Elinor Ostrom and the Contestable Nature of Goods

Author : Pablo Paniagua

Following the work of Paul Samuelson, many economists have assumed that whenever markets struggle to provide certain public goods and services, the state should aid their production. This simplistic conclusion presupposes that only two optimal organizational forms exist for the production and provision of goods and services: markets, which provide purely private goods and states, which provide public goods. If one fails or is deemed inefficient, the other must prevail. This dichotomous view is not limited to the analysis of economic goods and services, and is often extended to intangible social goods. Viewed in this light, the social and economic order can be conveniently reduced to a binary struggle between markets and the state. If a specific institutional arrangement does not fit into one of the two predefined categories, it is treated as a distortion to be corrected.

Elinor Ostrom and her collaborators showed that the binary taxonomy ignores a wide variety of alternative institutional arrangements such as clubs and common-pool resource systems that individuals and communities devise to overcome collective challenges. Ostrom rejected the presumption that only one form of organization is suitable for the production and provision of a specific class of goods and services. Instead, she emphasized contestation. Rather than pre-judging what an optimal institution should look like, she sought to derive lessons from self-governing institutions operating in the real world. She found that, far too often, seemingly sub-optimal institutions outperformed and outlasted institutions that appeared optimal from an engineering standpoint.

Consider her famous example of over 600 Zanjera irrigation communities in the Philippines before the colonial period. These communities employed relatively crude technologies and labor-intensive methods. Their systems were not technically efficient, but they successfully adapted their rules to outlive many regimes. Many purportedly optimal market and government-provided irrigation systems came and went, but the Zanjeras remained.

For Ostrom, the factual or observable nature—instead of the abstract or *a priori* defined nature—of the goods and services in question is the analytical entry point for social scientific analysis. Looking beyond traditional dichotomies of goods and modes of production (private versus public, markets versus states), Ostrom argued that the nature of goods is institutionally contingent. Whether a good is private, public, or otherwise is not an intrinsic feature of the good. This is not to say that the biophysical characteristics of the resource system or the attributes of the good are irrelevant, but rather that they interact with existing institutions. The nature of the good is therefore discovered from the contestation and/or cooperation of a variety of institutions.

While an attempt to classify a good or resource like the Zanjera irrigation system as private or public may be a valuable theoretical exercise, it is unlikely to generate productive policies if we ignore the specific features of the resource system and the institutions within which it is embedded. Policy conclusions which neglect these factors can crowd out self-governing mechanisms already in place, or, even worse, lead to the destruction of the resource system.

Economists use two attributes to define a public good – non-excludability and non-rivalrousness. Non-excludability means that a non-payer cannot be excluded from consuming the good. For example, when you buy a sandwich, you can easily exclude others from consuming it (the sandwich becomes a private good); whereas in the case of national security it is much harder to exclude non-contributors from using it (national security becomes a public good). Non-rivalrousness means that consumption by one person does not reduce it for others. For instance, in a communally owned fishing lake, fish are rivalrous. If one appropriator extracts some fish, that subtracts from the total pool of available fish for others to consume. On the other hand, television broadcasting or Netflix services are non-rivalrous goods. As long as the bandwidth is sufficient, or the living room is sufficiently large, joint consumption is possible.

Ostrom and her collaborators contended that the two features – excludability and subtractability – are not all-or-none categories but matters of degrees. Based on a wide range of field studies of common-pool resource (CPR) systems, they concluded that communities devise operational and management rules to balance their immediate economic needs with the goals of the long-term preservation of their resource systems. For instance, the Zanjera villagers developed elaborate monitoring and sanctioning rules to exclude non-members from appropriating and to prevent members from over-appropriating. Without those rules, water from the irrigation system may be deemed non-excludable. But once the institutions are put in place, it becomes excludable. Thus,

the nature of any good cannot be identified in an institutional vacuum. In other words, what is excludable or rivalrous (subtractable) depends on technological and institutional factors.

In our recent article published in the *Journal of Institutional Economic*s, we draw from the above Ostromian insight to argue that the two attributes (excludability and subtractability) are not static but institutionally contingent, contestable and dynamic features. If institutional factors that impact the degrees of excludability or subtractability change, this can result in a change to the nature of the good itself. To illustrate this point, we explore and codify four complementary mechanisms through which the nature of goods and services can change over time.

First, technology and geographical factors can influence the degree to which a good is excludable and/or subtractable. Fish in an open sea are less excludable than in a farmer's pond. Water in an open sea is less subtractable than in a local stream.

Second, the degree to which a good or service requires consumer inputs for production – that is, co-production – determines whether the good can be reliably produced by a given institution. Education is one such high co-production good, which requires 'consumer inputs' (student efforts) if the good is to be produced at all. Adopting learning technology can motivate high consumer inputs in many instances. Thus, depending on an entrepreneur's choice of institutions, a good's typology can change.

Third, heterogeneous goods and services can be bundled (or unbundled), changing their nature. A post-disaster relief package is one example where FEMA, a local church or association may bundle a variety of goods (private, public or otherwise) and provide them jointly.

Finally, political and legal changes, including regime changes, can alter the economic incentives associated with ownership, production and provision of goods, exogenously (and coercively) changing the nature of the goods. Economy-wide restrictions of private production through nationalization schemes are examples of such change.

We then proceed to argue that if a good's excludability and subtractability are contestable and dynamic properties, the conventional static classification cannot provide a reliable framework for effective public policy. We emphasize that polycentricity offers a malleable and adaptive framework for public policy analysis to account for the dynamic nature of goods. Polycentricity, in this context, entails multiple centers of decision-making operating independently at different levels and scales – competing in one area and/or cooperating in a different area – to produce and provide goods and services. Because each decision node is subject to competitive pressures and cooperative opportunities, such an arrangement allows for experimentation to devise efficient methods to match the nature of a specific good with its appropriate level and scale of provision.

Finally, we discuss various scholarly implications of the dynamic nature of goods. By integrating ideas from transaction cost economics, the dynamic framework can pave the way for new insights on institutional change and path dependence. For example, transaction cost theories can explain why a certain class of goods is provided by a specific institution even when there is a consensus that a different institution is more fitting. In other words, the dynamic framework may better explain institutional rigidity. We conclude by arguing that the Ostromian attempt at reconstructing the good typology is a valuable area of research that needs to be further explored.