

Carlo Donolo

## Comment on Elinor Ostrom/2. Commons in Collective Action Problems

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# Comment on Elinor Ostrom/2

## Commons in Collective Action Problems

*by* Carlo Donolo

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1. To produce public goods we have to solve collective action problems. Especially to govern commons, natural and local, we strive to avoid the impending tragedy of the commons, and therefore we need an effectual collective action to establish rules, costs and benefits of allocation, sanctions. In any practical situation in which we seek for ways to overcome the plural obstacles which impede an easy solution, we encounter just some of the goods that we are called to produce. In such cases, they present themselves as resources to solve the problem. As far back as from Hobbes we know that in order to bring out a “constitution” to avoid the state of nature (that can be posited as equivalent to a deployed and chronic tragedy of commons) it is necessary to “convene” on meta-rules and other constitutional institutes. The latter must be “common” and able to generate pertinent and trustworthy regulations. In order to convene (the English word covenant is very expressive), we need primary commons such as language, communication, understanding, general moral intuitions concerning the just and the unjust, and so on. We must also be able to recognise (in ourselves and in others) cooperative, altruistic motives and finally we must have the capacity of mutual recognition. It may sound paradoxical, but to solve a given collective action problem we must have already solved other similar problems, either on another level or on other matters. Alternatively, we must be able to learn from the good practices of others. Learning, however, implies a normative endowment in and by the actors and the sharing of a common good. In a sense, we can say that to learn is similar to solving a collective action problem, considering the need for self-control and for a certain covenant between divergent psychic instances. That problem is searched for by Ostrom in the form of an experimental psychic (motivational) economy.

I stress, then, that commons (perhaps the same common pool resources) occupy two different analytical positions: both as a resource for and as a matter of the tragedy to be avoided. Streaming up the process of production of such goods, the collective action itself, the searching for the “solution”, and the solution (rules, institutions and so on) are resources and matters. The tragedy pertains primarily to the commons to be managed and at a second level to the problem solving process itself. Hence the continuous drama, the “struggle” underpinned by Ostrom in so many insightful analysis. Translating the tragedy in a perennial drama with many variable momentary end-states, each one relatively satisfying for the involved community, it does imply the availability of commons that are pertinent to the solution of the governance problem. They can be also produced in and through the same process of “struggling” or “muddling through”. The double status is sociologically obvious, upon the tenet that only in a society can there be collective action problems. There is a tragedy here because a tragedy has been avoided in some other time and space. In any concrete situation, however, commons for governance have to be mobilised, accessed and formatted for the problem at hand: that is the collective action problem, so often recursive and reflexive. The activation of virtual or artificial commons – knowledge, know-how, trust, technology – is necessary to try and govern the societal relationship with natural, local or global, commons.

However, only a hyper-socialised vision of social things and processes – prevailing, but often contested in sociology – may induce us to believe that the arrow goes only in one direction: from society to nature, from social commons to natural commons (a distinction more and more difficult in a growing artificial world, that re-naturalises the social). The same natural commons are responsible for the patterning of the social commons. We understand well the double bind when we consider the territory, as a type of meta-common, as the interaction between social ecosystem and natural ecosystem. The latter, with many of its attributes, gives form to the social one. And this is true not only in antecedent phases of human development, when society was dependent upon the natural ecosystem, given the limited and problematic efficacy of available technology. Yet with the arrival of globalisation, natural local ecosystems co-produce local social systems: urban areas, industrial districts, clusters, knots in networks.

2. Considering the double role of commons as a matter and as a resource, as a premise and as an outcome, a neoclassical frame based on de-socialised actors, strict self-interest, high interest rates on future, individuals without a society will encounter many difficulties. The resources for building up a society will be found along the route, in the process, even if they are given from the beginning, let’s say as potentials, such as reciprocal trust, or the intelligence needed to change the adopted

