The Global Rule of Law, Social Justice and the Commons

By

Winston P. Nagan

Sam T. Dell Research Scholar, Professor of Law

Director, Institute for Human Rights, Peace & Development

Levin College of Law

University of Florida

Montenegro Academy of Art & Science

March 20-22, 2014

Introduction

This conference has its focus on society in transition. The challenge that this represents is well expressed in the Shakespearian phrase: “To be, or not to be: that is the question.” We normally think of the commons in terms of territorial space. This is historically true. However, in our time there may be other “spaces” that may be candidates for inclusion in the values represented by the commons. A consideration of these issues covers a wider focus on human values and institutions.

A consideration of the commons discloses an arena of important value contestation in our time. The key values that emerge from a successful commons experience stresses such human values as altruism, compassion, reciprocal tolerances, shared caring, mutual concern for life and the environment, concern for the sustainability for the environment including a restrained imprint attributable to its human uses. It also generates internal norms of self-regulation, conservation, mutual deference, and often, policy centric forms of management. It is these values that modern economists suggest represent the tragedy of the commons. These values do not elevate private property over commons interests. However, modern economists suggest that without private property the common resource pool of the commons is doomed to extinction. In short, self-interest, greed in the form of private property, is the only solution to the rational management of the commons. This clash of values has, as we shall try to show, significant ramifications of global importance.

The status of the ancient idea of a people’s commons has become a major focus of important theoretical contestation. The initial challenge to the commons idea in the modern period emerged from an important article which suggested that a form of tragedy underlie the fundamental idea of the commons itself. The author of this article, Garrett Hardin, argued in 1968 that the freedom in a commons would end up bringing ruin to everyone. In short, Hardin suggested that if the resources of the commons were not privately owned, it would be destroyed by the greed of individuals. At the back of Hardin’s view was the theory of neo-liberal economic policy. Using the commons to illustrate the primacy of state/market economic policy as the only rational foundation for a sound economic order was itself a matter of considerable disputation. I would suggest that this dispute implicates important elements of global economic, social, and environmental justice. The central challenge is the notion that only and exclusively, a private property regime can prevent the tragedy of the commons.

The Commons in Anglo-American Legal Culture

Most citizens who live under Anglo-American law look to the Magna Carta as the foundation stone of Anglo-American liberty. It is often forgotten that the Magna Carta was accompanied by the Charter of the Forest. Both these charters represent what Churchill described as “the Charter of every self-respecting man at any time in any land.” According to Noam Chomsky:

> “The companion Charter of the Forest is perhaps even more pertinent today. It demanded protection of the commons from external power. The commons were the source of sustenance for the general population - their fuel, their food, and their construction materials. The Forest was no wilderness. It was carefully nurtured, maintained in common, its riches available to all, and preserved for future generations.

By the 17th century, the Charter of the Forest had fallen victim to the commodity economy and capitalist practice and morality. No longer protected for cooperative care and use, the commons were restricted to what could not be privatized - a category that continues to shrink before our eyes.

Last month the World Bank ruled that the mining multinational Pacific Rim can proceed with its case against El Salvador for trying to preserve lands and communities from highly destructive gold mining. Environmental protection would deprive the company of future profits, a crime under the rules of the investor rights regime mislabeled as "free trade."

This is only one example of struggles under way over much of the world, some with extreme violence, as in resource-rich eastern Congo, where millions have been killed in recent years to ensure an ample supply of minerals for cellphones and other uses, and of course ample profits.

The dismantling of the Charter of the Forest brought with it a radical revision of how the commons are conceived, captured by Garrett Hardin's influential thesis in 1968 that "Freedom in a commons brings ruin to us all," the famous "tragedy of the commons": What is not privately owned will be destroyed by individual avarice."

The Commons Problems Today

The status of the commons is a matter of major national and global concern. The protection of the commons at every level from local to global, and to seek as well a clarification of the important values behind the commons idea and how those values may be better secured when understood in terms of the basic values of the global rule of law, as well as issues of global social justice and equity.

