SPACE SETTLEMENTS AND NEW FORMS OF GOVERNANCE

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      Masters in Space Studies
      International Space University

Jim Dator

"I can say only this!" Arkady said, staring at her bug-eyed. "We have come to Mars for good. We are going to make not only our homes and our food, but also our water and the very air we breathe--all on a planet that has none of these things. We can do this because we have technology to manipulate matter right down to the molecular level. This is an extraordinary ability, think of it! And yet some of us here can accept transforming the entire physical reality of this planet, without doing a single thing to change our selves, or the way we live. To be twenty-first-century scientists on Mars, in fact, but at the same time living within nineteenth-century social systems, based on seventeenth-century ideologies. It's absurd, it's crazy, it's-- it's--" he seized his head in his hands, tugged at his hair, roared "It's unscientific! And so I say that among all the many things we transform on Mars, ourselves and our social reality should be among them. We must terraform not only Mars, but ourselves" [1].

Yes, it is crazy--and "unscientific"--indeed. But it is certainly true. Probably the most out-of-date aspects of the everyday world we all live in now are our systems of governance. They are, as the fictional person, Arkady, says, "19th century social systems based on 17th century ideologies."

And do they have a firm control over our minds and actions.

When communism collapsed, we had a wonderful chance to re-think forms of governance there. But that did not happen in a single country. Instead old forms of governance were refurbished and re-implanted, or foreign (mainly US) forms were transplanted, more or less intact.

I am convinced that the American "Presidentialist" form of government is extremely unstable. All of the 30 nations which have adopted the American Presidentialist form of government since World War II have collapsed into military dictatorship. While this has not happened in the US itself, and may not for various reasons unique to American political culture, it seems clear that Presidentialism is not a viable form of governance for the US either [2].

On the one hand, listening to some aspects of the arguments by US Congressman Newt Gingrich and his "Contract With America," you might get the impression that he also recognizes that what is wrong with the US is not just the so-called "liberal" policies which the US has more or less followed since the Second World War, but the formal and informal process of governance in the US. The US Constitution (both the formal written document, as interpreted by the US Supreme Court, AND the other informal practices which surround and animate the written document) are inadequate to the task of modern-day governance. Rep. Gingrich's calls for decentralization and "returning government to the people," where various experiments in

governance can be tried out in the states and local communities, would seem to indicate that he too recognizes the limitations of the national governmental system [3].

Presidentialist forms of democratic government are very rare. The most common form of democratic government on Earth today is Parliamentary, where the powers of the executive and legislature are combined in the person of a Prime Minister elected for an indefinite term of office, and subject to a "vote of no confidence" when the situation demands it (more or less).

In my judgment, the governments of Scandinavia and the Low Countries are among the most satisfactorily democratic in the world at the present time. In many ways, they are very good models for future forms of governance everywhere.

Yet, even (especially?) in those countries, as in the United States and all other "democratic" countries, there are continuing outcries against inadequate citizen participation in decisionmaking, against "bureaucracy," and against the forms and outcomes of judicial processes as well.

Clearly we need to rethink forms of governance on Earth.

But what about space?

While an argument can probably be made that military-like and Earth-centered command structures are necessary, or at least preferable, during the initial stage of planetary exploration [4] (although I think a good argument can be made against that as well [5]), clearly some other forms of governance should, and probably will, emerge, either by design, evolution, or revolution once larger, permanent settlements arise.

Some time ago, Jerry Glenn and George Robinson issued a "Declaration of Independence for Spacekind as it Separates from Earthkind." Here is a portion of that Declaration. You may recognize its stylistic source:

> *"When in the course of human evolution it becomes necessary for progeny to dissolve the political and biological bonds which have connected them with their progenitors, and to assume among the powers of the solar system and galaxy the separate and equal station to which the Laws of Nature and their Creator entitle them, a decent respect to the opinions of Earthkind requires that they should declare the causes which impel them to their separation into Spacekind.*
> *"We hold these truths to be self-evident, that Earthkind and Spacekind are created equal to their own respective environments, that once having been raised above their biological origins to a recognizable level of sentience and sapience they are endowed by their Creator with certain inalienable rights, and that among these rights are survival, freedom of thought and expression, and the evolution of individual and community knowledge."*
> *"We, therefore, the representatives of space migrants, space communities, and Spacekind descendants of Earthkind..., do, in the name and by the authority of Spacekind settled and living in space communities, solemnly publish and declare that their communities and*

> *their inhabitants are free and independent; that they are absolved from all allegiance to the governments and organizations of Earth; and that all political and ideological subservience of Spacekind to Earthkind is and ought to be totally dissolved.... And for the support of this Declaration, with a firm reliance on the protection offered through the Creative Intent, we mutually pledge to each other our lives, our fortunes, and our Sacred Honor" [6] .*

So, whether or not we assume that Spacekind does intend to separate from Earthkind, let's assume that even the earliest space settlers will want to establish their own forms of governance, compatible with their own wishes and desires, and that they will <u>not</u> imitate <u>any</u> presently existing form of government.