discount rate. Many economists are at work to set the frame right and to argue about and in favour of a more socialised actor. E. Ostrom moves away from the standard rational choice frame and then tests it in prototypical situations, registering the many intervenient variables – also the constituent elements concerning the nature of the actor and of the game. Such factors show up progressively in the interaction through fine-tuned variations of the game situation. As E. Ostrom, says in the final statements of her essay, if we will be able to disentangle some strategic factors from the mass of observed variables, we will finally have at our disposal a complex of cognitive and normative resources. They will allow a redesign of the constituent elements of a polity, set in the position to recover self-governance capacity. Here we can follow also many knowledgeable hints by V. Ostrom and consider that the process will be not so much engineered as participated and constructed by collective action. The chief form of self-government is the governance of the exchanges between the natural ecosystem and the societal ecosystem, the government of territory. This has always been true, but today it acquires strong evidence given the environmental crisis, the global change, through its local and global symptoms, in the double bind with the destiny of so many local commons.<sup>1</sup> Anyway, varying the information or the communication allowed in experimental sets, making the rules of the game, the dimensions of groups and the timing of the game increasingly complex, we do not obtain the foreseen variables, but we generally find much more resources for treating collective action problems than what we had initially assumed. We “discover” that actors are socialised from the very beginning and that the same interaction produces socialisation effects. Socialisation is the process that allows all that is common, the societal and social bond, itself a common, constructed through commons, to emerge, to consolidate, to be put at work.

3. Thinking about social interactions and exchanges – yet in a laboratory games are more or less formalised – leads us to conceive interaction as a learning process. E. Ostrom puts it right, when she underlines that learning – as the discovery of new intervening variables or of new preferences – demands appropriate contexts; learning can also be impeded, or prove itself inadequate for the task. Appropriate contexts are normatively structured, they are institutional settings, and these are also in many ways commons. The “solution” to a collective action problem can be essentially reformulated as a “design” of a context wherein the learning process can take place.

<sup>1</sup> The endemic socio-political crisis in Italy, the so called “caso italiano” – well known through the studies of Banfield, Putnam, Tarrow or Allum – finds its axis precisely in the systematic “malgoverno” of the relationships between the two ecosystems in modern and contemporary times. Crainz [2005] has spoken of a “failed” country, i.e. of a country unable to handle its own tragedy of the commons productively. The same high political fragmentation reflects the difficulty to solve collective action problems, and consequently to build up pertinent institutional solutions.

Institutions as commons are surely of human design and also the outcomes of uncalculated consequences of actions. As a design, they appear in the reflective and retrospective process of recognition and legitimisation. Learning cannot spring out of a *tabula rasa* or of a de-socialised actor. Sen has criticised precisely this model because of the poverty of information allowed on the constitution of the actor himself. Learning presumes a social actor. Specifically, the actor must avail himself of an apparatus for learning, and that implies the assimilation of normative components in function of cognition processes.<sup>2</sup> The interaction in the collective action set is essentially a process of activation or enactment of potentials, resources identification and accumulation, learning of new vocabularies and preferences. In an experimental context the variables schematised by E. Ostrom can be unknown at the beginning – to actors and to observers – and unfold themselves in and through the interactive process, often stimulated by variance of rand conditions. The growing social matter via learning is the social component, to say the quality and quantity of social bonds; we can interpret the greatest part of it under the heading of social capital.<sup>3</sup>

<sup>2</sup> I will not say more on this here, but cfr. Conte [1997]. For brevity, I do not stress here the obvious difference between an individual and a collective actor: with their different memory systems, calculations, timing, agendas and formation of preferences.

