

On Rules, Ultimate Causes, and Cultural Motion

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In my admittedly small corner of anthropology, I study the motion of culture, taking "culture" to be what we acquire through social transmission and social learning. I am particularly concerned with how motion takes place -- transmission through the medium of artifacts, especially ephemeral ones like sounds and behaviors, but also more durable ones such as documents and material objects. My special interest is in exploring the forces that bring about and affect motion.

I have identified four (or possibly five) kinds of forces: (1) *inertia*, or the tendency of culture already in motion to continue in motion; (2) *entropy*, or the tendency for cultural artifacts such as narratives or rules to get disorganized or reshaped in the transmission process, of which forgetting, mentioned by Ostrom (2012), forms a part; (3) *interest*, that is, attraction to or repulsion from artifacts, interest generally corresponding to the economic notion of utility, though interest need not be expressed monetarily; and (4) *metaculture*, that is reflexive culture, culture that is about other culture, for example, recognized socially transmitted "rules," like those Ostrom formulates as "genotypes". A fifth candidate is *creativity*, about which I know too little at this point. From the perspective of cultural motion so construed (Urban 2001, 2010), I will try to make a few friendly comments on the game-theoretic view of rules so elegantly formulated by Ostrom (2012), as well as on the sweeping evolution-as-ultimate-cause theory outlined by Wilson and Gowdy (2011).

Regarding "rules," when they are explicitly formulated, as in Ostrom's paper, they depend on cultural artifacts for their transmission or circulation. Rules are a special type of artifact for two reasons: first, because they involve the explicit referential use of language, and, hence, the referential meanings are maximally salient to consciousness, in contrast to cultural forms that rely on non-referential signaling usages, such as ritual lamentation, which I will say more about below; but, also, second, because they are what I have dubbed metacultural, that is, they reflect back on cultural practices, in Ostrom's case, practices related to irrigation and water usage, and they seem designed to affect those practices, simultaneously as they are themselves part of socially transmitted culture. The metacultural property is obviously what makes plausible the analogy to genotypes.

If we think of rules in their public manifestation as cultural artifacts, and ask what their function is, a game-theoretic formulation focuses attention on the referential aspect of rules as artifacts -- that is, on the cultural behaviors described and prescribed by the rules. Without denying the importance of this referential aspect, it is nevertheless significant that the game theoretic

approach tends to mask the existence of rules as cultural artifacts, which happen to be also simultaneously metacultural. If rules are cultural artifacts (not just metacultural artifacts), we need to inquire into how and why they circulate or move. Their very circulation within a community may be part of another and perhaps evolutionarily even more important function, namely to produce the semblance of a common culture, which in turn promotes a cooperative community. This latter function depends on the interplay between the referential and non-referential role of rules as cultural artifacts.

I have elsewhere (Urban 1996) made an argument along these lines for the discursively formulated "rules" of social organization in a Brazilian indigenous community, where the social groups constituted by the rules (and manifested through body painting practices in ritual) were said to be exogamous, that is, you had to marry someone from a different group. In reality, virtually no attention was paid in practice to exogamy, even though everyone at the time of my field research was able to tell me the "rule". This may seem a small revision to Ostrom's formulation, but it could help to account for the empirical finding that sites where water use rules are externally imposed are less productive than those where the rules are internally generated. Internal generation of rules may go along with better social circulation and, therefore, a more cooperative community, one likely to be more productive.