If so, what forms of governance might they consider?

They might begin by recollecting that for the overwhelming majority of human history, humans have lived in very small bands or tribes of from 20-300 people, or in villages of the same size (and only rarely more than 1,000 people or so). Even as late as the 18th Century, "large cities" often had only 5,000 to 20,000 people in them. At the beginning of the 19th Century the largest city in the world was Tokyo with slightly over one million people. London, with under one million, was the largest in the West at that time. It is anticipated that the largest city in the early 21st Century will be Mexico City with more than 25 million people. A dozen or more other Third World cities will be approaching this range, and, for the first time, more of humanity will live in urban areas than rural ones [7]. True, some civilizations did produce impressively large cities, and often sustained them for quite a long time, but they remain the exception. "Civilization" itself is only several thousand years old anyway--a blink of the eye for the lifetime of homosapiens sapiens [8].

For most of pre-history, most tribes and bands seem to have been organized fairly "democratically" [9]. At least (except perhaps for some elders) there were no official leaders, or even permanent "chiefs". The stereotypical first words of an extra-terrestrial alien, stepping off a spaceship, to the first human he encounters is: "Take me to your leader!" That request would have perplexed and confounded most humans for most of human history. Only we now, so thoroughly indoctrinated into the belief of the necessity of "leaders," assume that it is natural and normal to be led rather than to share in leading.

Thus it may not be too much to say that humans are "evolved" for small, face-to-face groups where decisions are "democratically" made.

I know from many years of teaching political design that most students--even those in the ISU summer session--end up trying to reinvent tribal governance systems for space settlements when given a chance. We all want to be able to participate in matters affecting us. We want to have a fair hand in carrying out group tasks. We want to participate in settling conflicts among our companions.

Well, OK. Not everyone does. There are many "libertarians" who believe that life in the state of nature was one of free rugged individuals doing their own thing without the slightest concern about the things that other rugged

individuals were doing, and that only recently have governments arisen to steal their natural individual freedom.

Such libertarianism is mistaken, I believe the evidence shows. Early humans were normally in groups and could scarcely have imagined their independence from their group. Individualism is a very recent concept which arises when more and more people do in fact find themselves "free", and develop an ideology to justify it, or to make it not only tolerable but preferable: "Freedom is just another word for 'nothing left to lose,'" as Janice Joplin once sang.

Still, the libertarians are right if they mean that humans were not "normally" subject to faceless and remote power figures over which they had no real influence or control. Such dominance clearly is a recently-evolved human condition, arising initially when the first chiefdoms were established probably by conquest over "Others", and then elaborated into the early civilizations, then into extensive feudal arrangements in many parts of the world, maturing finally into "kingdoms" which, in the European experience, were what so-called "democratic" (really, "representative") forms of government were intended to replace.

So here we are, entering the 21st Century with 17th, 18th, and 19th Century ideas and practices of so-called "democratic" governance touted worldwide as the best we can do. They are not. They were arguably the best we could do then. And they should be respected for that. We should also carefully learn from them. But now we can and should try to do better.

How?

Well, begin by learning from primitive peoples and their governments, to be sure.

Then by considering the vast literature of real and imagined utopian communities [10], and of anarchy [11], as well as the now-unfashionable literature of workers' control of their workplace [12], and finally the considerable literature on TQM and "re-engineering" businesses today [13].

It is also a good idea to consider what some of the "new" scientific paradigms--quantum theory, chaos theory, and the science of complexity, for example--might tell us about principles of design, including political design. I refer to the chapter titled, "The Nine Laws of God"--indeed, to the entire book--by Kevin Kelly, Out of Control, for one example [14].

Direct Electronic Democracy?

But still, how can self-government (direct democracy) work for large groups? Is direct democracy possible for large settlements?

