"John Stuart Mill, Emergence, and the Evolving Best System Account of Lawhood"

Among the currently available philosophical views on what the concept of law in science must exactly amount to, the so-called "Mill-Ramsey-Lewis view" or "Best System Approach" [BSA] has attracted many minded philosophers over the years, to the effect that it certainly constitutes nowadays one of the serious contenders in the debates on lawhood. In a nutshell, under the perspective of a broadly humean worldview with respect to which all there is in the world is some sort of a vast mosaic of spatio-temporally localized fundamental matters of fact, everything else non-fundamental supervening on it, it is the core contention of [BSA] that laws just are the axioms and the theorems of the deductive system that is true to the mosaic, and which achieves the best balance between two epistemic virtues that generally tend to work against one another, namely strength – a measure of informativeness – and simplicity – a measure of the sobriety of systematization.

Though attractive in many ways, [BSA] is beset with a notorious issue that has recently become particularly acute given the current, steadily growing anti-reductionist tendency in the philosophy of science community. As things stand, it seems to be the case that [BSA] cannot properly account for the putative autonomy or irreducibility of laws in the special sciences, insofar as these are supposed not to be directly about fundamental matter of facts of the humean mosaic, but rather among supervening, non-fundamental matter of facts. One has then indeed serious reasons to expect that, while running the competition between all the available deductive systems that are true to the mosaic, the generalizations of the special sciences will invariably come out *at best* only as theorems of the winning system, that is, as mere derivative, reducible laws.

Recently, philosophers have endeavoured to remedy this situation by amending [BSA] in an appropriate way. Among them are the proponents of the "Better Best System Account" of lawhood [BBSA], which, in a nutshell, differs from conventional [BSA] in that it allows for multiple competitions among deductive systems to be run independently for any fixed set of matter of facts (and not only for the fundamental ones, presumably physical in nature; see *e.g.* Callender & Cohen 2010; Schrenk 2014). In particular, it has been claimed that the running of such independent competitions yields different sets of autonomous laws for each different domains of matter of facts, corresponding to the "freestanding" special sciences, in such a way that these different sets of laws are connected by a relation of emergence. It has furthermore been contented that John Stuart Mill's early take on emergence and lawhood may be seen as the ultimate historical origin of such an approach (Schrenk 2017).

The paper that I propose to present during the conference aims at three interrelated objectives. The first, critical in nature, is to show that considering John Stuart Mill as the progenitor of [BBSA] as it is formulated is based on an erroneous construal of Mill's emergence. Contrary to what is sometimes suggested by the unfortunate umbrella label of "British Emergentism" (McLaughlin 1992), which leads many philosophers to mistakenly assimilate distinct views on emergence with a monolithic, traditional, so-called "synchronic" tradition, I'll show that Mill's emergence is, surprisingly enough, highly idiosyncratic, insofar as it is actually more in

line with non-traditional, diachronic accounts of the notion (like, *e.g.*, Humphreys' (1997) "fusion emergence").

A second objective, this time constructive, is to argue that the appropriate construal of Mill's emergence allows for considerably strengthening the case of [BBSA] as a way to safeguard the autonomy of the special sciences in a humean setting. More particularly, it will be contented that it is only through Mill's conception of an "evolving humean mosaic" that the irreducibility of the laws of the special sciences can be adequately vindicated. From this, a new variant of [BSA] will emerge as a close cousin of [BBSA], namely the "Evolving Best System Account" of lawhood.

Finally, an incidental objective of the proposed talk will be to show that, somewhat surprisingly, a broadly humean worldview, together with a purely regularist take on lawhood, may be hospitable to a non-trivial form of emergence, *pace* Lewis' contention that "emergent natural properties" are to be considered as "rubbish" (1986, x), and *pace* the received wisdom according to which, following Kim (2006), emergentism necessarily needs to come hand in hand with some degree of causal or nomic realism.

## References

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