

# The Conflation of “Chance” in Evolution

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- Two rebuttals:
  - Distinguish four notions of “chance” without resolving those debates
  - Show that conflation causes problems in arguments



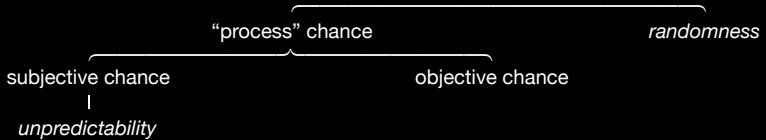
# Four Notions of “Chance”

“process” chance

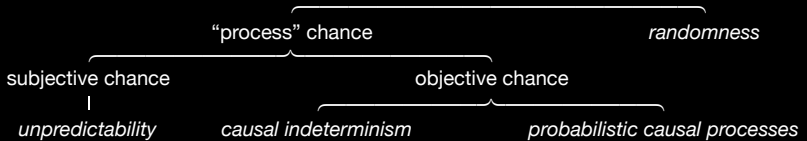
*randomness*



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- Not the only four!

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- “drift clearly is a stochastic or probabilistic or indeterministic phenomenon” (324)
- “if one is a realist...then one should conclude that [evolutionary theory] is fundamentally indeterministic” (336)



## But then...

- “the inferences we can make” about drift (322)
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- Response: Graves, Horan, & Rosenberg (1999)

# A Reinterpretation

- What about probabilistic causation?

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- Brandon's causal reading of drift
- Back to hidden variables

# Conclusions

- Conflations of “chance”:
  - BC conflate at least three senses of “chance” (unpredictability, causal indeterminism, probabilistic causal processes)
  - Only on one of these does their argument go through
  - GHR conflate at least two senses of “chance” (unpredictability, causal indeterminism)

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- Arguments fail to engage
- But the distinctions are well-known!

Questions?

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