Yes, I believe. Via "Teledemocracy". I have personally been involved in many experiments using television and interactive television in order to try to achieve "electronic direct democracy" [15].

There are many technical problems, but none is insurmountable IF we wanted to design an interactive electronic democracy.

There appear to be many human problems, but I also am convinced they are not insurmountable either.

For example, I am often told that most ordinary people are not interested in politics. I agree they are NOT interested in the pseudo-participatory forms of the present. They know that merely "voting" does not do much to effect policy in a positive and continuous way. They would become "interested" if they knew their participation counted (and that there non-participation counted even more). Very few people are apathetic about everything. Almost everyone has areas of life that excite and animate them. Politics could be one such area for almost everyone if participation were made easy and effective, and if non-participation were made costly (to their interest; I am not suggesting that non-participants be fined, for example) [16].

But other folks wonder whether ordinary people are informed enough to have direct democracy work. Can we trust them to vote intelligently?

My answer here is similar. If people can participate easily and effectively, and if they then will participate frequently, we need to be far more serious about our political education than we are now. Learning fairly about important social issues and how they can be discussed frankly and fully within the political community must become a central task of education--and of mass media (which are probably more effective forms of "education" than is formal schooling presently--thus re-thinking "schooling" in our increasingly media-rich environment is a necessary part of rethinking governance)

Most "political education" presently is simply indoctrination in loyalty to the current regime and should not be considered a model for political education for full participation in direct democratic governance [17].

To the contrary, however, I am impressed by how much "ordinary people" DO know (or do find out) about things that they are interested in. Professional sports rules, statistics, and history, for example. Or the Bible. Or the plots of soap operas. If it is sufficiently important to them, they eagerly search out, retain, and use relevant information.

So how can political participation be made more effective and inviting, without becoming trivial? Here again I have personally participated in experiments which suggest that there are ways [18].

We can start by asking what are the most popular forms of presentation in the world today, especially on television? They seem to be comedy in various forms, game shows, soap operas, and sports. We well know that what is not popular--what most people will avoid if they have a choice--is just old boring "talking heads" (with everything here, there are exceptions to that. Some heads talk more interestingly than the most popular soap opera, but as a rule they do not).

I believe it is possible and desirable to use all of the "tricks" of the most sophisticated advertisements and media productions to help people understand

complicated issues accurately and fairly, and to let them participate in exciting and satisfying ways

Another thing that two colleague of mine, Ted Becker and Christa Slaton, have pioneered and developed is a technique which combines informing people fairly and interestingly while polling them on their attitudes, and then actually having them vote their preferences. It is called "Televote" [19].

However, television is about to be surpassed by, or merged with, the Internet into a new form of interactive individual, group, as well as truly mass (national/global) media.

Current experiences with "cyberdemocracy" online have encouraged many people to wax optimistically eloquent over the future of worldwide direct anarchy on the Net [20].

I agree. That has been my experience, and observation. But I also am even more impressed, and concerned, about the political and economic forces now moving swiftly to "regulate" and "commercialize" the Net. While the possibility for cyberdemocracy is still there, it does not look like it will happen without considerable vision and effort on the part of those who want it.

I believe there has been sufficient research and experimentation done to demonstrate that direct electronic democracy can work, if we want it to, and that it would be vastly superior to any existing form of governance. Clearly much, much more work needs to be done to develop, implement, and perfect it, but it is feasible, I am convinced.

Direct Bureaucracy?

But "direct democracy" in terms of "policy making" is only one part of the governance picture. We mentioned that among the many complaints people have of present governments is that they are too bureaucratic. OK, so how will "direct democracy" be administered?

I think the answer is, by "direct bureaucracy"!

First of all, let me review what I believe to be the present functions--and dysfunctions--of bureaucracies now:

     1. <u>A mechanism of control by the ruler over the ruled</u>. A day-to-day way to see that the ruled behave as rulers want them to.

     2. <u>A form of power.</u> For the bureaucrat's own sake vis-a-vis, for example, the legislature or even other bureaucrats, and vis-a-vis the military (another, but more powerful, bureaucracy, to be sure).

     3. <u>An advocate for some constituent group</u> (For example, tobacco farmers). If you and your group have a bureaucrat concerned about you in the administration, then you have an advocate for your interests vs. the interests of other individuals and groups. If you do not have such a bureaucrat/advocate, you very well may be voiceless, or at least routinely

voiceless (you will have to shout a lot to be heard!), when it comes to policy making and implementation.

