

# Evaluating Java Programming Paradigms

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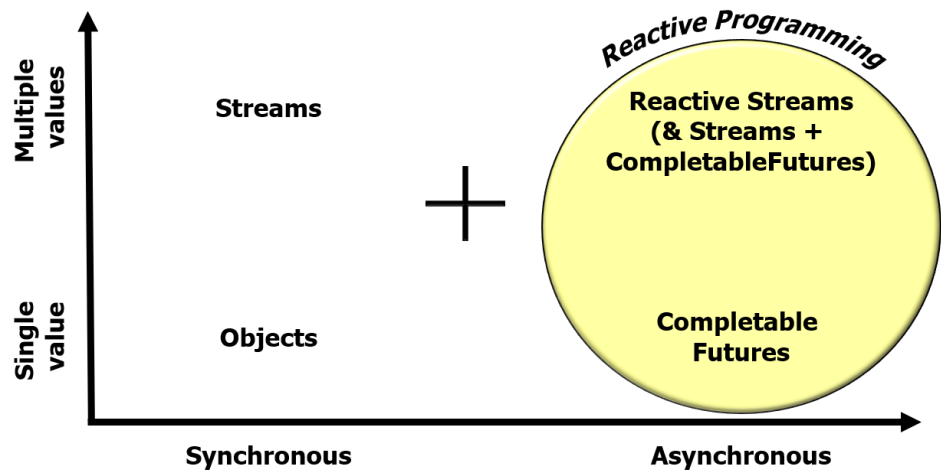
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**Vanderbilt University  
Nashville, Tennessee, USA**



# Learning Objectives in this Part of the Lesson

- Understand the key benefits & principles underlying the reactive programming paradigm
- Know the Java reactive streams API & popular implementations of this API
- Learn how Java reactive streams maps to key reactive programming principles
- Recognize how reactive programming compares with other Java paradigms
  - e.g., OO programming (including structured concurrency), & sync/async functional programming

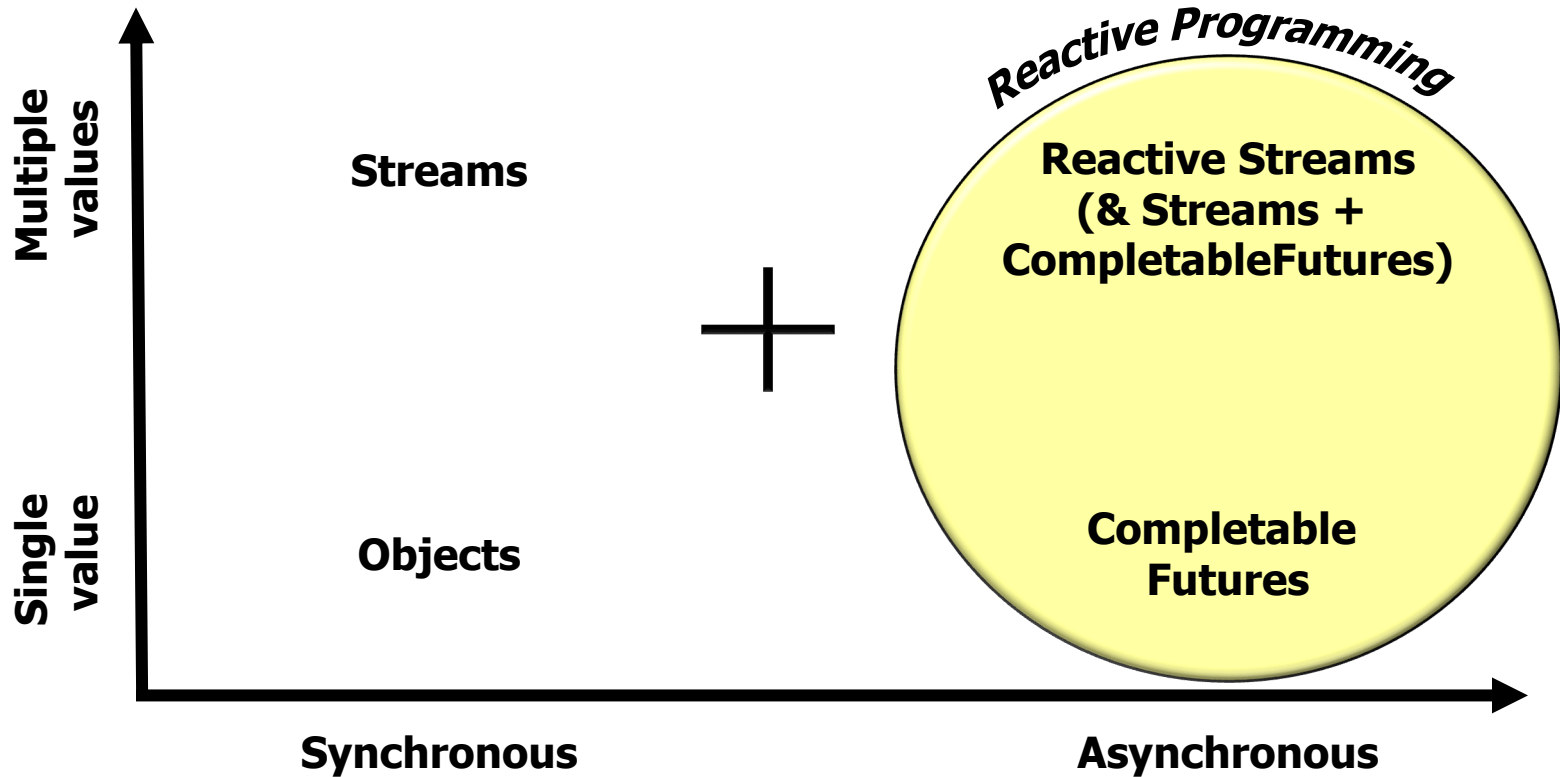


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# Comparing Reactive Programming with Other Paradigms