<sup>3</sup> It is worthy to note that social capital denotes a class of social resources, when they are placed inside a valorisation process, principally in the economic growth. In the cases discussed here we observe much more an institutional or constituent process. In this case the social capital resources are not facilitators (of functional nexus between variables in a frame of bounded maximization), but they are directly constituent or institution building factors. In the games Elinor observes, they are normative resources, inductive to law making upon matters of common interests. It is also possible to state that only the antecedent solution of many constituent dilemmas allows the design of a maximising function of production. Such resources make it possible for Sen to propose the overcoming of the neoutilitarian frame, re-introducing excluded information and cognitive resources: meta-preferences, criteria, experience, multidimensional identity. The parallel between the intellectual enterprise of Elinor and Sen would be worthy of a much more extensive interpretation. Let me stress only one point. The numerous social variables (reputation, trust, reciprocity norms, intuitions concerning the just/unjust) that Ostrom reintroduces progressively in the experimental setting are all together forms of game intelligence and valorisation of communicative and interactive potentials. At the end they are “discovered” as strategic in various local and historical combinations, and as such they also become points of reference for any search of solutions for looming problems. Thus, the discourse – yet based on diverse analytics – approaches the ideas of Sen on capabilities. Many of Ostrom’s variables intervene as conversion factors of the original resources of the actor (entitlements or dotations). They are themselves resources or feasibility conditions for a choice set and for its social legitimisation. The amplitude of the feasibility set depends crucially on such interaction potentials. To approximate the chance of a positive collective action for the handling or governance of a common do imply the deliberate (it means: to reflect for choosing) enlargement of the feasible set and the change in their collective legitimisation. Going back to the arguments of Sen and Ostrom we see that the governance of commons is often hindered by the mere fact that the actors stay within a set that is too restricted, or in an opaque, myopic or rationally degraded set. Elinor’s intervenient variables work – or anyway they offer a chance to work – as expansive forces of the feasible set and they are able to bring the actor to an otherwise hampered reflexivity level. Reflection, moreover, is always both cognitive and normative. Tragedy is also and always a tragedy of institutional, social and individual obtuseness. Therefore: no “struggle for commons” without capabilities.

Ostrom shows in great detail as the socialising components do emerge and function (here the word can be very near to the meaning of “functioning” in Sen’s frame).

I wish to stress one aspect only: for the collective action problem the learning of new or better preferences is very important. Ostrom registers the fact that actors modify their preferences at the light of new information (brought about through interaction). Information concerns the status of actors, the stakes, the nature of the game itself. From a cognitive point of view we have to do with reflections about interactions. The experiences made in the different phases and cycles of the social game are selected by meta-preferences, meta-level preferences able to hierarchise preferences in factual choices. Obviously, many trade-offs are possible and necessary between preferences and between meta-preferences (of regulative principles, or evaluation criteria). Each trade-off is itself “judged” by more and more general criteria. Regulative principles and information confront themselves as in any case of intelligent conduct. The quality of available and accessible information (reliability, completeness, truthfulness, trustworthiness) will be central, and the solidity of meta-preferences – elaborated in an often long history. Information is collected on the field; meta-preferences are stratified in the middle and long term experience. They are the reflexive “memory” of what is of value. They are rooted in the past and project themselves in the future; information, on the contrary, is very much tied to the present. As a mediating factor time plays an important role here, under the disguise of the discount rate.<sup>4</sup> This element is a derivative form the play between meta-preferences and local-present preferences. It also depends very crucially from the dotations – also in terms of functioning – of the actor. Normally the actor is constrained to accept current social evaluations crystallised in the dominant discount rate, to avoid a too great existential risk.

Here we encounter the question of the feasible set for the actor (especially for the collective actor, or for the actors in a collective action setting). The set is socially defined, but always in an enlargeable sense, it depends from current power and authority relations. Not at random, collective action and conflict are strictly interrelated.

4. Finally, for the solution of a collective action dilemma and to handle the tragedy positively (to transform it into a drama, as Ostrom suggests), we need a capacity to learn new preferences. Said better: we need “better” preferences, different from the ones conducing to the stalemate or to the tragedy. In democracy, as self-gov-

<sup>4</sup> We use the language of rational choice, however it must be stressed that its legitimisation is far from being self-evident when we have to do with commons such as territory in the above-defined sense or with the handling of a tragedy. Briefly: the Kantian transcendental conditions of subsistence of human society (in the words of Polanyi) – and the same social embedding in the natural ecosystem – cannot be categorised as “resource”, or only in very limited and highly prudent terms.

ernment under a constitution, actors may choose in which sense some preferences are better than others. Also the forms of the multilevel federalism analysed by Vincent Ostrom, so as the institutional formulas studied by Elinor for the multi-scalar governance of commons, are resources for a covenant on the conditions of the learning process. All contemporary debates on the sustainability of socio-economic processes are centred on this. Poverty of information, preferences formed in previous development phases, institutional interests, deficits of institutional and regulatory frames, incomplete or blocked subsidiarity: these are the intervening variables that make the governance of commons very difficult. We may turn back to the analyses of Elinor Ostrom, persuaded that in her catalogue we will find the necessary means to acquire capabilities in the handling of looming tragedies.