In addition to function, Wilson and Gowdy also draw attention to Tinbergen's "mechanism". One key aspect of the mechanism of the rule, viewed as a cultural artifact, is the interplay between its semantic referential and pragmatic non-referential aspects. To make this distinction more empirically intelligible, let me briefly describe a very different cultural artifact, which I have also had the opportunity to observe firsthand in Brazil -- ritual lamentation. This is a stylized form of crying, which, in the case of the indigenous community I mentioned earlier, involves words but also cry breaks, creaky voice, sing song intonation, and other markers of crying. Importantly, though, the actions can be neocortically controlled -- that is -- turned on and off at will. The form can be used not only in the aftermath of deaths, but also as a greeting, the so-called "welcome of tears". It is an almost quintessential cultural artifact, socially learned and transmitted, and also highly salient. In the analysis I have given of the phenomenon (Urban 1988, 2002), it is important that lamenters manifest or perform feelings, not just talk about them through referential language. Their power lies in their unspoken pragmatic qualities, which are designed to resemble crying but also be distinguishable from it as a socially learned cultural form. The force behind the circulation of the cultural form -- the interest or fascination in it -- derives from its non-referential functioning, but in a way similarly to rules in which the non-referential meaning (feelings of sadness and loss) make for good circulation even though they may not be present or may be summoned by the cultural artifact.

In her paper, Ostrom recognizes the inertial quality of rules as part of culture. Once formulated, the rules then pass down over time. She also points to the role of entropy in the form of forgetting. However, a game theoretic approach, such as she proposes, runs the risk of missing the role of interest as a force contributing to the circulation of rules as cultural artifacts. The rules may be attractive because they are felt to produce a sense of community, not just because of the efficacy of the patterns of cultural activity they prescribe. They may hold interest because they are "good to think," that is, because of the appeal of the referentially imagined world they purport to describe and constitute, despite and even because of possibly wide deviation between

rule and practice. Communal orientation can make the actual practices more efficacious. Correspondingly, exogenously imposed rules may meet with negative interest, what is known in the literature as “resistance.” This tends to inhibit their uptake as cultural expressions of community. Correspondingly, it tends to undercut the efficacy of the behaviors prescribed by the rules, even though the prescribed behaviors might be well-designed to promote efficient use.

Let me turn now to make a brief comment about the evolution-as-ultimate-cause account in Wilson and Gowdy’s paper. *Function* and *mechanism* seem to me important when studying the processes of motion in which I am interested, since they help in figuring out what promotes and retards the motion of which cultural forms. If I understand *development*, the analogy to biological development would be in terms of how new individuals – for example, young children or recent immigrants – come to acquire their orientations to cultural forms as well as their abilities to reproduce them. This is certainly crucial for an understanding of cultural motion. The analogy to *phylogenesis* may be through archaeology and cultural history, which supply a perspective crucial to illuminating the motion of cultural forms through longer stretches of time.

My one hesitation is that the biological analogy tends to treat the world to which organisms or cultural forms are adapting as given. We know that animals other than humans reshape the world – beavers, for example, create dams, with the attendant consequences for riverine systems. However, equipped with culture, humans are able to transform the objective world to an unprecedented extent. We have been tinkering with genetics for thousands of years through breeding, an ability that has been greatly amplified by biological science in recent decades. Through cultural accumulation of many sorts, we are now able to transform environments to unprecedented extent. If we can use the crystal ball to gaze into a distant future, we might ask ourselves what the limits of that reshaping could be. Culture might certainly be seen to be adapting, since it would be proliferating in the universe, but it is unclear how effective our current knowledge of the universe is in providing an ultimate causal understanding. There is a cutting-edge effect here, in which the cultural element may be creating a new environment into which it fits. Because of the rapidity with which this transformation can take place in the case of cultural elements, it may be impossible to ascertain whether a present day cultural element is in the process of creating a new world in which it is adaptive, or whether it is something destined to die out in short order because of its lack of fit in the present world.

Of course, we might also ask whether the survival of genes per se will prove crucial in some distant and impossible to glimpse future. Suppose self-assembling and self-reproducing machines — such as von Neumann (1966) imagined many years ago — became the more important carriers of culture, making genes per se obsolete or at least secondary, as some science fiction might suppose. Think of 2001, A Space Odyssey: “Open the pod bay doors, Hal” – “I’m sorry, Dave, I’m afraid I can’t do that.” While ultimate cause may prove explanatory of cultural element, we may not be able to foresee its adaptiveness, because it makes sense not in this world right now but in a world that is coming into being as a result of the cultural element.

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