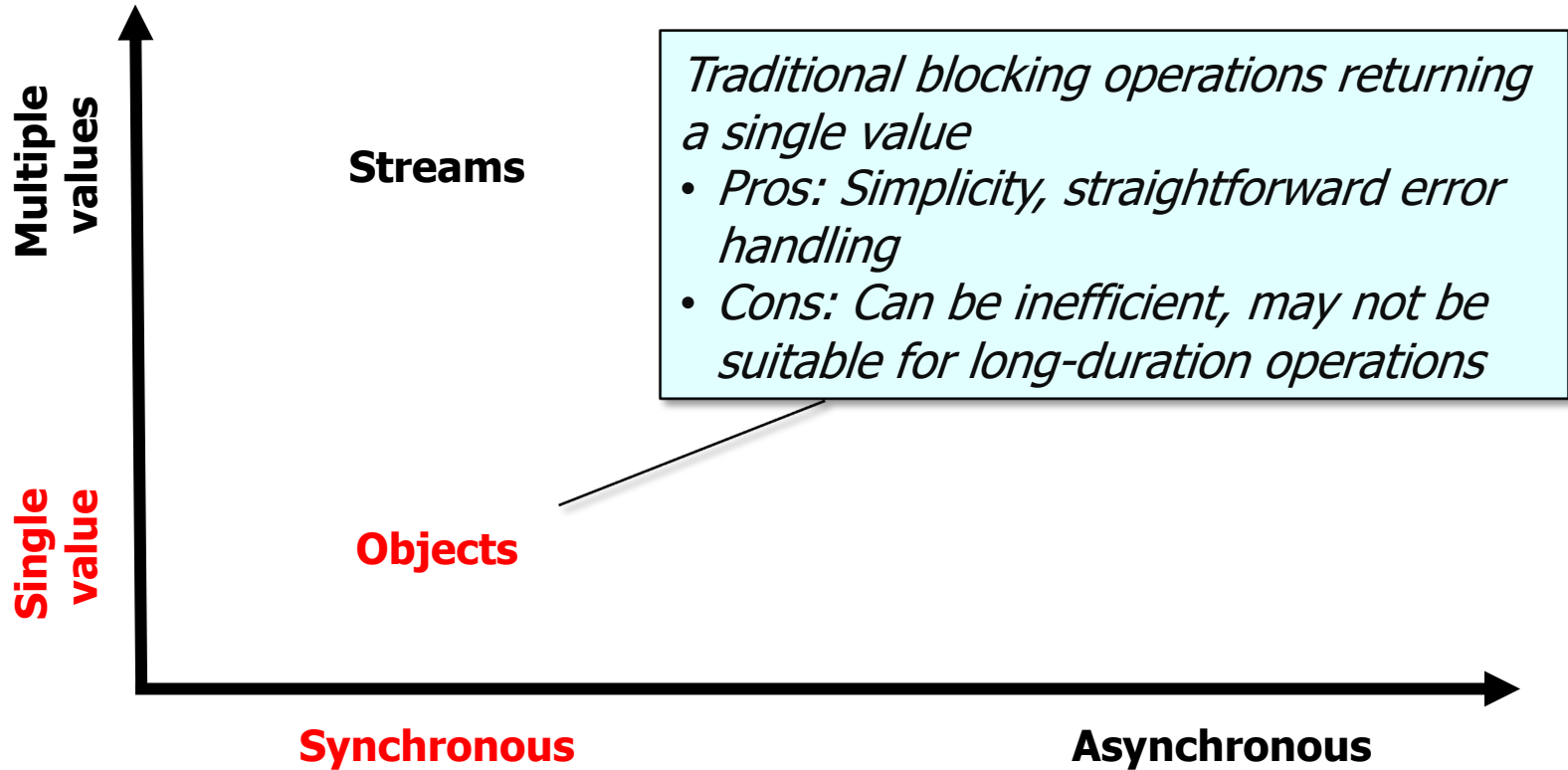
# Comparing Reactive Programming with Other Paradigms