4. <u>A government of laws and not of men</u>. The theory of modern administration, captured by that slogan, is that policy should be carried out in a routine, rational, fair, and predictable manner by people recruited and trained to be fair, rational and objective. The notion is that bureaucracy is, or should be, "nonpolitical". And so the bureaucrat can and should always say, "I'm sorry, ma'am, but I'm just doing my job. I'm just carrying out the rules. I don't make them."

5. <u>A job.</u> Bureaucracy is also merely a job for someone. Jobs in the bureaucracy may be the best jobs around in the Third World, attracting the very best persons; or they may just be safe, secure, routine jobs in the First World, attracting the second or third best--people not even fit to be teachers, they are so incompetent!

<u>Possible Design Goals for Direct Bureaucracy.</u>

If those are some of the major functions and pathologies of modern bureaucracies, then what should our design objectives be in relation to them? Perhaps the following [21]:

Reduce/eliminate 1 and 2.

See that 3 is done consciously and fairly for all. Turn bureaucrats into a kind of ombudsman or public defender.

Use and develop computers (expert systems; artificial intelligence) for most of 4--for all "routine, fair, equitable, quick, objective" carrying out of legislative/executive/judicial decisions. It is truly "inhuman" to expect humans to behave like machines, but that is what conventional administrative theory intends. Once upon a time there was no choice. Now we have machines that can be fair, objective, and quick beyond any human, no matter how bureaucratic she may try to be [22].

Concerning #5, reduce the number of bureaucrats to the very few who must actively interpret laws and act for constituents, recognizing that this then makes them an important part of the policymaking process as well.

Finally, as with Direct Democracy, so also with Direct Bureaucracy: Part of the duties of each citizen is not only to participate fully in making community decisions, but also in carrying them out.

<u>Direct Mediation?</u>

And how can disputes and conflicts be resolved in a direct democracy?

By "direct mediation"!

I will start this time by reviewing quickly the theory and methods behind three systems for resolving disputes.

1. Primitive law systems.

The "peace of the community" is more important than the "rights of the accused" or even of the rights of the victims.

The "truth" of what actually happened to cause a dispute is not important. Trying to decide who did what to whom and why will just prolong and worsen the dispute.

Revenge, punishment or even restitution may not be part of the process at all. What is desired is simply to prevent conflict from happening again with minimal damage to the peace of the community.

The entire community may take part in the conflict-resolution process--at the very least more than just the accused and accuser will participate.

There may be no formal judge--the entire community (or whoever takes part in the process) may also serve as the "judge."

There certainly will be many rituals, and usually some rules of procedures which need to be followed, but often the process will be very flexible and situational.

This is the way disputes are still settled in many parts of the world (and in informal groups in almost all parts of the world). But there are two "formal" legal systems extant worldwide now.

2. Continental (Napoleanic, Civil) Law systems

From Europe, to most of the rest of world. This is the most common modern form of law/judiciary.

The participants to the dispute-resolution process are: a Defending lawyer, a Prosecuting lawyer, and a Judge (or several judges) all of whom are professional (and highly trained and evaluated) members of the court, protecting the interests of the community fairly and professionally according to the laws of the realm.

This system is also "paternalistic"--the intention is to "help" the accused, who is more or less presumed guilty (the process also assumes a fair and professional police and detective force, so if the accused gets to court, she probably is guilty. The process also assumes the existence of a fair and professional corrections department which can in fact "correct" the guilty).

Lawyers and judges actively seek out information about who did what and why.

The court is very restricted in its discretion by the laws of the legislature and the rules of the executive. The judiciary must carry these laws and rules out to the best of their ability, and not question them.

3. Adversary (Common) Law systems

From UK, in US and rest of English-speaking world and its colonies only.

The court a considered to be a "neutral" arena where the "truth" of a conflict is decided: who did what to whom, when and why?

The defendant is considered innocent until proven guilty "beyond a shadow of a doubt" (sometimes), or "according to the judgment of a rational man" (usually).

The defending lawyer wholeheartedly defends the innocence of the accused whatever she may think about the defendant's actual guilt or innocence.

The prosecuting lawyer similarly wholeheartedly but fairly seeks conviction of the accused.

The judge impartially and passively listens to the evidence presented (only. The judge does not actively look for evidence or guide actions of the two lawyers--usually).

If there is no jury, then the judge decides the verdict and the sentence. If there is a jury, it decides the verdict (guilt or innocence only) but the judge still decides the sentence (what happens to a person declared guilty by a jury).

