

The reductionist blind spot

Abbott, Russ (2009) The reductionist blind spot.

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Abstract

Can there be higher level laws of nature even though everything is reducible to the fundamental laws of physics? The computer science notion of level of abstraction explains how there can be. The key relationship between elements on different levels of abstraction is not the is-composed-of relationship but the im-plements relationship. I take a scientific realist position with respect to (material) levels of abstraction and their instantiation as (material) entities. They exist as ob-jective elements of nature. Reducing them away to lower order phenomena pro-duces a reductionist blind spot and is bad science.

Keywords: emergence, entities, level of abstraction, reductionism

Subjects: [General Issues: Laws of Nature](#)
[Specific Sciences: Computer Science](#)
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[Specific Sciences: Complex Systems](#)

ID Code: 4540

Deposited By: [Abbott, Russ](#)

Deposited On: 31 March 2009

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