- Reactive programming is one of several Java programming paradigms



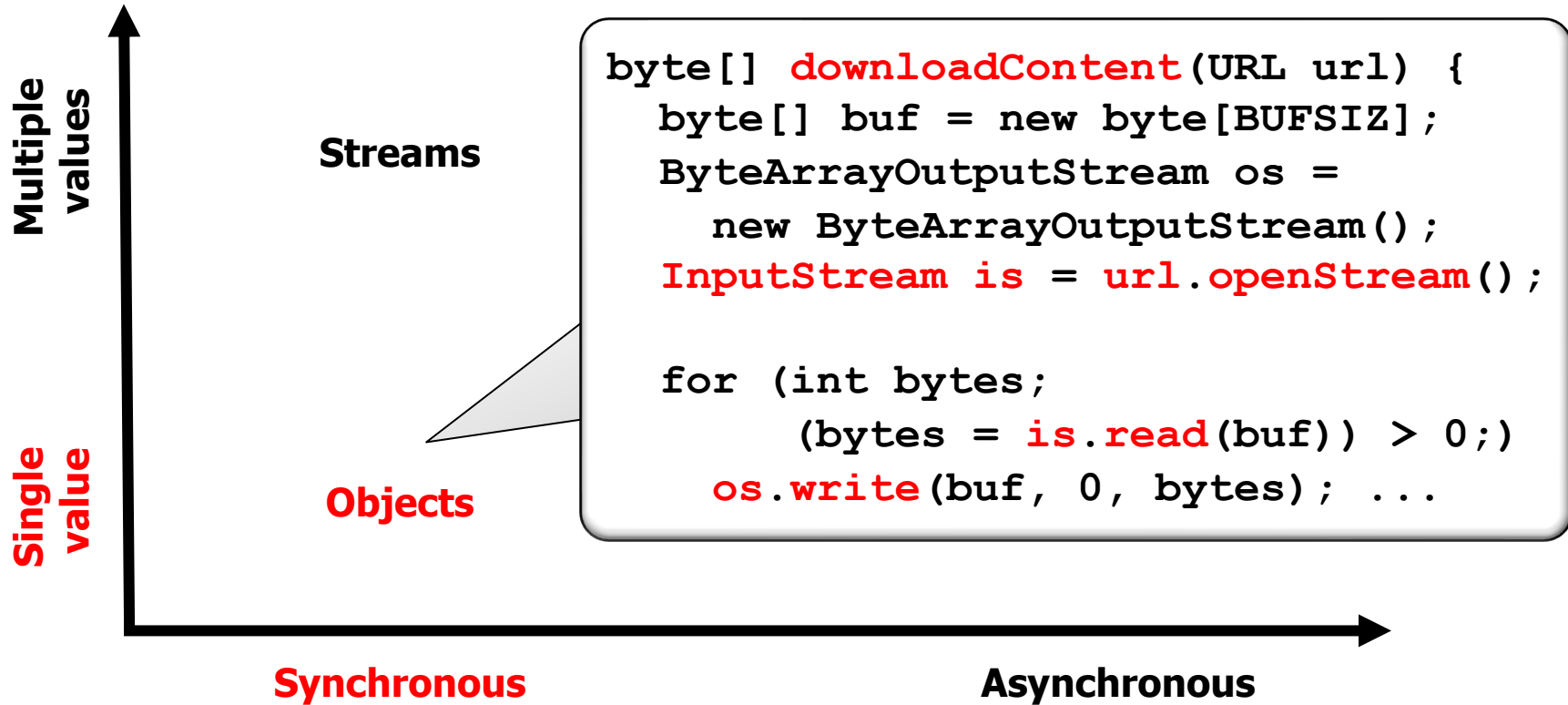
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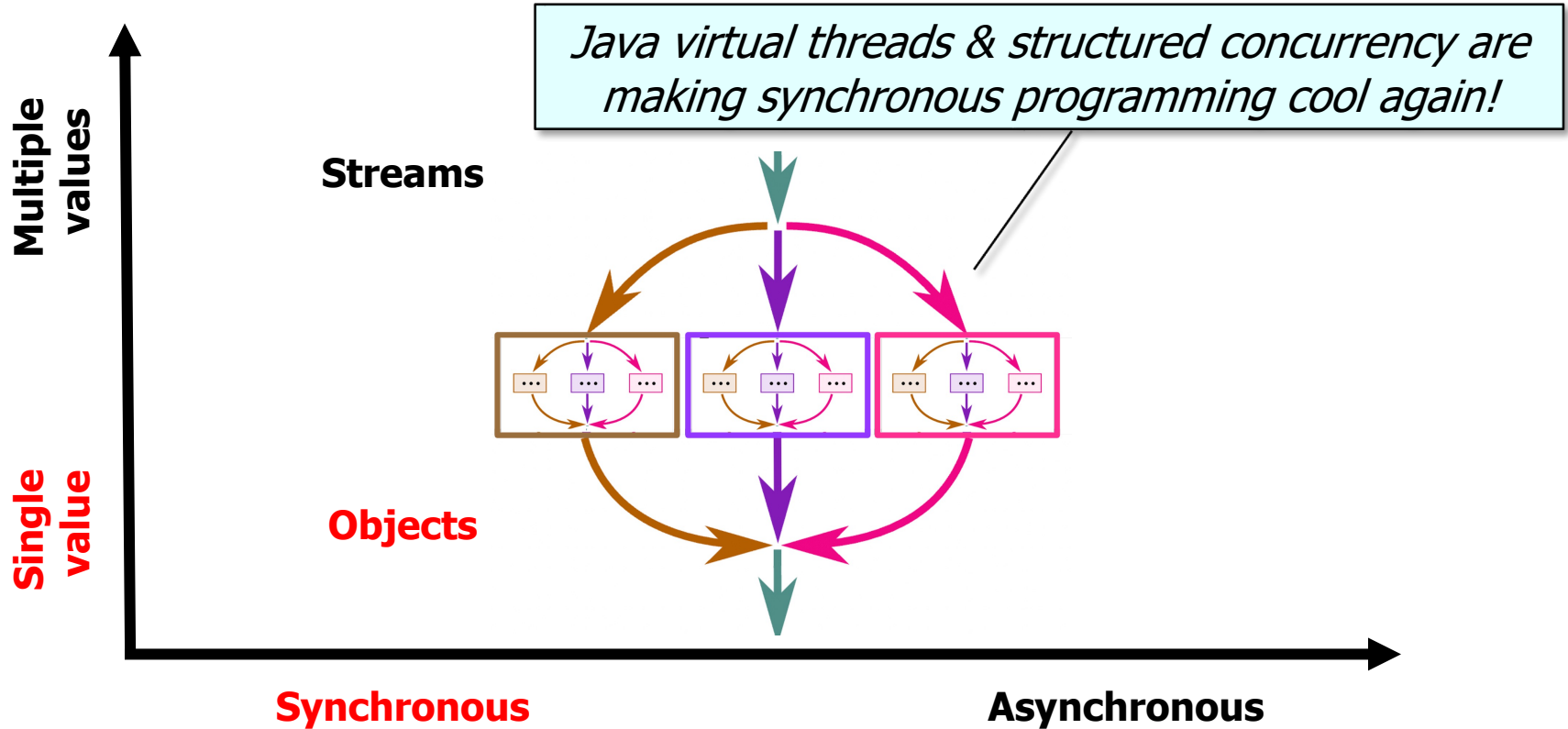
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See [CommandLine/src/main/java/livelessons/utills/NetUtils.java](#)

