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# The gene after encode: a Wittgensteinian approach

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## Abstract

The notion of ‘gene’ has become a classical topic in philosophy of biology. Most of the philosophical attempts to deal with the notion of gene have been devoted to provide a unitary (or binary) account of what a gene is. We propose a different approach, by using the wittgensteinian notion of ‘family resemblance concept’ to address the issues coming from the ENCODE project. First, we deconstruct any attempt to provide a definition, or a group of definitions that intersect the most recent outcomes of ENCODE. Thus we re-focus our question considering not what a gene is (the ontological question) but rather how the term ‘gene’ is used and, as a consequence, what kind of term is ‘gene’. By taking into account also some features of ‘gene’ (e.g ‘gene has blurred edges’ or ‘the distinction between Gene-P and Gene-D’) discussed in the literature we consider the gene as a cluster of characteristics at the epistemic level. Moreover, due to its semantic flexibility, it is possible to easily draw a line, as Wittgenstein claims, for practical purposes. As argued for species by Pigliucci, we suggest that ‘gene’ lies in the semantic intersection of all ‘practical’ definition used in biology. We finally propose to change the focus of philosophical analysis regarding this field privileging the notion of function rather than that of structure.

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