The Fallacy of Misplaced Concreteness: Its Importance for Critical and Creative Inquiry

H. EDWARD THOMPSON, III
University of Saskatchewan

ABSTRACT: In Science and the Modern World, Alfred North Whitehead (1925/1953) critically discusses the historical development of science and its larger impact on our civilization and culture today. The fallacy of misplaced concreteness (FMC) is a notion central to his analysis, both of the process of inquiry and to the general sustainability of quality of life. This paper is part of a panel of four presentations relevant to the theory, practice, and teaching of science. In this paper I identify the FMC as a set of variations on the central theme of misplacing concreteness, by mistaking the abstract for the concrete, and I define the component notions involved. More than half of the paper involves a representative range of concrete examples of the FMC. The realm of the aesthetic, of patient and sensitive attention, the full range of immediate bodily feeling, and the variety of real values revealed therein, turns out to be both the victim of and the remedy for the FMC. As Whitehead says: “Sensitiveness without impulse spells decadence, and impulse without sensitiveness spells brutality” (1925/1953, p. 200).

KEYWORDS: fallacy of misplaced concreteness, inquiry, science, theory, abstraction, the aesthetic, metaphysics (mechanism versus organism), process, reality, dogmatism, narrowness, danger to civilization and quality of life.

Introduction

This paper is a general explanation of the fallacy of misplaced concreteness (FMC), a notion introduced by Alfred North Whitehead, in Science and the Modern World (1925/1953, pp. 31 e.s., 38). Although it is self-contained, this paper aims to be a base for three other papers, by Mark Flynn, Bob Regnier, and Howard Woodhouse. They will show detailed applications and implications of the FMC for the proper treatment of, respectively, intelligence, educational measurement, and African science. All of the panelists have a grounding in Whiteheadian process philosophy, but in our presentations we aim to be relevant to the theory, practice, and pedagogy of what is called ‘science,’ and which I will refer to, more inclusively, as ‘inquiry.’ Essentially, we are criticizing some of modern science and its interpretations, as committing the FMC, or, in a phrase, mistaking its models for reality. Hopefully these four papers can articulate some convincing criticisms, and even raise some sensitive suggestions for improvement.

The FMC is detrimental both to good science and to good human living. I should note that Whitehead is not antiscience: as he says, the FMC “is not a vice necessary to the intellectual apprehension of nature . . . . It is merely the accidental error of...”

mistaking the abstract for the concrete" (1925/1953, pp. 50-51). Whitehead is concerned that the actual historical development of science has contributed to a modern world in which misunderstanding of this basic issue threatens our very civilization and quality of life. His penultimate chapter is concerned with the relation between religion and science, and, by implication, with all the issues of real fact and value and meaning that face a world overly impressed with the grandiose visions of early mechanistic physics. And his last chapter, "Requisites for Social Progress," claims that there is an urgent need for a real aesthetic dimension to basic education. Thus, we see our panel's concern as more than merely academic interest.

There are two main sections to this discussion. In the next, shorter, section, I will give a general explanation, in which I identify the FMC as comprising several variations on a central theme, and then define the component notions of the FMC. In the last, longer section I will illustrate several forms of the FMC.

**General Explanation: Central Theme and Definitions**

The FMC misleads us into thinking we have all of reality, when we have, instead, only part of it. The FMC is actually a paradigm notion, involving several variations on a central theme, that of misplacing concreteness by mistaking the abstract for the concrete. The variations I will discuss are three. The first concerns what lies beyond inquiry; this is the realm of feelings, or the aesthetic, and is also, for Whitehead at least, the realm of value. Wittgenstein claims that sometimes we actually mistake the map for the territory, and lose sight of the concrete actual situation altogether.

The second variation concerns the competing metaphysical modes of thought that claim to best support and guide inquiry. Whitehead claims that the modern legacy of 17th-century materialistic mechanism is too abstract, and is the wrong kind of metaphysical frame for conducting good science; he believes we need a frame which is more tantamount to our concrete experience, which I will here call organismism.

The third variation concerns the best general methodology for conducting inquiry, and there are three common forms of the FMC here. They are: (a) mistaking internal correctness, within the model, for external adequacy to the reality it was devised to explain; (b) dogmatically insisting on the wrong model; and, (c) unnecessarily restricting the range of concrete experience, and features revealed therein, which science ought to consult while seeking the best explanation. I will give explanations and illustrations of these variations in the last section of this paper, and more extensive and focussed applications will be given in the other presentations in this panel.

Let me now define the main component notions of the FMC. First of all, the FMC is a fallacy. A fallacy most generally involves making a mistake in reasoning. There are generally two sorts of fallacy: those which, in deductive logic, involve a failure of formal validity, such as affirming the consequent, and a wide range of informal fallacies, such as 'straw opponent' or 'arguing in a circle.' These latter are perhaps best seen as bad assumptions or strategies in inquiry; and the FMC falls into this