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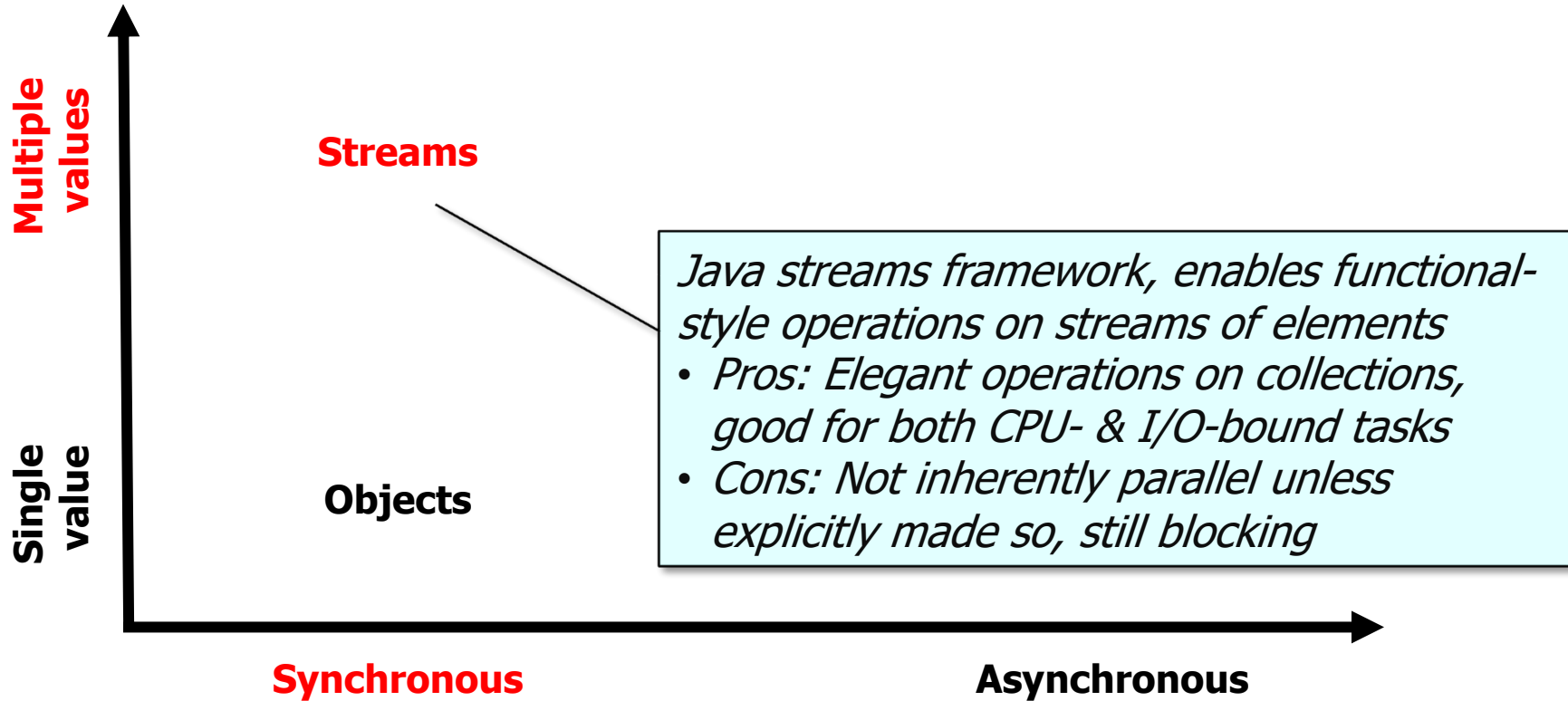
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See [docs.oracle.com/en/java/javase/21/core/structured-concurrency.html](https://docs.oracle.com/en/java/javase/21/core/structured-concurrency.html)

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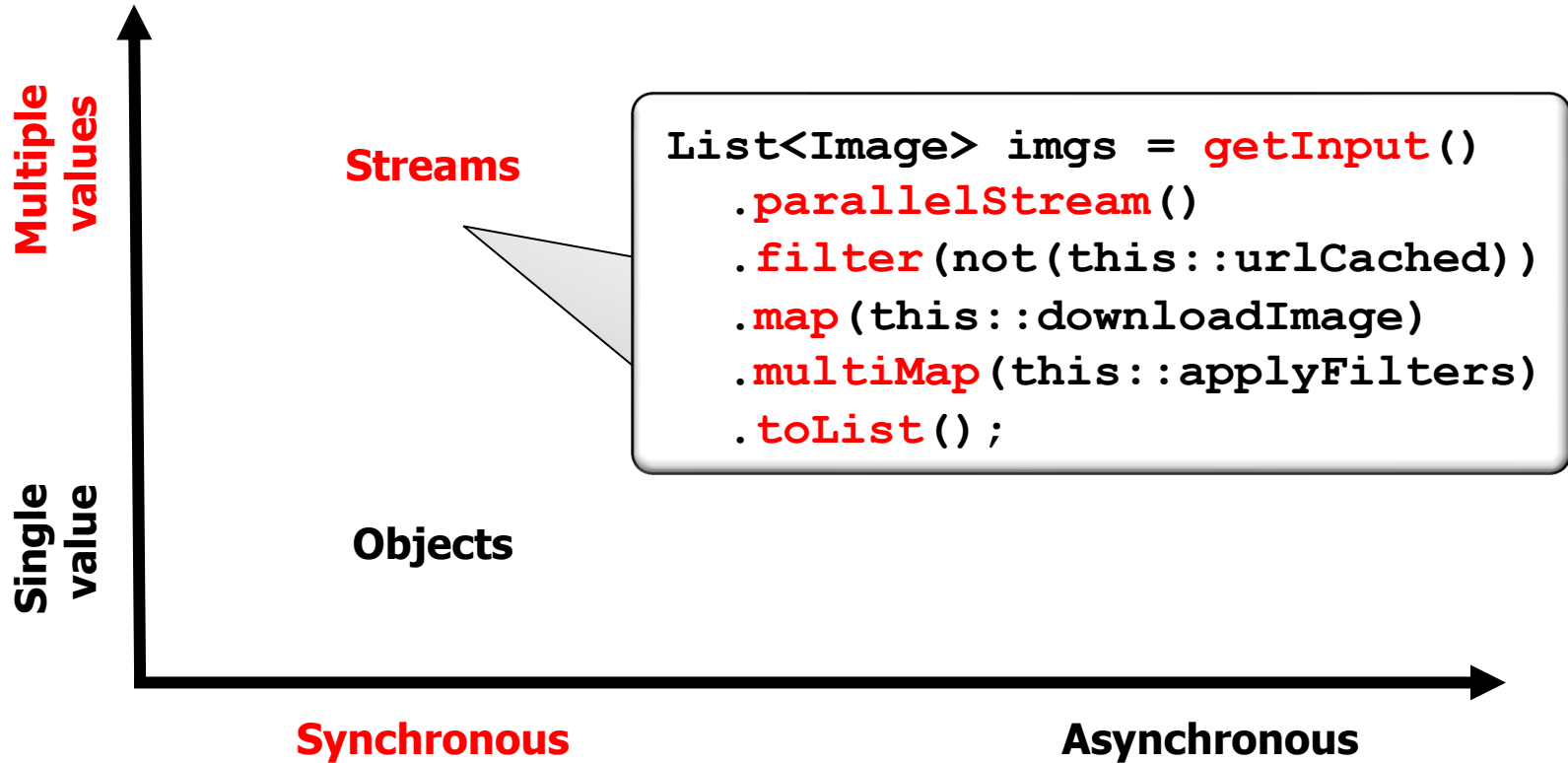


