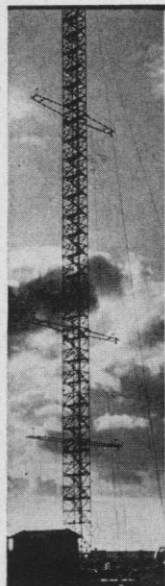


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school systems to make them a more appropriate learning environment than to make youngsters more tractable by drugging them "en masse"? This is only one of many examples which illustrate how drugs often appear to be used as alternatives to constructive changes in the patterns of social arrangements.

Finally, if Brand is indeed correct in claiming that the chemical solution to human problems represents the "growing tide of events," should we then abandon our efforts to dissuade young people from the use of stimulant and addictive drugs and accept their assumption that drugs can be used to achieve the same effects as human relatedness and experience?

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**Why People Formed States**

The circumscription theory concerning the origin of the state as propounded by Carneiro ("A theory of the origin of the state," 21 Aug., p. 733) poses some fundamental problems as to the causes attendant upon the rise of the nation-state which have long mystified political scientists. Carneiro has cleared away some of the rubble of earlier classical theories which have long been the bane of fruitful inquiry in political philosophy. But his theory does give rise to several questions.

How does he distinguish between a community and a state? The primitive communities which he says were pressed by the density of their populations into a "state" as a result of environmental circumscription had many of the prerogatives he uses to define his concept of "state": power to control the time and energy of the inhabitants for collective purposes (taxes), enforcing rules of behavior, and sending men off to combat—and this power they had *before* being "circumscribed."

It is not clear if a group of people became a state when they were settled in a specified area. Were the minions of Genghis Khan a "state"? Under Carneiro's definition the rulers of the Golden Horde exacted services and goods from their followers. Women

were especially controlled, and they made up half the population.

Then again, how does Carneiro's theory handle the ongoing evolution of political organization? The concept "state" is but one point on the political continuum and its uses are extremely limited when one wants to determine the relationship of inputs and outputs within a political process, the understanding of which is much more useful in grasping political phenomena than is the worn-out and often meaningless concept of "state."

It would appear that Carneiro is struggling with the old chimera faced by the classical political theorists, namely, what is the nature of the state. Admittedly, Carneiro does not claim his theory to be all-encompassing . . . but I think he is still caught in a battle of concepts whose origins are value-laden rather than empirically substantiated.

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Carneiro has failed to mention what was probably the most important single factor in the formation of mankind's earliest states—transportation. He rightly rejects "voluntaristic" theories, and various other theories with primary emphasis on the invention of agriculture. He also gives due credit to the role of coercion. What he overlooks is that coercion must necessarily be transported. In most places the formation of the state, regardless of environmental or social incentive, had to await the invention of such tools as the wheel or the ship, or the domestication of horses, oxen, and elephants, for the transport of the means of coercion and the profits thereof. The only important exceptions would appear to be geological circumstances in which states could (or were forced) to successfully evolve for primarily defensive reasons. The earliest central Mexican states probably remained essentially unchanged (despite several interim conquests) until the arrival of Cortez who imported horses and wheels in his ships.

It is interesting to speculate if states would have evolved in the eastern woodlands of North America if the human population there had invented the wheel, or had a pre-Columbian horse population been available for transport. What part did domestication of the llama, or the invention of coastal shipping, play in the evolution of the earliest Andean states? Shipping,

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Dolan asks how I distinguish a community from a state. As I use the term in my article, a community is an autonomous village. A state arises when many such communities are aggregated into a political unit having the power to tax, to draft men, and to decree laws. Dolan believes that communities had these powers before they became parts of a larger political unit. If his definition of a community is the same as mine, then he is mistaken. If he will examine the vast ethnographic literature dealing with autonomous agricultural villages—the type of community with which my reconstruction of political evolution begins—he will find that they lack taxation, conscription, and decreed laws. The power to carry out these functions arises only with supra-community aggregation resulting from continued and successful participation in war.

Dolan also asks how my theory handles "the ongoing evolution of political organization" beyond the attainment of minimal states. My theory is not essentially concerned with this problem. I have tried to explain how the state arose in the first place. How it continued to evolve once it had emerged is a rather different problem. Certainly warfare and conquest still played a large role in this later evolution, but there was more to it than that. However, it is a separate issue which my theory is not obliged to explain.

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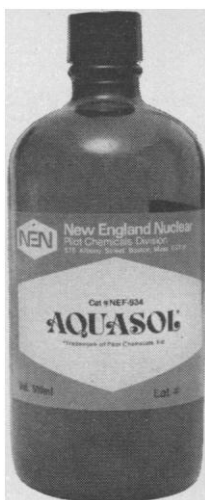
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