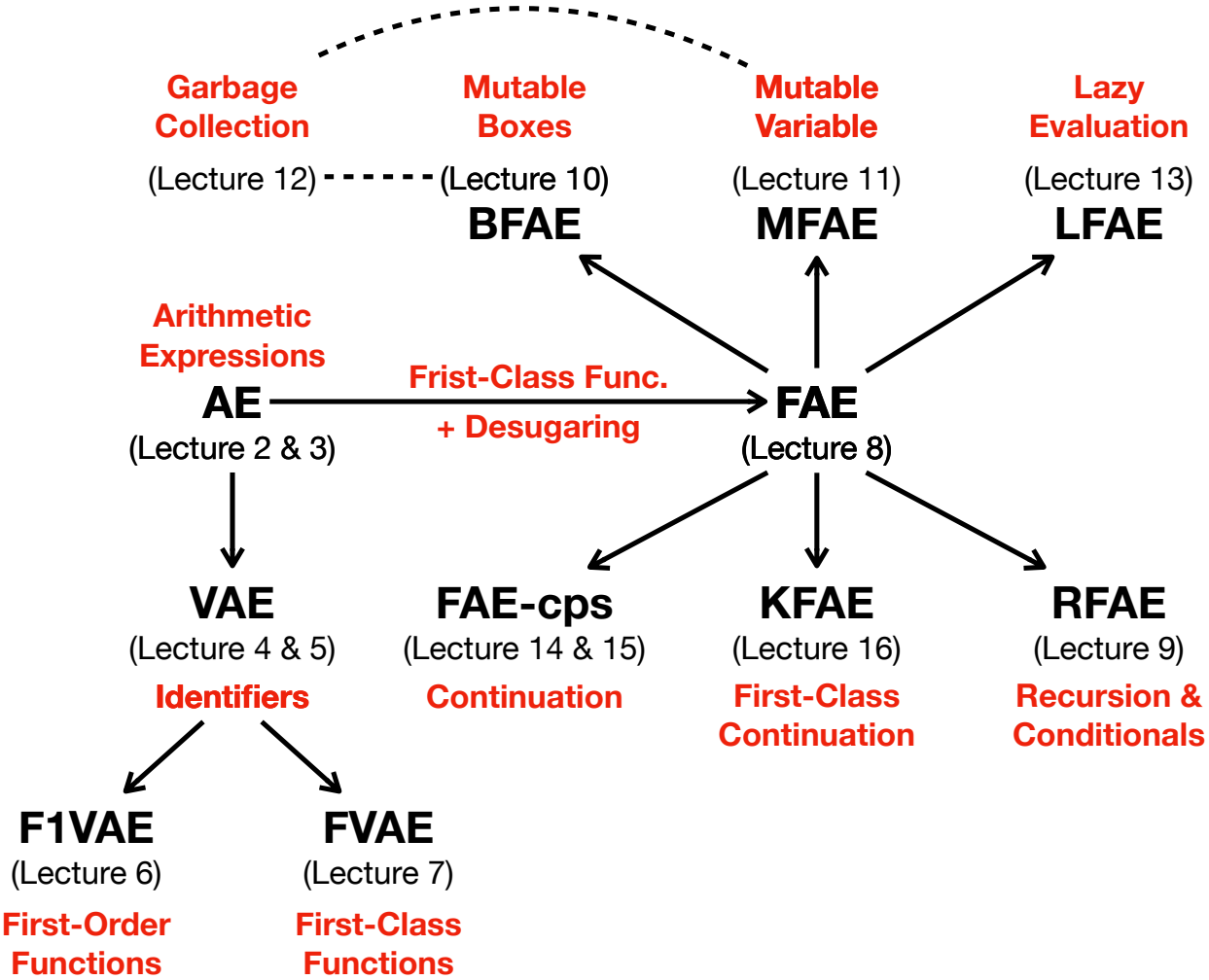

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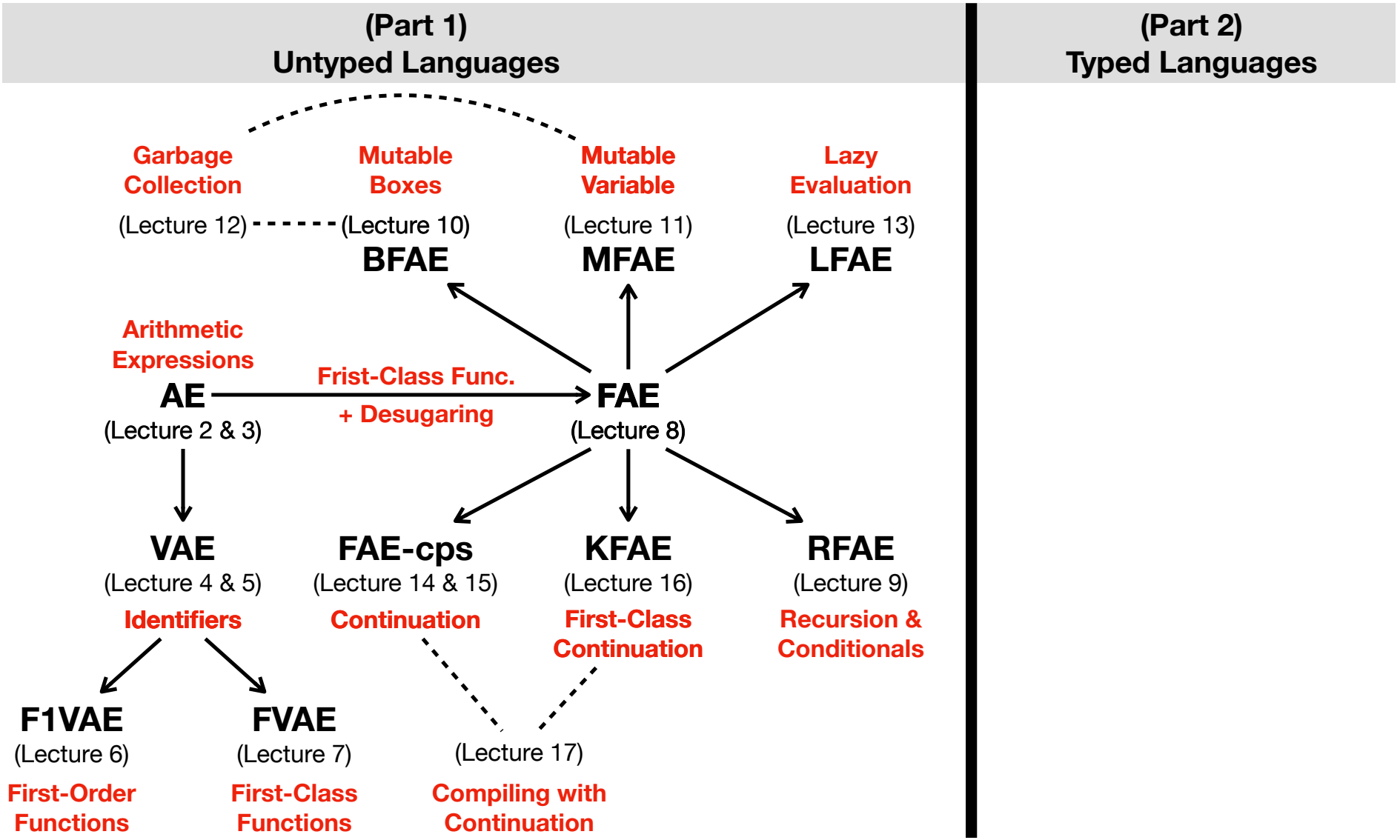

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