See [docs.oracle.com/javase/tutorial/collections/streams/parallelism.html](https://docs.oracle.com/javase/tutorial/collections/streams/parallelism.html)



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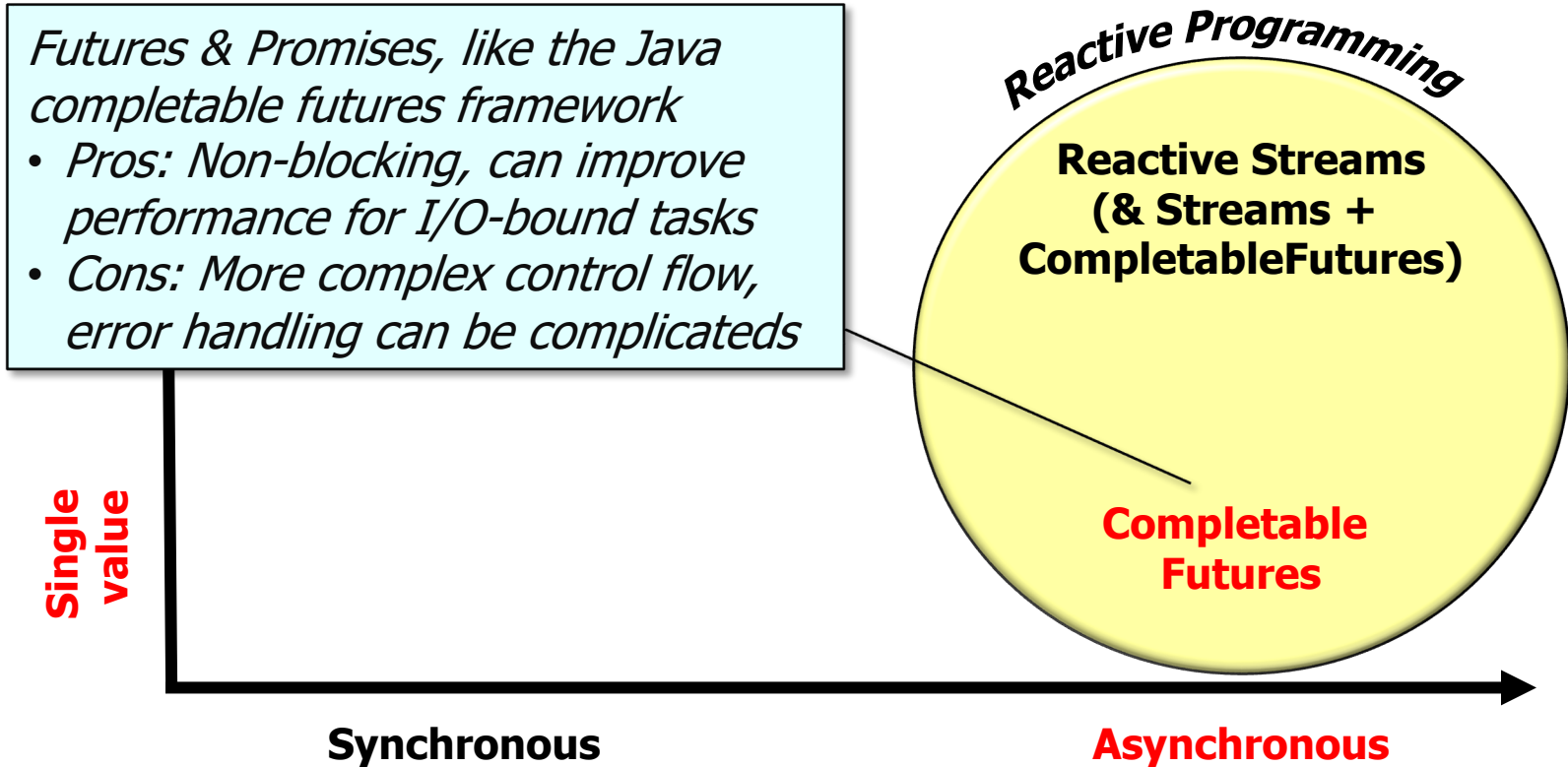
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See [CommandLine/src/main/java/livelessons/streams/ImageStreamParallel.java](#)