## References

- Bratti, A., and Vaccari, A. (eds.)  
2006 *Gestire i beni comuni*. Edizioni Ambiente: Milano.
- Cassano, F.  
2004 *Homo civicus*. Dedalo: Bari.
- Conte, R.  
1997 *L'obbedienza intelligente*. Laterza: Roma-Bari.
- Crainz, G.  
2005 *Un paese mancato*. Donzelli: Roma.
- Dasgupta, P.  
2004 *Benessere umano e ambiente naturale*. Vita & Pensiero: Milano.
- Donolo, C.  
1997 *L'intelligenza delle istituzioni*. Feltrinelli: Milano.
- Donolo, C.  
2007 *Sostenere lo sviluppo*. Bruno Mondadori: Milano.
- Elster, J., and Slagstad, R.  
1988 *Constitutionalism and Democracy*. Cambridge University Press: Cambridge.
- Elster, J.  
2004 *Ulisse liberato*. Il Mulino: Bologna.
- Ostrom, E.  
1999 "How some communities have avoided the tragedy of the commons". Università di Trento, Centro sui demani civici e le proprietà collettive, Serie Quaderni, 4.  
2000 "Collective action and the evolution of social norms". *The Journal of economic perspectives* 14 (3).  
2002 *The Tragedy of the Commons*. National Academic Press: Washington.

- 2006 *Governare i beni collettivi*. Marsilio: Venezia.
- Ostrom, E., Dietz, T., and Stern, P.C.
- 2003 “The struggle to govern the commons”. *Science*. 392: 12.
- Ostrom, E., Low, B., Simon, C., and Wilson, J.
- 2000 “Redundancy and diversity in governing and managing common-pool resources”. Paper presented at the 8<sup>th</sup> Biennial Conference of the International Association for the Study of Common Property, Indiana University.
- Ostrom, V.
- 1987 *The Theory of a Compound Republic*. University of Nebraska Press: Lincoln.  
*The Meaning of Democracy and the Vulnerability of Democracy*. University of Michigan Press: Chicago.
- Sen, A.
- 1985 *Commodities and capabilities*. North-Holland: Amsterdam.
- 2005 *Razionalità e libertà*. Il Mulino: Bologna.



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Abstract: Developing a coherent theory of collective action that is also relevant for practice in explaining local development is a major challenge. At the individual level, individuals do take costly actions that effectively take the interests of others into account in many field and experimental settings but this is not consistent with contemporary game theory. We need to move ahead to achieve a more coherent synthesis of theoretical work that posit variables affecting the success or failure diverse forms of collective action. The first section of this paper discusses the growing and extensive theoretical literature positing a large number of structural variables presumed to affect the likelihood of individuals achieving collective action to overcome social dilemmas. None of these structural variables, however, would change predictions if one uses the *model* of rationality that has proved successful in explaining behavior and outcomes in competitive market settings as a universal *theory* of human behavior. Thus, the second section examines how a theory of boundedly rational, norm-based human behavior is a better foundation for explaining collective action than a model of maximizing material payoffs to self. The third section examines the linkage between the structural measures first discussed with the individual relationships discussed in the second. The fourth section looks at how changing the rules of a focal dilemma in deeper arenas in efforts to improve the net benefits from collective action by affecting the structural variables of the focal arena. The conclusion reflects on the challenge that social scientists face in testing collective-action theory in light of the large number of variables posited to affect outcomes.

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*Keywords: collective action, social-ecological systems (SESs), inter-disciplinary research, multi-level development, sustainability.*

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**Carlo Donolo** teaches *Institutional analysis and complex systems* at the Faculty of Statistical Sciences, Sapienza University of Rome. Recent publications: *Il distretto sostenibile* (Milan, 2003); *Il futuro delle politiche pubbliche* (ed., Milan, 2006); *Sostenere lo sviluppo* (Milan, 2007); “*Networking as disembodied capacity building: testing Sen’s capabilities*”, ISA XVI Congress (London, 2007); “*Territory as a matter and as a matrix of conflicts*”, ISA RC37, Rome, June 2007; “*For a just and sustainable knowledge society in Europe*”, in ISSI Report (Milan, 2007).