REPLY

Reply to "*A Critical Comment on the Taylor Approach for Measuring World City Interlock Linkages*" by C. Nordlund

Peter J. Taylor

I do not treat cities as agents. I do not claim to be an alchemist. I do not consider my original illustrative data set to be an adequate basis for discussing actual intercity relations. Theoretical elaboration was not part of the remit of my original paper.

I just want to make four points:

1. Clearly we draw on different literatures in our network analyses. My work is based upon combining two sets of ideas. First, I use traditional ideas from functional-region/spatial-interaction research in human geography. Thus, I identify the two summation measurements I present as "site" and "situation" characteristics of cities. One is based solely on the content of the node (site), and the other brings in values outside the node but connected to it (situation). From spatial interaction modeling I borrow the idea that interactions between places are a product of some measure of the size of each place. In simplest terms, traffic flow between two cities is, in part, a product of their populations: all other things being equal, two large cities will generate much more traffic between them than two small cities. This is the multiplicative element to which Nordlund objects. I call it a "plausible assumption" and adhere to this position; it underlies all spatial interaction modeling in the social sciences. Second, I use an interlocking network model that has important implications for identification of agency. Nordlund appears to believe that I interpret cities as agents in my model; this is simply not the case. For his version of "network analysis," nodes may have to be agents, but in my modeling the "prime agents," as I call them, are at the sub-nodal level: global service firms are the key agency in world city network formation. From my social theory perspective, to treat cities as agents in this process is a gross error of reification.

2. Because we draw on different literatures I am afraid that we may have communication difficulties through using the same word for different meanings. For instance, it may well be that Nordlund's idea of "agent" is different from mine. We certainly have different conceptions of "structural": I treat the term in a historico-

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theoretical way, while he uses the word to mean what I term *relational* (in my methodology—critical realism—the idea of "structural data" is an impossibility). Nevertheless, we can agree that the model I use does not employ actual flow data: that is why I am careful to always refer to intercity relations. These relations are derived from attribute data (again in the tradition of calibrated spatial interaction modeling). Since this is the case, it is incontrovertible that you can reverse the algebra or arithmetic and get back to where you started. Whether this "proves" that my "oranges" always remained "apples" is hardly relevant since I do not claim to be an alchemist; I am merely a data analyst driving a particular measure from a set of data.

3. I find Nordlund's use of my illustrative example as providing empirically results worthy of discussion quite worrying. Although I specifically argued that results from this small data set do not provide meaningful findings about the world city network, my critic chooses to make an empirical challenge on the basis of this flimsiest of evidence: Nordlund focuses on the very small part (just seven cities) of the advertising firm WPP's global office network. Second-guessing WPP's use of cities in their global servicing of clients, he uses his intuition to make a series of "would" and "should" statements that are used as predictions about specific intercity relations. He then finds his "results" derived from the service values for WPP offices in seven cities to be surprising: for instance, that the London–New York interlock link is larger than the London–Paris interlock link. My knowledge of the world city network suggests that this is not at all surprising (London and New York constitute a preeminent city-duo in all my analyses), but this is beside the point. All global service firm's networks are different; they are idiosyncratic depending as they do on such matters as a firm's geographical origin, its agglomeration history, its clientele, etc. Thus, deriving intercity relations using a single firm's service values will often produce surprising results. That is why the method for deriving intercity relations depends upon aggregating a large number of office networks to iron out the idiosyncratic. This process is not designed to hide "flaws," but it is merely an aggregative model in the spatial interaction tradition.

4. Nordlund very briefly refers to a lack of theory in my original argument; he is correct to say this was not covered in the paper. It was not within its remit. For my initial stumblings in a theoretical direction, see Taylor (2004).

LITERATURE CITED

Taylor, P. J. (2004). *World City Network: A Global Urban Analysis*. London: Routledge.