
Population Pressure Problems

Peter N. Peregrine

Lawrence University

Carneiro has offered a thoughtful article for discussion, and I am glad to have the chance to comment upon it. My comments are intended to identify problems (some long-standing) with Carneiro's theory, and to offer some possible solutions. Despite my critiques, I believe Carneiro points us in a direction we must follow if we hope to ever fully understand the rise of states.

Carneiro makes the point that the 'historical particularists' offer little to advance a generalizable theory for the rise of the state. Indeed, I would suggest they do nothing more than offer a self-fulfilling prophecy. If one begins with the assumption that each case of state formation is unique, then one will not see the similarities. But there is danger in the other direction too, a danger that I suggest Carneiro himself may fall into. For if one begins to construct a theory for the rise of the state under the assumption that there can only be a small set of causal factors, that assumption can also become a self-fulfilling prophecy.

I think Carneiro falls into the self-fulfilling prophecy trap in his insistence that population pressure must be a primary cause for warfare and the rise of states. His position is not an unusual one, and has, in fact, been staunchly backed by numerous scholars for half a century. Unfortunately, it has also been rigorously tested and evidence for it has been found to be lacking empirical support. Indeed, in at least two cases – the Valley of Oaxaca and lower Mesopotamia, it would appear that population actually declined just prior to the rise of states (see Hayden 2001: 251–253). Carneiro (and he is not alone in doing this) overcomes these inconvenient cases through some interesting mental contortions. First, Carneiro explains that population pressure is difficult to identify, thus, the empirical evidence suggesting it is not present in some cases

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should not be trusted. But this explanation raises at least two questions: (1) How can Carneiro's theory can be tested if population pressure cannot readily be measured? and (2) If population pressure cannot readily be measured then why assume its presence rather than its absence (or that it varies from case to case)? Second, Carneiro widens the definition of population pressure to include competition for any valued resource under conditions of what he calls 'resource concentration'. Since almost any resource we can think of is concentrated in distinct locations (oxygen and sunlight are obvious exceptions), and will be competitively sought after by individuals, then one has to ask whether this defines a situation dependent on population, or is simply a condition of human life? People compete for resources, regardless of the population size or density, and competition will be greater over resources that are rare or difficult to obtain. Thus, making population pressure the primary causal factor underlying the rise of states seems to me to become a self-fulfilling prophecy.

I agree with Carneiro that warfare is usually a key factor in the rise of states, and that access to resources is often a key reason behind warfare. In recent years there has been a growing body of evidence pointing to unpredictable resource scarcity as a primary cause of warfare in non-state societies (*e.g.*, Ember and Ember 1992). This evidence adds significantly to Carneiro's argument and relaxes some of the mental contortions Carneiro must employ to explain warfare by population pressure. This evidence supports the idea that access to resources is a force which compels people to war in order to survive, but it is not dependent on population size or density. Indeed, it is important to note that population itself is a valuable resource, and unpredictable shortages of people may itself lead to war. The peasant revolts of the mid-14th century in Europe (particularly England and France) were likely caused by the enormous loss of population (and hence labor) following the second Black Death pandemic; in North America, the European-introduced epidemics created a situation of internecine warfare often aimed at capturing slave laborers.

I want to end by raising a problem, and, perhaps, a solution: we do not have a good definition of a state, in part because states themselves vary considerably. This is not a new problem, but it is the one that makes Carneiro's theory easy to criticize, for he does

not provide a clear definition (few have) for what a state actually is and, more importantly, what is very similar but not a state (like a complex chiefdom). This problem disappears if we look at states as part of a continuum that runs from acephalous societies to ones with strong political leaders. Our task then becomes explaining variation rather than presence or absence. I argue that explaining variation is the direction we must take in theory-building in the future. Carneiro provides a solid foundation for that work.

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