As we have seen, in the Anglo-American legal tradition, the existence of a domain of space recognized as a commons was rooted in the history of the common law itself. This was a space, which was accessible to all participators in the benefits that may be brought about by a common space. However, the precise notion of the title of the commons was murky in the sense that it was rooted in traditional and customary practices. This seemed to suggest that specific rights of individuated ownership by the commoners in the enjoyment of the commons space, was less important than the customary practices generated by a reciprocated altruism. To the extent that the commons has a regime, it is a regime that seems to manage common pool resources and resists private property rights or state control. This is a regime that could technically fall into a legal vacuum. Certainly a troublesome proposition. To the extent that the commons exhibits patterns of behavior that appear to be self-regulatory and founded upon mutual reciprocated tolerances, these behaviors suggest that they are self-organized in the commons community and their enforcement is complicated and sometimes even idiosyncratic.

Advanced contemporary forms of jurisprudence have identified, with modern tools of analysis the idea that there is in the human community a widespread use of what some theorists call micro law. Other theorists describe this as vernacular law. Essentially, what has been identified is that the commons is not a legal vacuum, but a repository of norm generation, institutional creation, as well as

identifiable procedures that a community of peers invents to manage certain resources in the commons on its own. This type of governance structure leans heavily in a non-coercive democratic direction.

The increased tensions between the micro law of the commons and the more general law of the state was enhanced as society moved from status (feudalism) to contract (mercantilism and capitalism). A society based on contract came with a market and the market could exchange goods and services, which came in the form of property. The commons was an awkward fit for this development. However, the practice of maintaining the commons has continued well into our time although it has attracted controversy because of its ostensible incompatibility with the property law foundations of capitalist political economy. In our time, it has become clear that the neo-liberal paradigm of economic order contains major defects, in important areas of economy and ecosystem. The central problem of neo-liberalism is that its embrace of freedom disparages limits on freedom or the prospect that freedom may evolve into destructive license. For example, the freedom to exploit the natural environment often assumes that the environment is inexhaustible and that therefore the exploitation of this resource should ostensibly be without restraint. In this sphere of financial regulation, the development of a financial culture with no restraints is commonly regarded as one of the causes of the economic crisis the world has just experienced. On the other hand, the commons may exhibit a weakness, reflected in work that underlines the so-called tragedy of the commons. In short, if the entire form of economic organization requires all things of value to be property in order to function in the market, then the commons which does not have a protected form of legal space could be appropriated by the enterprising appropriator and maximally exploit the common resource pool in the commons until it is exhausted. The commons would be destroyed and the appropriator with his mobile capital may simply move on.

The commons implicates common land within states; it could implicate wild life, which has historically enjoyed a status outside the notion of private property since the time of the Roman Empire. It could encompass endangered species, wilderness conservation, oceans and seas, special land masses such as Antarctica, space, as well as bodies of matter that occupy space. It will therefore be clear that there is an enormous amount at stake in the notion of the commons viewed from the global perspective. The obvious tension would be in the self-interest and avarice of the capitalistic expropriator who would seek to find mechanisms and devices for asserting the claims of private property over aspects of these resources and the concern of classic commons values that in general, these resources are the common heritage of all the people.

The Alleged Tragedy of the Commons

The study of the commons in the modern period has been significantly influenced by a single article published in the journal, Science in 1968.[1] Hardin built his insights around a common sense limited narrative. We assume there is land that constitutes a communal pasture. The participators in the commons graze their animals on the land. If a participator decides to enhance his personal economic advantage by adding more animals to graze, the net effect of such use may result in the destruction of

[1] G. Hardin, The Tragedy of the Commons, Science 162, 1243, 1248 (1968).

the common grazing area by overgrazing. Because the commons essentially functions in this narrative in a kind of legal vacuum, the problem of preventing the destruction of the common grazing area must be left to the conscience or sense of morality of each individual participator. These counter veiling values may not be strong enough to constrain self-interested action, which may be driven by selfish or greedy impulses. This is summarized by Hardin as follows: "Therein is the tragedy. Each man is locked into his system that compels him to increase his herd without limit – In a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own interest in a society that believes in the freedom of the commons." This simple narrative had large-scale implications, which in effect overlapped the multitude of other disciplinary insights. The insight was seen to implicate a multitude of other problems. For example, in the environmental context there would be the overgrazing on federal lands, acid precipitation, ocean dumping, discharging carbon dioxide into the atmosphere, exhausting fossil aquifers, overfishing, and more. In the hardened model, we are presented with a profound dilemma. We have rational individual behavior acting without limits to maximize short-term personal gain. Such behavior can generate long-range harm to the environment, to all non-self others, and indeed, to oneself.

