

# SIMPLICITY

Maxwell, Nicholas (2000) SIMPLICITY.

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## Abstract

There are two problems of simplicity. What does it mean to characterize a scientific theory as simple, unified or explanatory in view of the fact that a simple theory can always be made complex (and vice versa) by a change of terminology? How is preference in science for simple theories to be justified? In this paper I put forward a proposal as to how the first problem is to be solved. The more nearly the totality of fundamental physical theory exemplifies the metaphysical thesis that the universe has a unified dynamic structure, so the simpler that totality of theory is. What matters is content, not form. This proposed solution may appear to be circular, but I argue that it is not. Towards the end of the paper I make a few remarks about the second, justificational problem of simplicity.

### Keywords:

simplicity  
unity  
beauty  
metaphysics  
symmetry  
explanation  
empiricism  
theory-of-everything  
gauge invariance  
induction  
physicalism

### Subjects:

[General Issues: Confirmation/Induction](#)  
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[General Issues: Structure of Theories](#)  
[General Issues: Theory Change](#)

**ID Code:** 252

**Deposited By:** [Maxwell, Nicholas](#)

**Deposited On:** 29 April 2001