

Dissertation Abstract

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The Search for Logical Forms: In Defense of Logical Atomism

In my dissertation, I defend a new version of logical atomism. I argue that (Russellian) logical atomists search for logical forms, and they do it by *term-busting*: they take apparent *terms* and bust them into *non-term parts of formulas*, just as is done in *Principia Mathematica*. Russell's theory of descriptions is the most familiar model for term-busting. It is well-known that the theory of descriptions has the twin virtues of eliminating the need for ontological posits and making clear the logical structure of facts. I draw attention to the varied cases of term-busting in Russell's logical atomism, distilling its essential features, and to the philosophical fruitfulness of the logical atomist's term-busting practice.

When a logical atomist *busts* a term into an incomplete symbol, they take a formula ϕ in which an apparent term a occurs. They then define that formula ϕ using another formula ψ in which that term a no longer occurs. The goal is to give a formula ψ that expresses the truth-conditions of ϕ , so that ψ is true if and only if ϕ is true, but where ψ does not contain the term a . In this way, we can use ψ to express the ϕ that we had previously needed to use a to express. But ψ , the logically analyzed form of ϕ , makes perspicuous the truth-conditions of ϕ . This is because the logical form of the fact that would correspond to ϕ when ϕ is true was masked by the use of the simple term a . Busting a into a *non-term* part of ψ unmask the logical form of the truth-conditions of ϕ .

I split my thesis into two three-chapter parts. In the first part, I support my interpretation of logical atomism using its history. Chapter 1 critically discusses the standard readings of Russell's logical atomism and argues against it on historical and textual grounds. Chapter 2 develops my novel interpretation of logical atomism using *Principia* and the crucial examples of term busting that occur in Volumes I and II. Chapter 3 takes up Wittgenstein's alleged logical atomism by examining his changing views on logic between his 1913 Cambridge *Notes* and his 1914 Norway *Notes*; I argue here that Wittgenstein was not a logical atomist.

In the second part, I develop a modern logical atomism using the interpretation of logical atomism defended in the first part. Chapter 4 considers the logical requirements for philosophically fruitful term busting and develops a philosophy of logic around them. Chapter 5 offers a formal logic matching the previously developed philosophy of logic. Chapter 6 develops an intended interpretation of this formal logic and an ontology appropriate to it.

So in the first part, I reinterpret the logical atomism genus; in the second part, I create a new species of logical atomism as the foundation for a modern philosophical research program.