The Ostrom Response to Hardin

Scholars have been critical of the lack of clarity in Hardin's work on the nature of the resource. For example, the distinction between the public good and the commons. In general, public goods may be non-consumptive. For example, weather forecasting may be a public good but it cannot be exhaustive. Critical to the analysis should be where the resource is subtractible and consumption by A may deprive B of that resource. Although not all the uses of subtractible resources need be catastrophic. Access to the resource may be a means of restraining its over exploitation. Regulating access could avoid Hardin's tragedy. The scholar that has done the most credible work in seeking to modify and constrain the concept of tragedy tied to the commons is in the work of E. Ostrom.[2] Ostrom gave careful attention to commons type practices such as the grazing and forest institutions of Switzerland and Japan and the irrigation systems of Spain and the Philippines. Her conclusions from empirical study demonstrated that durable common pool resource institutions were sustained by certain conditions. She identified eight:

1. Clearly defined boundaries
2. Congruence between rules and local conditions
3. Collective choice arrangements
4. Monitoring
5. Graduated sanctions
6. Conflict resolution mechanisms

[2] E. Ostrom (1992) The Rudiments of a Theory of the Origins, Survival and Performance of Common Property Institutions, in D.W. Bromley, Ed., Making the Commons Work: Theory and Practice and Policy; E. Ostrom, Governing the Commons: the Evolution of Institutions for Collective Action (1990).

7. Minimal recognition of rights to organize

8. Nested enterprises

A further important addendum to Ostrom's conditions is the development of creating CPR institutions that also use adaptive muddling processes. This represents the generation of multiple solutions of problems in the field and which permit the exploration of problem solving experimenting with a multitude of initiatives simultaneously. The muddling involves small steps and muddles that don't work are not catastrophic and muddles that do work can clearly be adapted as part of the workings of the CPR.

This particular approach appears to work on the notion that the commons is not *res extra commercium* but is rather in the nature of res nullius. As earlier indicated, an important body of scholarship began to focus on this problem led by and Indiana political scientist, Elinor Ostrom, whose work has most recently been summarized by Robert Hoffman and Derek Ireland.[3] What Ostrom established with sophisticated social science scholarship was that one could with appropriate tools to focus observation, determine that the commons and its common pool resources did not exist in a legal vacuum but had identifiable institutional structures that simply required more sophisticated understanding of internal governance of the commons. Thus the commons would exhibit user and resource boundaries, management consistent with local conditions, rules concerning the appropriation of benefits, collective choice arrangements, monitoring users and resources, graduated sanctions, conflict resolution methods, recognition of the appropriators right to organize, and the existence of nested enterprises covering a range of institutional activities internal to the commons. In order to modernize the commons management today requires imagination and creativity, requires as well an interdisciplinary perspective, which permits the identification of polycentric governing solutions. Ostrom has provided us with the antidote to the tragedy of the commons.

The identification of an institutional culture within the commons as well as the important markers that identify different components of this phenomenon generates as well the challenge of original and creative governance solutions. It would be worthwhile if we first could briefly identify in general the values that the institutions within the commons are supposed to secure and enhance. These values are implicated in resources, basic services, public spaces, cultural traditions, essentials of social life, all of which could be seen as a part of a public trust. Hence, the key values behind the commons idea appear to be are that life, communication, human relations, culture and natural resources are not for sale, as property in the market. I would suggest that these values are tied, today to the global rule of law idea which itself must include the idea of global justice. The challenges therefore to the commons may also be challenges to the global rule of law and global justice.

