

## FORMAL OPERATIONS AND SIMULATED THOUGHT

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For reasons internal to the concepts of thought and causality, a series of representations must be semantics-driven if that series is to add up to a single, unified thought. Where semantics is not operative, there is at most a series of disjoint representations that add up to nothing true or false, and therefore do not constitute a thought at all. There is necessarily a gulf between simulating thought, on the one hand, and actually thinking, on the other. It doesn't matter how perfect the simulation is; nor does it matter how reliable the causal mechanism involved is. Where semantics is inert, there is no thought. In connection with this, this paper also argues that a popular doctrine—the so-called 'computational theory of mind' (CTM)—is based on a confusion. CTM is the view that thought-processes consist in 'computations', where a computation is defined as a 'form-driven' operation on symbols. The expression 'form-driven operation' is ambiguous, and may refer either to syntax-driven operations or to morphologydriven operations. Syntax-driven operations presuppose the existence of operations that are driven by semantic and extra-semantic knowledge. So CTM is false if the terms 'computation' and 'form-driven operation' are taken to refer to syntax-driven operations. So if CTM is to work, those expressions must be taken to refer to morphology-driven operations. But, as previously stated, an operation must be semantics-driven if it is to qualify as a thought. Thus CTM fails on every disambiguation of the expressions 'formal operation' and 'computation'.

## Introduction

In this paper, I wish to discuss the relation between *simulating* thought, on the one hand, and *actually* thinking, on the other. I believe that this relation has been distorted by a failure to take into account some basic facts about the conditions under which separate thoughts can combine to form a single molecular thought.