## **Optimization and Simulation**

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## Introduction

- Management of complex systems
  - Transportation systems
  - Environmental systems
  - Process systems
  - Structural systems
  - en.wikipedia.org/wiki/List\_of\_types\_of\_systems\_engineering
- The whole may be different from the sum of the parts
- Need for methods to deal with the complexity
- To optimize: to find the best configuration
- To simulate: to act like.