Rule of Law Developments that Facilitate a Better Understanding of the Commons and Global Justice

When we recognize that the domain of the commons at whatever level we define it is a contested domain, we see the problems and challenges more clearly. The pressures for growth, access

[3] Elinor Ostrom, Institutions and Governance of the Global Commons, Second Draft, Robert Hoffman and Derek Ireland, July 2013.

to resources to balance the budget, the pressures to commodify as much of nature and human activity represent a danger that the commons may well be appropriated by special interests at the expense of the common group. To bring the rule of law into the discourse of the appropriate place of the commons in the global scheme may facilitate an improvement of the sphere of governance in the commons in the common interest of all.

The rule of law idea emerged from the work of legal scholars as a concept designed to limit the capacity of sovereigns to govern arbitrarily. Since World War II and the adoption of the UN Charter (our global constitution), the rule of law idea has become an important matter of global expectation and a consideration of this idea has identified the relevance of global justice values. These values taken together add up to the idea that global justice requires the universalization of human dignity. These values have to be distilled from the primary human rights and humanitarian law documents. These values include the values of power, wealth, skill, health and well being, enlightenment, affection, respect, rectitude and aesthetics. The commitment to human dignity requires the optimum shaping and sharing of these values. The commons with its elements of self-regulation, conservation, mutual deference, and democratization, encapsulates the important values that we associate with universal dignity. It seems to me that the ideas of global justice and the values inherent in the commons regime provide an inter-stimulation and support for each other.

The domains of the commons reach from specifically localized versions of the commons to grand global and spatial dimensions of it. For example, at the global level the global commons would include vast spaces of the ocean, the earth's atmosphere, and spaces of space itself, Antarctica, as important areas of the global commons. Given the complexity of these domains of commons, it cannot be said that there is one shoe of control and regulation that fits every complex situation. Here, there are obviously lessons to be learned from Ostrom's polycentric approach to governance, which requires creativity and imagination. These global spaces are still contested domains working through the appropriate framework of cooperation and mutual deference by preserving the common interest and common heritage of humanity. One thing is clear; there is no one shoe that fits all given the complexities of these domains.

Inside nation states there is a good deal of complexity not only about those spaces of commons that survive as commons into our time, but there is also the creation, apart from territorial spaces of domains that have the character of public spaces needed by all people for the well being of the planet. At the back of these developments is the emerging idea that public goods are *res extra commercium*, because they are considered to be critical to the foundational values built into the rule of law. Consider the following: Canadians have a state-run healthcare system. Should this system be seen as part of the global commons supported by the global value of a right to healthcare and well being? Canada has a form of government-run social security. Is social security a protected good falling within the notion of the Canadian commons? Indeed, there are other domains that appear to be connected to the public good idea. How far can we go: Should we include libraries, national parks, forest, rivers, cultural heritage treasures, the highway system, some aspects of higher education, the postal system, public parks? To this, we may add matters that may be even more controverted. For example, should human organs be consigned to the domain of a public good and a commons; what about genetic mapping; what about

carbon trading; should we have an intellectual commons to protect traditional knowledge from being contaminated and exploited? Should we have a global seed commons and prevent Monsanto from owning all the seeds upon which human life is dependent? For example, Monsanto tried to patent on yellow dried Mexican beans. This was withdrawn. Another investor tried to patent Basmati rice. This too later was withdrawn. There is the emergent idea about a creative commons in which ownership rights are not reserved and there is another development relating to open source software. These are illustrations of the creative possibilities of the commons idea as a way of protecting the core values of human dignity embedded in the rule of law. The commons is not a static domain of global justice.

One of the most important contributions to relating the commons idea to the issues of ecological survival and human rights is the recent work of Burns H. Weston and David Bollier.[4] In this book the authors seek to "imagine new paradigms of ecological governance" that are both environmentally and human rights sensitive. To this end, they present the notion of the commons as seen as a rights-based ecological paradigm. The model that they emerge with distances this paradigm from the neo-liberal state/market paradigm. After a thorough going critique of the limits of global economic neo-liberalism, they present as an alternative framework within the overarching structure of global governance the important potentials of the notion of a global commons. One of the fundamental problems of the common idea is that its juridical character represents unchartered water and in any event, whatever it is, it falls outside of the juridical reach of the sovereign state. On the surface, this seems to resemble a legal vacuum and the technical question then becomes how is it possible to create a rights-based regime sensitive to ecological and human rights values from an arena that represents an ostensible legal vacuum?

