Reductionism

«Reductionism»

by Jes Fabricius Møller

Source:
It is an interesting paradox in science, and especially in the humanities, that reductionism generally is considered an invective. This goes for we historians as well. We take the implications of the problem of induction very seriously – and that is why others often call us mindless empiricists.

The late Henrik Nissen made fun of the tendency among political scientists to formulate ‘covering laws’ of society and history with the following mock theory: “Whenever a state has acquired uncontested military hegemony in Western and Central Europe it will attack Russia, and the following winter will be unusually cold” (Nissen 1981: 199). This applies beautifully to the cases of Charles XII (of Sweden), Napoleon and Hitler, but to any historian ‘Nissen’s law’ is meaningless in itself because it doesn’t offer any explanation or insight into the actual cases: What did Hitler have in mind when he invaded? You might as well use the explanation of the comedian Eddie Izzard: “Hitler obviously never played Risk as a child”. This is both true (since this strategic board game wasn’t invented then) and funny, but it doesn’t count as an explanation either.

My own version of Nissen’s point is the even more pretentious Møller’s Theory on Literature: “A comprehensive study of Shakespeare’s collected works demonstrates without a doubt that, in reality, they consist of nothing more than a combination of common words

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that can be found in any good dictionary. Further studies will most certainly demonstrate that this applies to other writers as well”. This theory is even more true than Nissen’s – but also even more meaningless because it suffers from what we might call ‘reductionist overstretch’.

Historians can never hope to achieve the simplicity and beauty of a Newtonian law. However, we too must simplify. Deduction is problematic but reduction is necessary. Jorge Luis Borges has described the dangers of not reducing in his fable of an empire where cartographers were held in such high esteem that they finally managed to create “a map of the Empire whose size was that of the Empire, and which coincided point for point with it”. The beauty of the fable lies in the fact that it is itself reduced to austere brevity. A description of the world in a 1:1 scale simply does not count as science since it would be redundant by definition. Any interpretation means identifying a pattern, a system or an order that is simpler (or at least smaller than) the totality of what is interpreted.

A famous reductionism is the “Biologismus” of the late 19th century that tried, at least on a theoretical level, to reduce human life to its biological components (Møller 2000). It had ontological, epistemological and ethical implications, or to put it more bluntly, it produced a lot of nonsense, much of which was used to justify cruelty against people on a previously unknown scale (Møller 2006). The Danish geneticist, Wilhelm Johannsen, wrote as early as 1914 a vitriolic and very funny critique of the strange need of his contemporaries to reduce human or societal phenomenon to biology. (Johannsen 1914) He called for clear demarcation lines between the understanding of the human world on one hand and natural explanation on the other. Johannsen didn’t know Dilthey’s distinction between understanding and explaining, or Windelband’s distinction between idiographic and nomothetic, but his point was approximately the same.

Jesper Hoffmeyer is intellectually seen as a remote descendant of Johannsen. He oversteps, so to say, the demarcation line from the other side and reinterprets biology – or to be more precise, introduces interpretation to the biologists: “Life is in every respect communicative”. It is a kind of monism, meaning that the same kind of scientific thought applies to both the natural and the human world: interpretation rather than the idea of covering laws, patterns of
meaning rather than biological facts. Suddenly the humanities have colonized biology and not the other way around. It looks very much like reductionism, but perhaps it isn’t.

Hoffmeyer himself denies that he is a reductionist; on the contrary. In one respect he is right. The world is becoming an empire where information, communication and interpretation are held in so high esteem that the amount of information etc. already outnumbers reality. It began already a couple of hundred years ago. At a very early stage, the available literature on Shakespeare quantitatively overshadowed the oeuvre of Shakespeare himself. The present level of communication on anything has probably reached and surpassed the 1:1 ratio. From a Hoffmeyerian perspective, of course, there is no such ratio. More communication simply means that the world is growing. Whatever the case is, the need for reduction in order to understand is larger than ever.

References