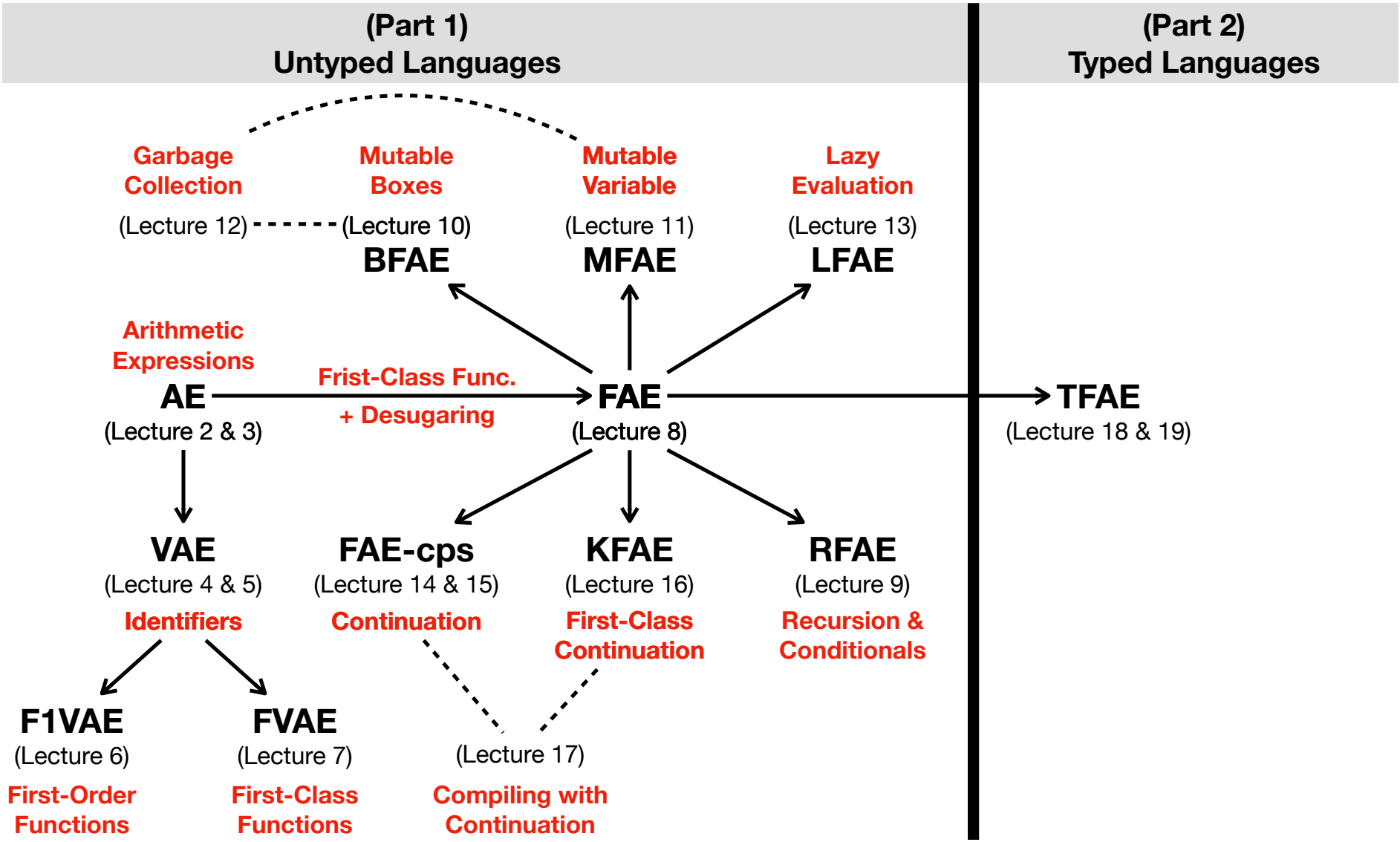
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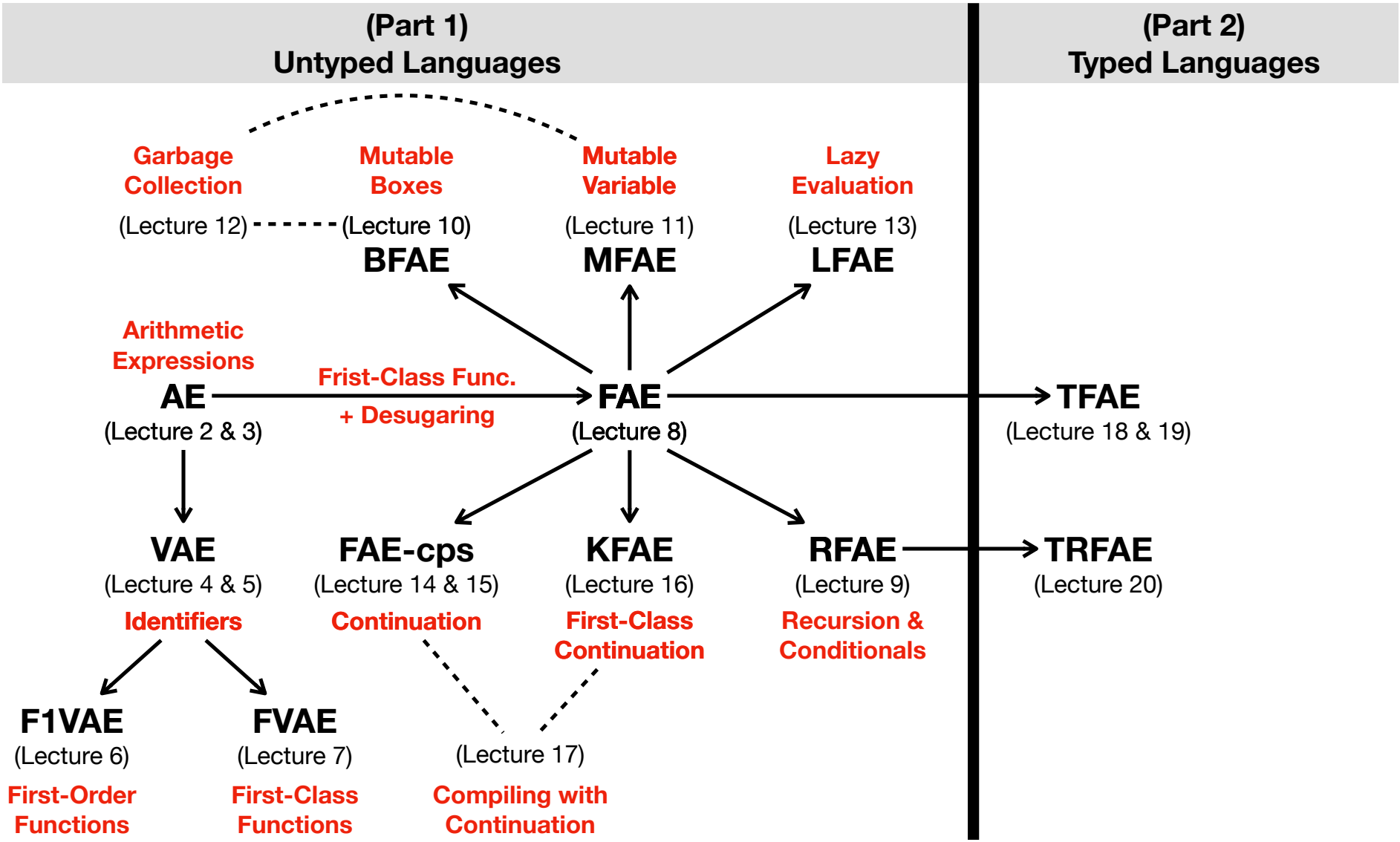
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