The Role of Communications Theory and Legal Theory in Providing a Strong Conceptual Basis for the Value of the Commons

Developments in jurisprudence and the rule of law provide us with supplementary tools that provide greater currency to the insights of Ostrom and her colleagues. One of the earliest insights in this regard comes from the work of Eugene Ehrlich.[5] In an article near the turn of the century Ehrlich wrote about the phenomenon which he described as the living law. In short, there is the law of the state sovereign, but often unacknowledged local communities within the state develop a living law that is real and effective and has all the qualities of law other than the blessing of the sovereign. Erlich's work touched an interest among legal anthropologists about the scope of law outside of the sovereignty concept. Walter Weyrauch conducted experiments for NASA in the late 1960s. These experiments observed the creation of small group norms within a confined community of participators. Two studies emerged: the Penthouse Astronauts[6] and very importantly, the Basic Law or Constitution of a Small

[4] Green Governance: Ecological Survival, Human Rights and the Law of the Commons (2013).
[5] Hertogh, Marc, ed (2009). Living Law: Reconsidering Eugen Ehrlich. Oxford.
[6] Law in isolation—The Penthouse Astronauts, June 1968, Volume 5, Issue 7, pp 39-46

Group.[7] Other scholars explored the vitality of a Jewish law in the Diaspora, and Weyrauch himself wrote extensively on the vibrancy of Gypsy law.

Harold Lasswell himself explored the reality of micro law using the tools of modern communications theory. Scholars have used communications theory to more fully elucidate the international law of the world community. They have also used communications theory to study the idea of law in brief encounters. It would therefore be useful to summarize briefly the elements of communications theory, which may provide us with tools to more accurately describe the micro law of the commons type situation. Below is a summary and explanation of the general communications theory[8]:

- "Who?" [9]
- "(Says) what?" [10]
- "[About what?]" [11]
- "(To) whom?" [12]
- "(In) what channel?" [13]
- "(With) what effect?"[14]

The question, "Who?" examines the character of the participant initiator of communication, (i.e. a control analysis). The question, "Says what?" examines the content of communication and, together with the ostensibly implicit ["About what?"] question, provides a broader context for content analysis. The question, "In which channel?" examines the relevant channels of analysis (i.e. a medium analysis).

---

[7] Walter O. Weyrauch, The Basic Law or Constitution of a Small Group, Journal of Social Issues › Vol 27 Issue 2 (1971).

[8] Winston Nagan & Craig Hammer, Communications Theory and World Public Order: The Anthropomorphic, Jurisprudential Foundations of International Human Rights, 47 Va. J. Intl. L. 725 (Spring 2007).

[9] *See* Harold D. Lasswell, *The Structure and Function of Communication in Society in* THE COMMUNICATION OF IDEAS 37 (ed. Lyman Bryson, 1964) [hereinafter, *The Structure and Function of Communication in Society*].

[10] *See id.*

[11] *See id.*

[12] *See id*.

[13] *See id*.

[14] *See, The Structure and Function of Communication in Society, supra* n. 94 at 37.

The “to whom” question examines the target of the initiators’ communication (i.e. a target-audience analysis). Finally, the intersection of the impact of communication on a target audience, the mode of transmission or exchange, and the further impacts upon the initiators’ perspectives collectively comprise the subject matter of the “With what effect?” question.

When we apply Lasswell’s model directly to law – at any level: local, national, and international – the relevance of these questions becomes immediately apparent. The “Who?” question is of chief importance: does the law (created or interpreted) emanate from a government official? Is it a judge, an administrator, a legislator, an international civil servant? Or does it emanate from the private sector? Is it actually rooted in political pressure exerted by a political party, a corporation, or a non-governmental organization? An honest answer to the “Who?” inquiry provides key insight into the power, competence, authority, and expertise of the government system from which the law emanates as well as a keen understanding of the law itself. In the context of international law, the “Who?” question is critical for all participants because the communicator of the law indicates to the extent to which States are bound to obey it. Law which emanates from the United Nations General Assembly, as opposed to the United Nations Security Council, or a statement by the Secretary General, or the European Union are each accompanied by understanding s with regard to the law’s area of effect.