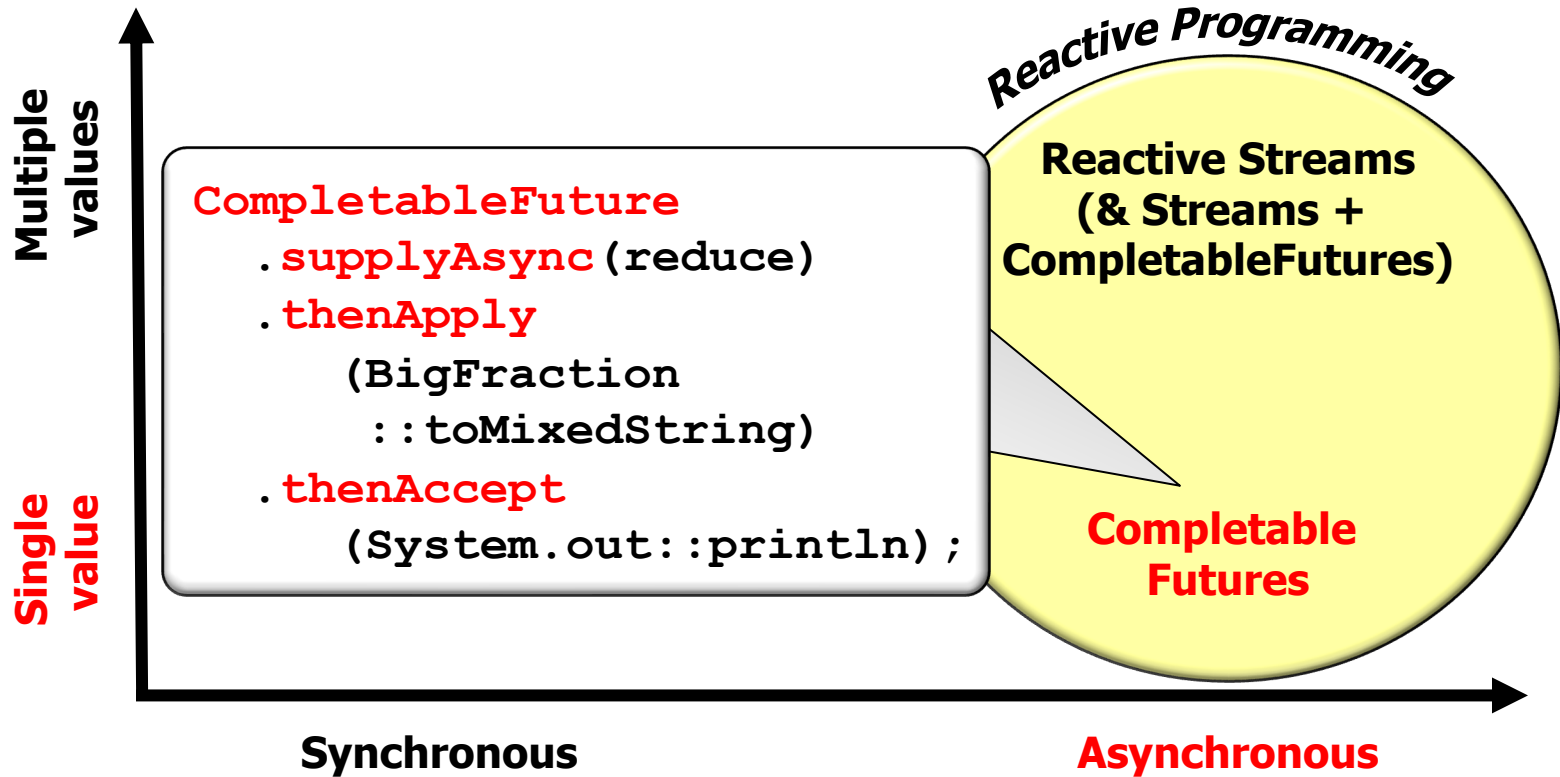
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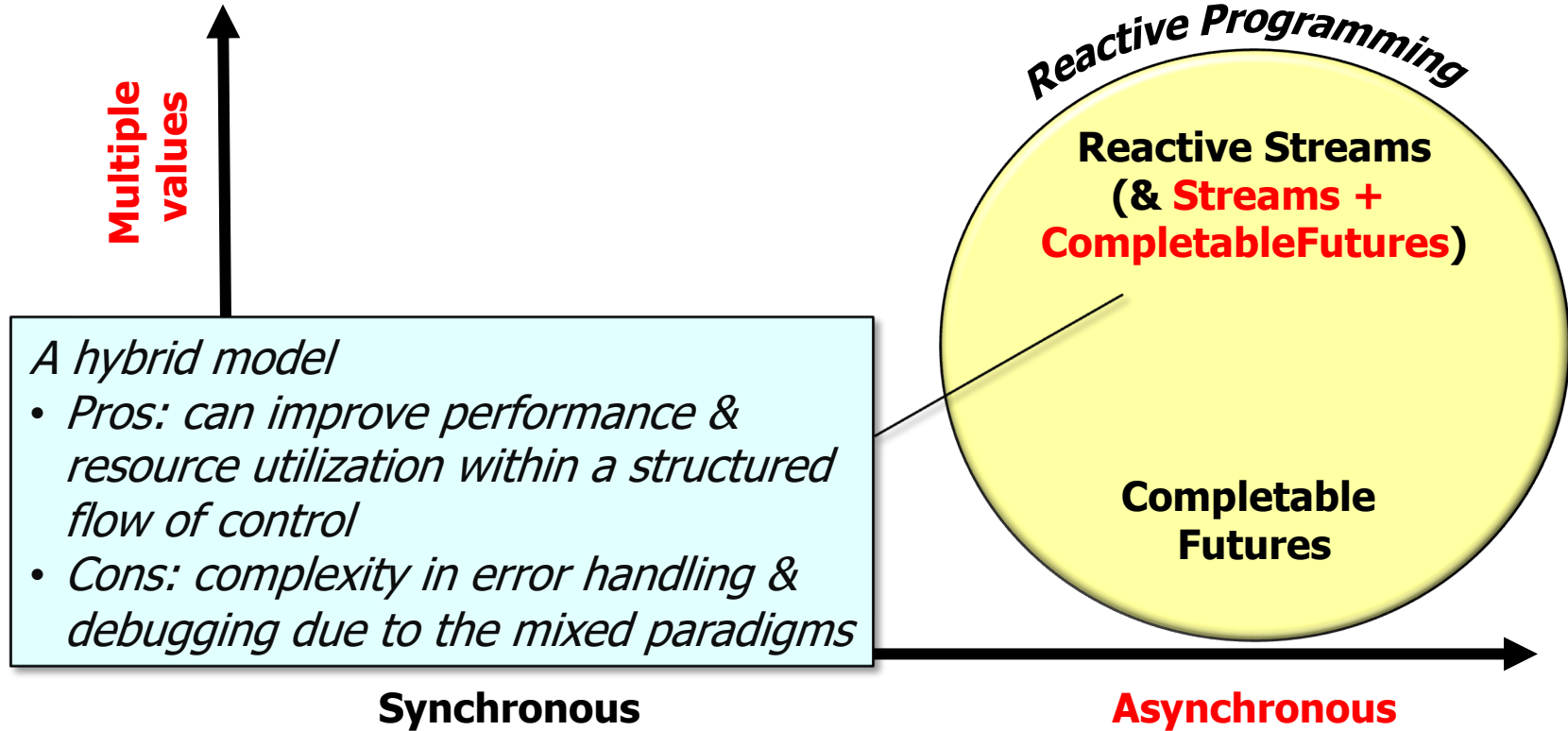
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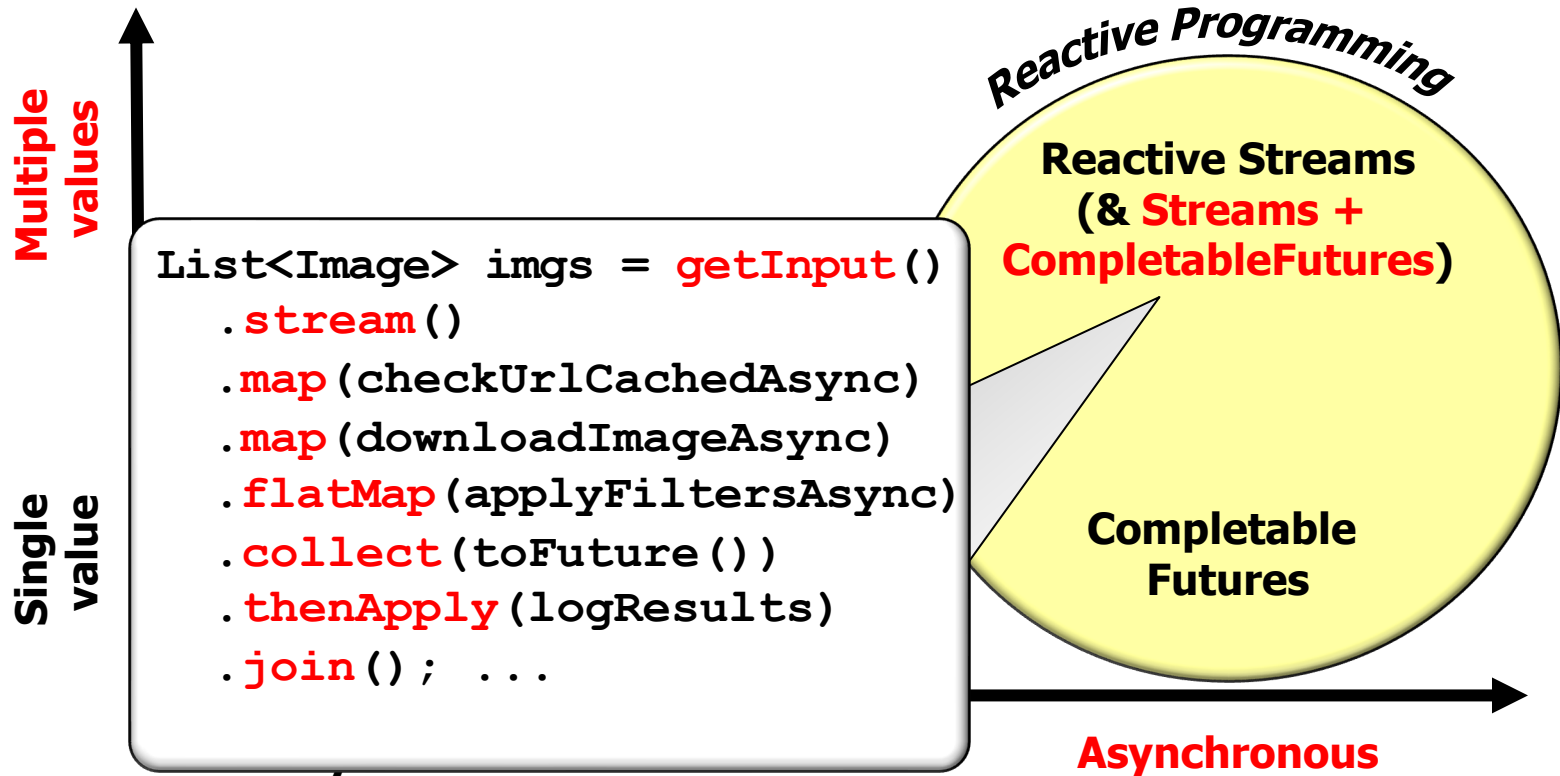