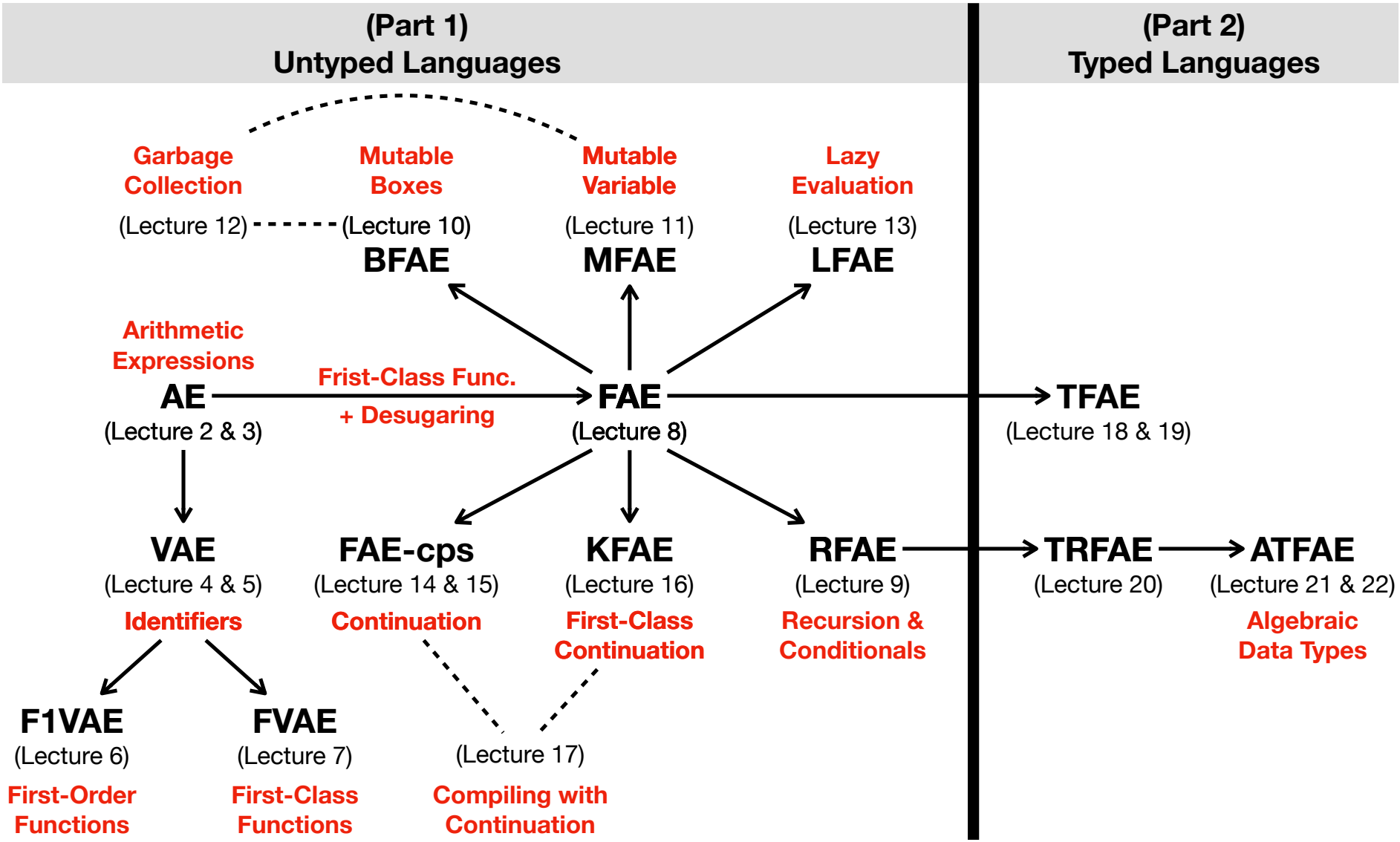
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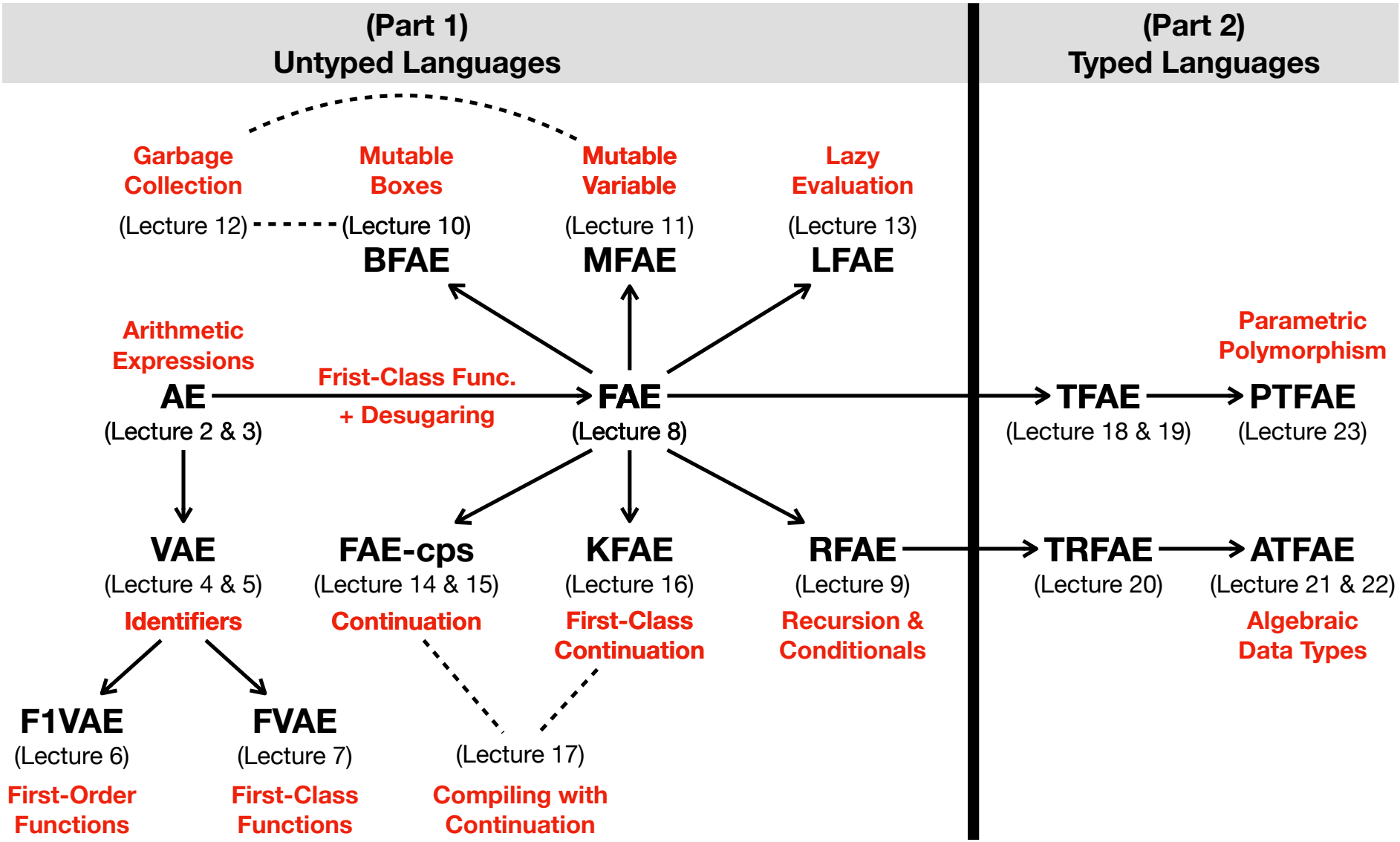
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