

# On Complexity as a Meta-Theory

A Perspective from Economics

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This paper was born by the need of introspection, of understanding how I (wish to) do research. Even if we cannot use the experience of a single (early-stage) researcher to describe an entire discipline (a theme, the relation between a part and the whole, which recurs in the paper), many issues are reflected in individual experience. By analysing the historical and epistemic relation between Economics and Complexity, I want to explore an alternative way to do research, by looking at the condition required to embrace Complexity as epistemology rather than a mathematical toolbox. I argue that a sincerely complex approach to Economics must be heterodox and, similarly, the recent inclusion of “complex” elements in *post-neoclassical* research programs is only about the kind of mathematics used (and not at all about a change in epistemology) and an out-of-time attempt to save the neoclassical core of the discipline.

## 1 The Elusive Nature of Complexity

Once upon a time there was a world full of complexity but without a theory to describe it. This world is indeed not so far in the past.

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## **2 A Metaphor, a Definition, a Methodology**

### **2.1 A Metaphor**

### **2.2 A Definition**

### **2.3 A Methodology**

### **2.4 A Meta-Theory**

## **3 The two Complexities in Economics**

### **3.1 An Anachronistic History**

### **3.2 The Santa Fe Perspective**

### **3.3 A Post-Neoclassical Perspective**

### **3.4 A Note on Pluralism**

## **4 Doing Complexity in Neoliberal Academia**

### **4.1 The Serialization of Creative Work**

### **4.2 The Social Legitimacy of Academic Workers**

### **4.3 The Need for Slow and Artisan Research**

I want to empathize that a sincerely complex approach puts at least as much emphasis on the processes than on the results, if not more. How a research question is chosen and how a model is tailored (and so the reasoning behind it) are a fundamental part of how research is doing and should be communicated and valorized on its own, where results remain a useful appendix of doing science.