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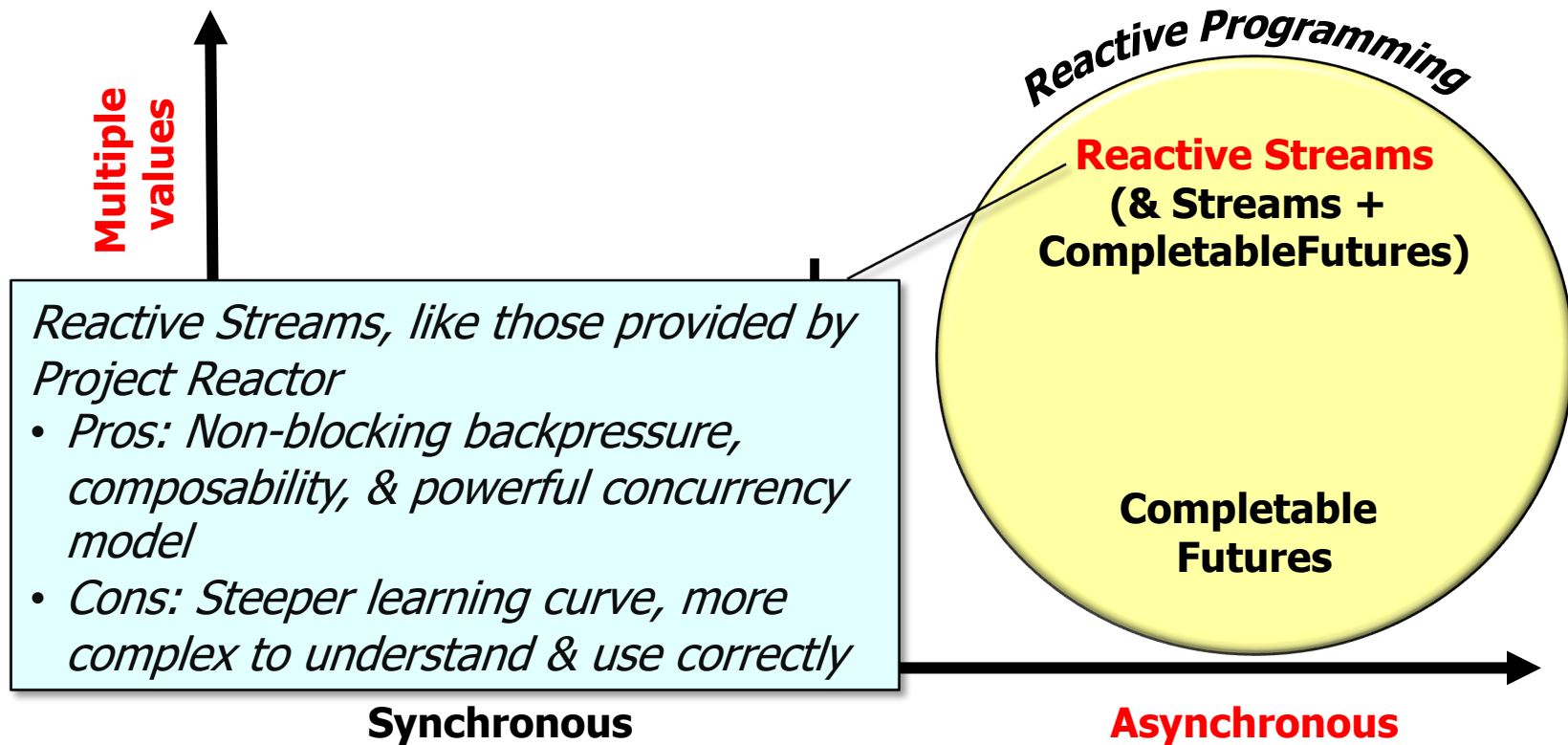
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See [CommandLine/src/main/java/livelessons/streams/ImageStreamCompletableFuture1.java](#)