Lasswell’s second question, “(Says) what?” designates the content of communication. Should this communication emanate as a prescriptive statement, the form thus communicates wrongdoing by certain participants as well as an expectation regarding those participants’ future conduct. While the next logical question, “[About what]” was not expressly stated by Lasswell, it was, by necessary implication, the next communicative step, which indicates the primary importance of the participants’ comprehension of communication content within the appropriate context within which it is communicated. Only by asking “[About what?]” might these participants be able to determine the expectations which accompany a prescriptive statement or whether the communication is accompanied by expectations of authority and coercion; it would thus provide key information into how these participants might react.

The question, “(To) whom?” specifically designates the aforementioned participants: the target audience of the communication. For example, “(To) whom” is a Security Council Resolution addressed? By comparison, “(To) whom” is an Advisory Opinion of the World Court addressed? From a human rights point of view, curious scholars might wish to know whether the Universal Declaration of Human

Rights is addressed exclusively to those States, which have signed and ratified the United Nations Charter or whether it is addressed to every member of the international community.

The inquiry, "(In) what channel?" permits the target audience of the communication to understand both its efficacy and its intended effect in either practice or theory. Advanced mechanisms of communication are ever more widespread and available to diverse sections of humanity, resulting in a continuing exponential explosion of available interpersonal channels. This, for example, means there is a growing series if channels devoted to the communication of human rights prescriptions. Indeed, the communications revolution has compressed both space and time in the development of expectations regarding universal human rights law.

Finally, the question, "(With) what effect?" obligates the target audience to both act on the content of the communication and further gauge the value of the communication in terms of its ultimate effect. If the audience recognizes some direct or indirect effect which results from the audience's action pursuant to the communication, critical legal implications might result. It is important to note that the effect of audience action might be zero change to the status quo – this itself is valuable information. If the effect of audience action means something for law it is crucial to determine the critical indicators in this process, which might indicate that the communication has created some distinct expectations regarding what is effective and what is ineffective under the law.

As communications theory became a distinct field of social science inquiry, the research objectives of the discipline became increasingly well articulated. When we apply this model to the social interaction in the commons, we may well observe using the tools of communications theory the generation of a living law among the participators in the commons. What we would be looking for more specifically in the communications context is clarity in who the communicators are, and who the target audience is. The communication should reflect some element of an authority signal, meaning that the communicator or communicators are sufficiently respected within the community for their participation, wisdom, and reliability. The second signal is that the communication is meant to trigger some level of controlling intention within the target audience itself. In short, the communication is meant to have a social consequence of efficacy. Finally, the communication must be expressed in a prescriptive form of communication, rule, principle, or norm. If by observation communications about human interaction within the commons, identify these characteristics in some of the communications within the participators we have a notion of a living law generated within the community itself and tailored to the needs and necessities of the community. This legal insight is one that appears to be missing from the

literature on the commons in general. It does however provide an important addition to the theoretical advances generated by Professor Ostrom. This it would seem would be an important contribution that the rule of law could make to this important area of scholarship and public interest.

The point we made earlier that the issue of the commons does not lead to a one shoe fits all scenario. A narrative that is at the other extreme from Hardin's grazing commons is the issue of the reach and definition of the analogous notion of some spaces constituting a global commons. If we accept the fact that the oceans of the planet cover more space than found on the continental expanses, then the question emerges as to how the commons spaces of the deep-sea bed are to be appropriately managed. International law has evolved the principle that certain spaces constitute a common heritage of all mankind. The idea was given traction in the sixteenth century by the Dutch jurist, Grotius. During this time Portugal, the great navigational force of the fourteenth and fifteenth centuries had asserted a claim that the oceans through which its navigators traveled could be claimed as an ocean for the exclusive use of Portuguese navigation (Mare Clausum). Grotius representing the emerging Dutch navigation presence around the world argued that a resource like the ocean which was in effect unlimited, could not really be acquired by any one state. He therefore favored the concept of the freedom of the oceans as a dominant rule of international law. It still has a central place in the law of the sea. However, modern developments have suggested that new technologies that make fishing for example, much more efficient, also have the effect of diminishing the stocks of fish and risking the ability of these stocks to replenish themselves.