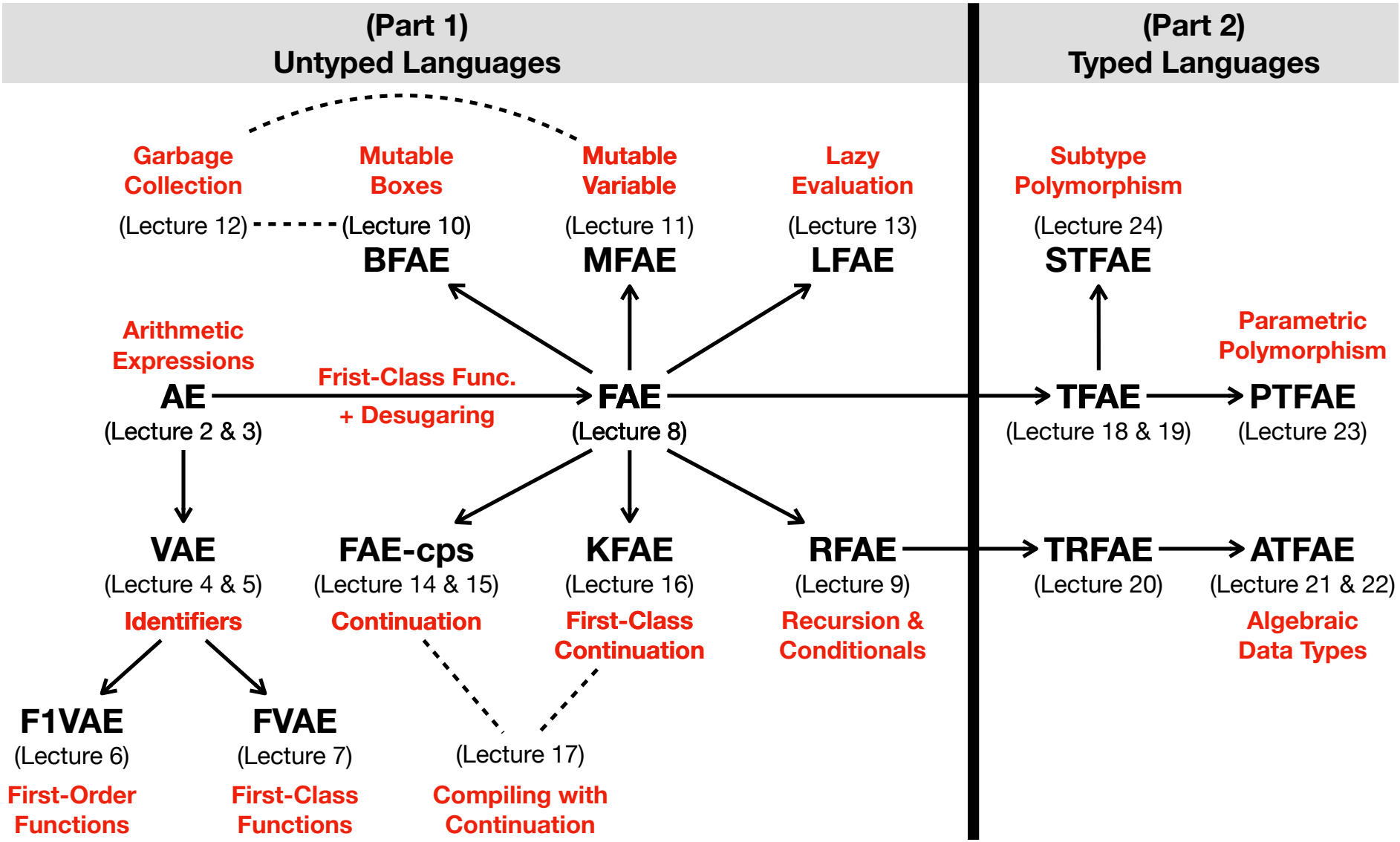
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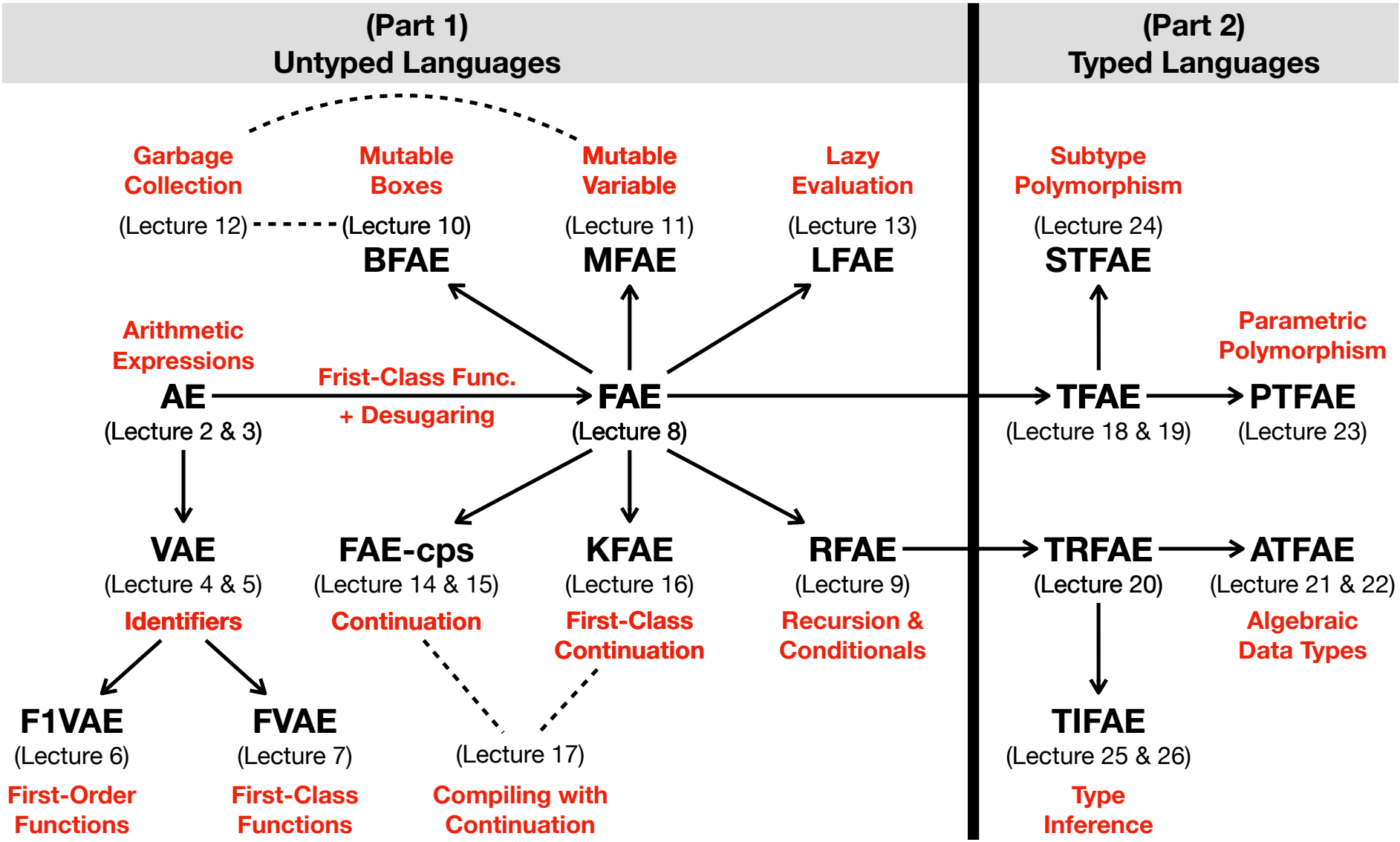
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TIFAE
(Lecture 25 & 26)
Type Inference

Final Exam

PLRG

- The final exam will be given in class.
- **Date:** 13:30-14:45 (1 hour 15 minutes), December 20 (Wed.).
- **Location:** 535, Asan Science Building (아산이학관)
- **Coverage:** Lectures 14 – 24
- **Format:** 7–9 questions with closed book and closed notes
  - Fill in the blank in a Scala code snippet.
  - Define the syntax or semantics of extended language features.
  - Write the evaluation results of given expressions.
  - Yes/No questions about concepts in programming languages.
  - etc.
- Note that there is **no class** on **December 18 (Mon.)**.

- I hope you enjoyed the class!

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https://plrg.korea.ac.kr