

COMMENTS ON PATRICK M^CGIVERN'S
"PARTS OF PROPERTIES: REALIZATION AS DECOMPOSITION"

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My main reaction to M^CGivern's paper was one of dialectical puzzlement. Block argues that,

Macro Non-Reduction: [all] macro properties are irreducible to the micro properties on which they supervene

and

Inter-Level Competition: macro properties compete for causal efficacy with the micro properties on which they supervene

together imply

Causal Drainage: either there is a bottom level to reality or all properties are epiphenomenal

(assuming, of course, that micro properties always win their causal competitions with their supervening macro cousins.) Given the untenability of *Causal Drainage*, Block takes this implication to impugn the plausibility of *Inter-Level Competition*.

Kim gives two distinct and independent responses to Block's argument. First, as long as *Macro Non-Reduction* is false (or at least not true of all macro properties), *Causal Drainage* can be avoided without rejecting *Inter-Level Competition*. But second, and more importantly, Kim himself rejects *Inter-Level Competition*. Instead he endorses,

Intra-Level Competition: higher order properties, at any given level on the macro-micro hierarchy, compete for causal efficacy with the lower order properties, at the same level, on which they supervene.

Now this principle and

Order Non-Reduction: [all] higher-order properties, at a given level, are irreducible to the lower-order properties, at that level, on which they supervene

may well imply

Level Drainage: either there is a lowest order of properties at a given level on the macro-micro hierarchy or all properties at that level are epiphenomenal.

But since *Level Drainage* is uncontroversial – because there **is** a lowest order of properties at a given level – no difficulties for *Intra-Level Competition* ensue.

Now Kim does endorse a hierarchical picture of reality: macro entities are (wholly) constructed out of micro entities and macro properties – at least those that are causally efficacious – are micro-based properties. But this falls far short of attributing causal efficacy only to micro properties. Micro-based properties are macro properties, not micro properties. And macro properties have causal powers over and above those of their micro-constituents. For example, a macro object, in virtue of its mass, has a well defined set of causal powers which none of its micro-constituents have.

My dialectical puzzlement has two sources. First, M^CGivern suggests that if Block can establish the non-identity of the macro properties invoked by chemistry, biology, and the special sciences with micro-based properties, the threat of *Causal Drainage* reemerges:

“So the question at issue for Kim is whether or not higher-level properties can be identified with specific structural configurations. Here Block wants to answer ‘no’: this would mean that those base properties would compete with the properties they realize after all, and thus if Kim’s reasoning is right about

competition, the possibility of causation ‘draining away’ remains.” [M^CGivern, p. 5]

The trouble with this suggestion is that it presupposes (i) *Inter-Level Competition* is still on the table, (ii) micro-based properties are micro properties, and (iii) no macro properties can be identified with micro-based properties. And all of these presuppositions are false. (The falsity of (iii) stems from the fact that micro-based properties are macro properties and are, well, self-identical). The non-identity of certain macro properties with micro-based properties, together with *Intra-Level Competition*, may well establish that the former are epiphenomenal. And the property Block focuses on – that of being jade – arguably is epiphenomenal exactly because it is not identical to either the micro-based property of being jadeite or that of being nephrite. Moreover, as long as the macro properties in question are functional properties whose realizers are micro-based properties, the corresponding **concepts** retain their explanatory importance.

And second, it remains unclear why Block thinks he needs to invoke any views regarding property mereology in order to establish that the property of being jade is distinct from any micro-based property. Merely pointing out that (i) a gem can have the property of being jade in virtue of either having the property of being jadeite or the property of being nephrite and (ii) being jadeite is a matter of being decomposable in one way and being nephrite is being decomposable in another would suffice. And supposing that what it is for a gem to have the property of being nephrite is for the gem to be (or have the property of being) decomposable in a certain way does not require the further supposition that the property of being nephrite is itself decomposable in a corresponding way.

In addition, I have a couple of more substantive worries about M^CGivern's argument.

M^CGivern argues that Block has a reason deny the identity between the property of being jade and one of its decompositions only if the property of being jade could (a) be instantiated and (b) fail to be decomposable in that way. And while the gem which instantiates the property may fail to be so decomposable, the property itself will not.

(Note: I take that it that M^CGivern is assuming that properties are immanent universals, wholly present in each of their instances, or something along these lines). But Block has a powerful motivation to deny these identities. Since the decompositions of the property of being jade just are the properties of being jadeite and nephrite respectively, if being jade is identical to each of its decompositions, it is thereby identical to both the property of being jadeite and the property of being nephrite. The transitivity of identity would therefore imply that these later two properties are identical. But the properties of being jadeite and being nephrite are distinct. Unless Block can avoid this result, his account of property mereological is in much trouble than M^CGivern suggests.

Finally, M^CGivern's positive account of property mereology, which he deploys in response to Kim, needs some comment. The suggestion, as I understand it, is that properties are individuated in terms of – and perhaps even identified with – sets of causal powers. And if the causal powers associated with one property are a subset of the powers associated with another, then the former is a part is a part of the latter. Now in the case of (the property of being) jade, I do not think this works. Presumably the causal powers that individuate this property are tied to the superficial surface characteristics that originally

led people to think that jadeite and nephrite were the same substance. And this would seem to imply that anything having those superficial characteristics would be jade, even if it were neither nephrite nor jadeite. But as an account of functional properties, this idea seems quite promising. After all, functional properties just are causal powers, and a realizing property would not count as realizing unless it yielded those causal powers, among others.

As to whether or not this yields an adequate defense of non-reductive physicalism against Kim's supervenience argument, I remain uncertain. The basic idea seems to be that although mental/ functional properties and their realizing physical properties are distinct properties and are both causally efficacious, they are not competing causes because they share causal powers. (Note the analogy between this solution and the trope solution to the same problem: distinct and efficacious mental and physical properties are not competing causes because they share instances). The reason I remain uncertain about the ultimate success of this manoeuvre is because Kim might just invoke the fragmentation strategy and identify the mental causal powers of each realizing property with a distinct micro-based property (although not that with which the realizing property itself is identified.) And this would yield reductive rather than non-reductive physicalism.