The Commons of the Deep Sea Ocean Floor (manganese nodules)

Another issue generated by advances in technology has been the technology that permits the mining of minerals (polymetallic nodules on the deep-sea ocean floor). What exactly does common heritage mean in this context? Does it mean that those who monopolize the technology can appropriate the nodules as private property? Or does the concept of common heritage mean that as a collectivity all of humanity in the global community has a proprietary stake in this resource? Additionally, how would we reconcile the claims of private property by the appropriator of technology and the claims of the others who constitute the stakeholders at large in the common heritage? The matter was resolved by the creation of an international seabed authority. This authority had the responsibility for controlling and regulating deep-sea mining in international areas. The authority legislated regulations which included the protection of the marine environment and by signing fifteen year contracts with seven

public and private entities. These contracts gave the entities exclusive rights to explore and extract nodules from specified tracts of the seabed.

Scientific studies regarding effects of nodule mining suggest that the methods used to scoop up nodules will have damaging effects on bottom dweller forms of ocean life. The sediment that will be released will also have an effect on surface dwelling organisms. Although the precise effect remains scientifically speculative. Studies do say that surface discharged effluents will most decidedly have an impact on surface water and as well will generate disturbances on the ocean floor.[15] The UN has assumed a regulatory competence over the moon and areas of space. These aspects of the commons in terms of practical problems, relating to uses, exploitation and ownership remain to be worked out.

Conclusion

As earlier indicated from a global earth/space perspective there are a multitude of domains that have been identified as falling within the commons idea. These diverse areas pose challenges for rational governance of common pool resources. These criteria building on Ostrom's work seek to clarify and expand on the importance of clarified boundaries. The importance of appropriate rules for local conditions, collective choice arrangements, monitoring, graduated sanctions, conflict resolution mechanisms, modest recognition of rights to organize and nested enterprises. These criteria lead to the identification of different types of commons such as subsistence commons, indigenous people's commons, internet commons, social and civic commons, business embedded commons, estate trustee commons. These issues pose conceptual and normative challenges for the governance of the commons in the common interest. A creative approach to solving these problems is suggested by the integration of Ostrom and the Weston Bollier development. This recognizes the importance of social cooperation, trust and problem solving. It seeks to stress the normative values of human rights and nature rights principles, the importance of control and subsidiary principles, the appropriate management of money and shared assets, the important principles concerning the fair allocation of property rights, clarifying property rights use principles, and the institutionalization of conflict resolution principles.[16] From these ideas a sequence of imaginative architectural principles for law and policy are developed to enhance the common interest. What is clear is that the stakes regarding the commons and how it is to be preserved and sustained and to be a resource for the common good and social justice are extremely high. The

[15] Anthony Amos, and Oswald Roels, Environmental Aspects of Manganese Nodule Mining, Marine Policy, April 1977, 156ff.

[16] These issues are exhaustively developed in Weston and Bollier in Green Governance, Ecological Survival, Human Rights and the Law of the Commons, Chpt. 6 (2013).

stakes are challenged by the vested interests who garner the support of conventional economic theory and whose eventual outcome will serve to inflict tragedy on the commons itself.

Finally, the rich values encased in the commons idea may be extended to the domain or space of intellectual and scientific excellence. Perhaps the real spaces occupied by the Montenegrin Academy of the Sciences and the Arts, the All European Academies, the European Academy of Sciences and the Arts, and the World Academy of Art & Science are in reality the domains of an intellectual and scientific commons which generates intellectual and scientific capital that may well constitute a common resource pool. If this is true, then the value implications of an intellectual and scientific commons are important for the commons values they represent.

The global reach of these values is that they represent a pathway to the universalization of human dignity. Indeed, an imaginative theologian may see in the human dignity idea a fragment of the very first cause.