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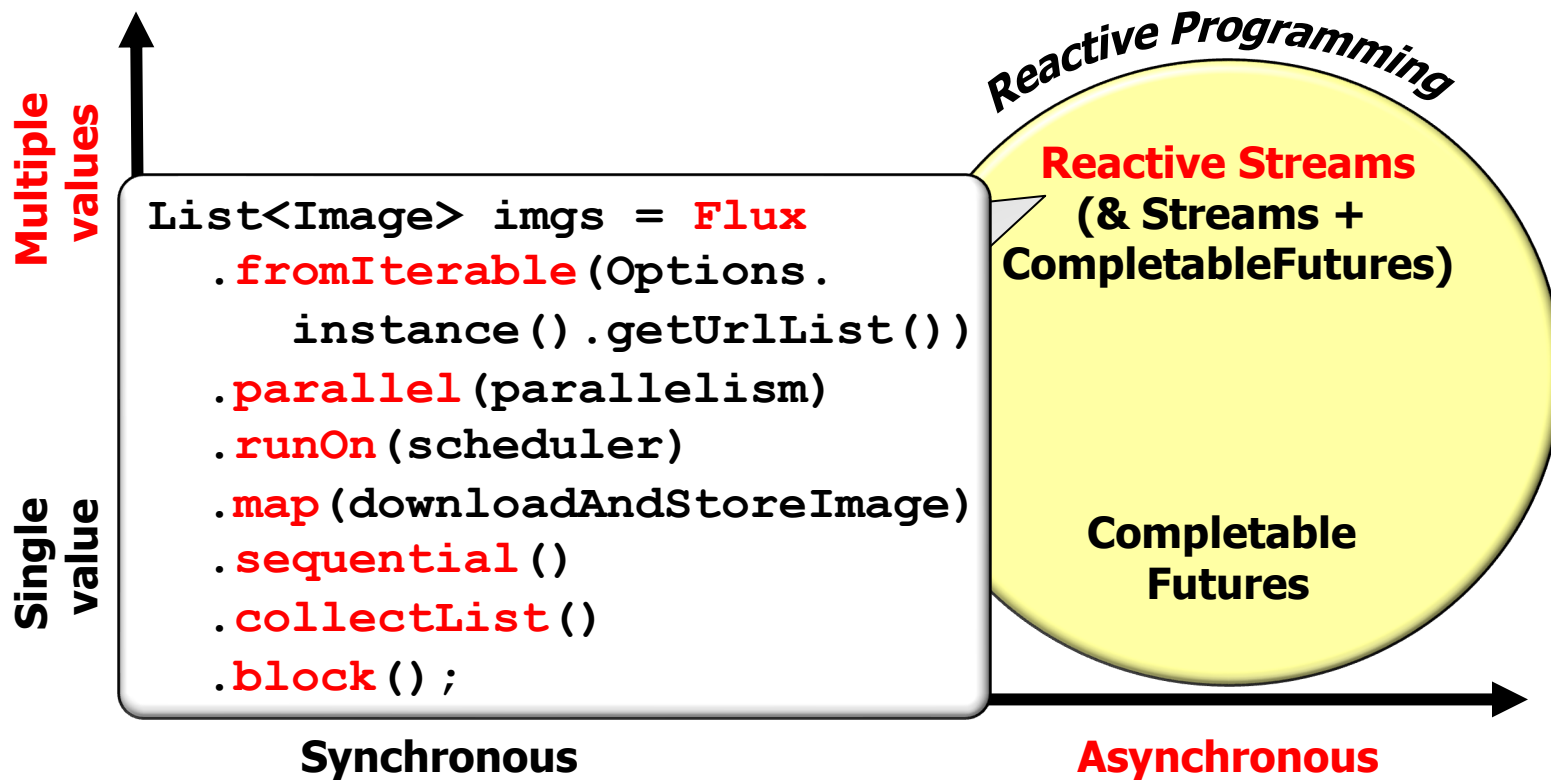
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See [projectreactor.io](http://projectreactor.io)

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See [RxJava/ex2/src/main/java/tests/ReactorTests.java](https://github.com/reactor/reactor-core/blob/master/src/test/java/reactor/reactor/core/ReactorTests.java)

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# End of Evaluating Java Programming Paradigms