There are very strict rules of evidence and procedure. No hearsay (indirect, assumed) evidence is permitted. This is designed to protect the accused, and to make the conviction of innocent people impossible, or at least very difficult.

If procedures are not strictly followed, then the accused goes free, regardless of how "guilty" the accused may otherwise seem to be.

"Victim's rights" are secondary, or entirely ignored. This is a matter between the accused and the state--not the victim (though this may be changing).

Impartiality (and prior ignorance of the facts and parties) of the jury is enforced. No third parties may participate directly.

Judges, prosecutors and defending lawyers often are elected by a popular vote like any other "politician" in order to keep the process "democratic". In general, the entire process is not as "professional" or professionally handled as it is in Civil law systems.

Courts are the most powerful unit of US government: they may declare acts of other branches "unconstitutional", and devise and enforce policy of their own instead of that of legislatures or executives.

(Notes in transition: Both civil and common law systems are highly formalistic and bureaucratic. The US system especially is very unsatisfying psychologically, even to the victor, because the rules and procedures are so formalized and "unnatural". Ordinary persons cannot represent themselves, or even say whatever they want to say, or their words or actions may "tend to prejudice" them.

Both systems--especially the US--generate enormous amounts of paperwork, and take a very long time and a great deal of money, which is why so many lawyers are so very rich and powerful in the US).

Possible Design Goals of Direct Mediation:

As in "Direct Democracy" so also in "Direct Mediation"--seek to create a situation where people solve their own conflicts among themselves rather than hire a lawyer to "duke it out" in a court of law. The overriding principle is: "real men settle their own disputes peacefully among themselves. Real men don't hire a lawyer and go to court" [23].

A Possible Solution: Mediation.

Mediation is rising in popularity in US and elsewhere, as an alternative to the Adversary System in most cases, reducing the Adversary System only an exceptional last resort, or for use in very serious cases.

Many jurisdictions now require (in certain situations) that mediation be tried before they allow a case to go to court.

The main point of mediation is to help the accused and the accuser reach an agreement that suits THEM.

A "Mediator" is not a judge and not an "arbitrator". The latter two enforce their (or "the law's") judgments on the disputants. A mediator helps

the parties themselves reach an agreement which is mutually-acceptable TO THEM. A mediator is a skilled, impartial, patient facilitator.

Mediation lets people say what they want to say, but mediators strive to protect both parties from abuse by the other.

Anyone can participate and give their version of what happened, and what the accused and accusers are like.

The process is interested mainly in restoring peace between the disputants so that the conflict won't fester, or lead to another conflict.

It is focused on the feelings of the disputants (and their families, friends and neighbors) more than on the peace of the community generally, but has the effect of causing such peace.

Another Possible Solution: Expert Systems and Artificial Intelligence.

Since much of dispute resolution is very routine decisionmaking, use Expert Systems and AI as much as possible.

Reduce the jurisdiction of the judiciary to only the most severe or complex cases, which will be mediated by humans, if possible, or adjudicated by a judge, if necessary.

Fully automated kiosk law systems now exist, especially in the US State of Arizona, where 11 kinds of disputes can be settled, without any cost, by answering a simple, quick, and easy-to-under set of questions (from tenant-landlord disputes to divorce). At the least, you can do all the formal paperwork yourself to present to a mediator, or to a formal court for adjudication.

These kiosks are presently located in the lobbies of court houses, but they are being spread to supermarkets, malls, and wherever groups of people normally congregate. Soon these services will be available in software, CD Roms, over the Net.

The creation of electronic "virtual courthouses" remotely accessible synchronously or asynchronously from anywhere in the world seems highly likely very soon [24].

Comments in conclusion.

More than anything else, space is, or should be considered to be--or should be understood that it will become--a place to do things that cannot or have not yet been done on Earth.

So far, it seems that very little thought indeed has been given to why people might choose to go into space to live, what that experience might do to themselves, individually and socially, and how they might govern themselves during the transformation. Aspirational and governance issues are very rarely discussed in the formal, "scientific" literature of space exploration and settlement (it of course is found in some, but not even most, space fiction)[25].

I believe one of the central issues which the Space and Society (or Space Humanities) group within ISU should explore is that of preferred forms of governance. What I have done above is merely offer one brief and fragmented view of what I hope will become an extended and lively obsession on the part of all ISU MSS participants, leading to experiments with new forms of governance on the Moon, or Mars--and even here on the Earth.

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