Comment on "Group Selection and Methodological Individualism: Compatible and Complementary" by Douglas Glen Whitman

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My compliments to Glen Whitman on a carefully argued paper that makes an important point: methodological individualism is not what you think it is; and, contrary to what many have argued, methodological individualism is not in conflict with the notion of group selection in the theory of cultural evolution. Of course, part of the reason I like Whitman's paper so much is that, as some of his footnotes hint, I have been saying many of the same things for a long time¹ (Langlois 1983, 1985, 1986).

My view – and, I think, Whitman's view – on methodological individualism is more-or-less the following. There are three possible claims.

- 1. We can construct wholes only from the parts, that is, we cannot use any information to construct wholes not contained within the parts. Social wholes are "nothing other" than the behavior of individuals.
- 2. We cannot analyze wholes without careful attention to the parts, which exist separately from the wholes. But to understand wholes we must also add information like compositional principles, filtering mechanisms, institutions, etc. that is not logically derived from a consideration of the behavior of the parts. This includes the possibility that the interactions among the parts may lead to "emergent" phenomena, at least so long as we do not get sloppy and let the idea of emergence become equivalent to Claim 3.
- 3. We can and should study wholes directly. Wholes have a "life of their own" independent of the parts, and (in some formulations) the parts don't even exist except in the context of wholes.

¹ Or, more correctly, I used to say many of the same things back in the days when I spent a lot of time thinking about methodology. Fritz Machlup used to maintain that one should write about methodology only at the very beginning and the very end of one's career. I've tried to follow that advice, albeit with a few lapses here and there.

Claim 1 is naive individualism; claim 3 is naive holism. Claim 2 is obviously right. I want to call claim 2 sophisticated methodological individualism, or simply methodological individualism. Others, notably Geoff Hodgson (e. g., 1999, pp. 132-133), want to see claim 2 as a kind of methodological holism.² The reason I think the label individualism fits better is that the real dividing line lies between claims 2 and 3. Both claims 1 and 3 are mistakes. But implementing claim 1 is not actually possible, so it is less likely to lead to error. All models in social science necessarily adduce some elements that don't flow directly from the behavior of individuals: even a simple model of supply and demand requires the proposition that a market demand curve is the sum of individual demand curves, and the property of addition is a (very simple) system constraint not logically contained in individual demand functions or other properties of the agents. By contrast, implementing claim 3 is all too possible, as the history of social science testifies.

It follows immediately that there is no conflict between group selection and methodological individualism understood (correctly) as claim 2. In both the original Wynne-Edwards version and the newer Wilson and Sober version, group selection is about how individual behavior interacts, not about some "group" characteristics independent of individuals.

It should be clear from my formulation of claim 2, moreover, that Hodgson (1999, pp. 132, 135) is wrong to classify me as a "reductionist" who believes that "emergent" properties don't exist.

Precisely because Whitman makes his case so well, I want to deviate from the text a bit and to devote the remainder of my comment not to Whitman's thesis but to the idea of group selection itself. My basic point is that Hayek's account of group selection is in fact strikingly different from the notion now current.

What I find striking about the modern discussion of group selection is how "neoclassical" it is. By this I mean that the discussion seems to be focused entirely on issues of incentives and equilibrium – rather than on issues of learning, experiment, and change. This is no doubt appropriate to some extent and in some contexts. Perhaps it is the case that the principal evolutionary issue facing hunter-gather societies was the need to solve common pool problems and to avoid free riding among group members. Thus questions of altruism (appropriately defined) versus narrow self interest (appropriately defined) naturally come to the fore. Those groups whose norms, institutions, rules, or behavior patterns solve the problem of team production well will tend to thrive (in an appropriately defined sense) while those who fail to solve the problem (as) well will tend to decline (in an appropriately defined sense).

This is all well and good. But it is not principally what Hayek had in mind when he endorsed the (Wynne-Edwards) version of group selection.³

³ Hayek's view seems to be that, although the concept may or may not be appropriate to biology, it is nonetheless important in the sphere of cultural evolution (Hayek 1978, p. 202n37; 1988, p. 25).

