

logical terminology in favor of physico-chemical terminology, it might nonetheless be the case that biological laws are "autonomous" in the sense that they are underivable from the laws of physics and chemistry. This view has been known in the literature as "functional emergence." Why could it not be the case, these proponents of functional emergence argue, that although living organisms are made up of exactly the same constituents as those found in organic compounds—so that ultimately cells, organs, organ systems, etc., could all be defined in terms of the available vocabulary of chemistry and physics—they nevertheless obeyed different laws from those that governed the same elements arranged in less complex constellations? Whether right or wrong, such hypotheses are intelligible. And whether they are indeed the case can only be determined empirically. But by obliterating the distinction between definability and derivability, Kemeny and Oppenheim rule out in advance the sort of irreducibility portrayed by the functional emergentist.

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#### NOTES

<sup>1</sup> 7:6–19 (January–February 1956).

<sup>2</sup> Nagel's definition originally appeared in "Mechanistic Explanation and Organismic Biology," *Philosophy and Phenomenological Research*, 11:327–38 (March 1951).

<sup>3</sup> Kemeny and Oppenheim, pp. 9–10.

<sup>4</sup> "T<sub>B<sub>2</sub></sub>" stands for the conjunction of all theories of the branch B at time t.

<sup>5</sup> Kemeny and Oppenheim, p. 10.

#### Errata

The following corrections should be made in "Notes on E! III: A Theory of Descriptions," *Philosophical Studies*, June 1962:

Page 55, line 33, for (26) read (23)

Page 58, line 8, for descriptions read description

Page 59, line 6, for containing no free read containing free

Page 59, line 8, for  $\phi x \supset \phi x$  read  $(x) \cdot \phi x \cdot \supset \phi x$