Rather than seeing groups as systems of team production that constrain wayward incentives, he sees groups more generally as *systems of rules of conduct*. Humans are not merely maximizers in the face of incentives; they are followers of rules more generally – rules that are often tacit and inarticulate. Some (but probably not most) rules may indeed have to do with solving free-rider problems. But, for Hayek, individuals follow rules in the sense of what Nelson and Winter call routines, not rules in the sense of game-theoretic strategies.⁴ Quite typically, people follow rules unconsciously, unaware of why the rules lead to the results they do. For one thing, the world is so complex that it is difficult for agents most of the time even to know what is in their interests.

Moreover, individual rules cannot often be easily disentangled from the overall system of rules the group follows; an individual rule is effective only in the context of other rules. This is why group selection is important to Hayek: you have to choose the whole package, not individual rules in isolation. Since, as Hayek insists, cultural evolution is Lamarckian, groups do not expand only

⁴ "A routine is a way of doing something, a course of action. As Sidney Winter and I have developed the concept (1982), the carrying out of a routine is "programmatic" in nature, and like a program tends largely to be carried out automatically. Like a computer program, our routine concept admits choice within a limited range of alternatives, but channeled choice. Almost always, there will be a set of understandings or beliefs associated with a particular outline, which explicates or rationalizes why it is appropriate in a particular context, and often, which provides an explanation of why and just how it works. But the key operative concept is the routine itself. It is the routine used that determines what is accomplished, given the context in which it is employed." (Nelson 2002, p. 269.)

through relatively higher rates of procreation.⁵ More importantly, groups – that is, coherent systems of rules of conduct – grow through imitation. Sometimes imitation is attendant on immigration to a more successful group: it is a familiar story that immigrants, who are attracted to the economic benefits of betterfunctioning systems, often struggle as they are forced to alter a whole package of behavior patterns in order to prosper from their new surroundings (Hayek 1988, pp. 129-130; Choi 1993). But sometimes imitation involves a conscious attempt to copy patterns of behavior observed elsewhere. Eastern Europe since 1989 is an example.⁶

The upshot is that, for the most part, cultural evolution does not suffer fundamentally from the problem of a conflict between the interest of the individual and that of the group. Or rather, if it does, it is a conflict exactly opposite to that envisioned by biologists. For Hayek, the problem is *too much* group solidarity, not too little. Hayek agrees that the hunter-gather lifestyle was indeed one whose success depended on solving certain public goods or free-rider problems, and perhaps on some form of altruism. But economic growth entailed the evolution of quite different systems of rules of conduct. And to get from the

⁵ Although sometimes they do, like Britain during the industrial revolution, where population growth responded strongly to economic growth. The population of England went up by about two-thirds over the course of the eighteenth century and more than doubled in the first half of the nineteenth.

⁶ In *The Fatal Conceit*, published in 1988, Hayek already saw this kind of group selection operating. Communism, he wrote, "is a religion which has had its time, and which is now declining rapidly. In communist and socialist countries we are watching how natural selection of religious beliefs disposes of the maladapted" (Hayek 1988, p. 137).

solidarist hunter-gatherer rules to the rules of the modern open society, individuals had to break the rules -- perhaps out of self-interest. From the hunter-gatherer stage "practically all advance had to be achieved by infringing or repressing some of the innate rules and replacing them by new ones which made the co-ordination of activities of larger groups possible. Most of the steps in the evolution of culture were made possible by some individuals breaking some traditional rules and practising new forms of conduct-not because they understood them to be better, but because the groups which acted upon them prospered more than others and grew" (Hayek 1978, p. 161). We might even extend this idea to suggest that breaking the rules - in the form of entrepreneurship – is still critical for economic growth (Choi 1993). The group that prospers is not the one that finds a way to substitute altruism for narrow self interest but rather the group that allows rules to be broken in wealth-enhancing ways while constraining unproductive rent-seeking behavior.

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