Communication Technologies and the Futures of Courts and Law

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In order to forecasts alternative futures of law, lawyers, courts, and judges it is necessary to understand their alternative pasts and presents, and to determine what aspects of the pasts and presents might continue to influence the futures, and what novelties might arise creating new conditions. This paper looks at the way judicial systems have been shaped by communication technologies in the pasts and might be shaped by current and emerging communication technologies in the futures.

For most of our existence, *homosapiens, sapiens* lived as nomadic hunters and gatherers in small, face-to-face groups. We are biologically and in many ways psychologically evolved for that kind of life, and not for the world in which we now live. Agriculture and cities--civilization--is only a few thousand years old for anyone, and still new for many. Industrial and information societies are mere recent eye-blinks in human history. Alfred North Whitehead said that civilization is a race between education and disaster. It is also a race between biology and our built environment, and the cultures we have created within it. including the cultures of law.

1. Changing Communication Technologies and Changing Humans

Many factors are responsible for the continuing though uneven transformation of humans over time and space. One of the most important factors has been changes in the way in which humans communicate. When we first emerged from the older *homo* line as *homo sapiens*, we could not yet speak. While we had big brains and helpful hands with articulated thumbs, our ability to think, to communicate thoughts, and especially to organize each other for group projects was limited. It was only later when changes occurred primarily in our jaw and larynx making it possible for us to produce meaningful sounds that *homo sapiens* transformed into *homo sapiens, sapiens*. That is when we really took off as a species.

2. Oral Societies

While powerful and transformative, speech was still a very limited mode of communication. It was extremely difficult to hold ideas "still" in oral societies--to take them out of their immediate context and to ponder over them. It was not possible to go back and review what had just been said, much less what had been said and intended yesterday, or (if the concept even existed) a hundred or a thousand years ago. With speech, we could better organize ourselves for group projects, but typically only for immediate action. Planning and carrying out projects that ranged over years was very

difficult (but not impossible, *vide* Jebel Faya, near the Persian Gulf, and the impressively large, geographically-separated, and successful Hawaiian kingdoms based entirely on the spoken word).

3. Before Writing

Then, only a few thousand years ago, some humans began using symbols, at first, not to convey ideas or emotions, but to designate items, identify who owned them, how much they were worth, perhaps where they were going. For about a thousand years or so, what eventually became writing was nothing but markers, labels, lists, tables. But these pale scratches made communication across time and distance easier than it had ever been before. They began to enable forms of social organization the world had never seen before in Egypt, Mesopotamia, India, China, and central and western South America: institionalized religion and priests in place of free-floating spirituality; formal education and teachers instead of amorphous beliefs and skills based on observation and imitation; terrifying hierarchical authorities of many kinds including, eventually, rulers, bureaucrats, judges and jailers. [Goody, Jack. *The power of the written tradition.* Smithsonian Institution Press. 2000].

4. Order Without Law

Before there was writing, there was order, but no law. As Stanley Diamond made clear, "Custom--spontaneous, traditional, personal, commonly known, corporate…is the modality of primitive society; law is the instrument of civilization, of political society sanctioned by organized force, presumably above society at large, and buttressing a new set of social interests." "Law *and* order is the historical illusion; law *versus* order is the historical reality." [Stanley Diamond, "The rule of law versus the order of custom," in Robert Paul. Wolff, ed*., The rule of law,* Simon & Schuster, 1971, p. 120 and 140]

5. Law and Rigidity

Literacy--hand writing and reading--became profoundly transformative technologies. Even though most people did not know how to read and write, formal life in scribal societies became for the first time based on written rules that were interpreted and enforced by power-wielding authorities. Wherever writing developed, rigid, rule-based, remote, enforceable government emerged in place of flexible, functional, direct governance. Most importantly, writing enabled thoughts to be frozen, codified, and made mandatory across time and space. Vast empires capturing huge numbers of people spread in large part because of the power of the written word and the power that the word gave those who interpreted and enforced it. [See: Havelock, Eric. *The muse learns to write: reflections on orality and literacy from antiquity to the present.* New Haven: Yale University Press, 1986. Olson, D. R., & Torrance, N. eds. *The making of literate societies.* Blackwell Publishers. 2001]

6. Colonizing Time and Space

By preserving written law and religious scriptures, and by empowering scribes and priests charged with further preserving, interpreting, and enforcing legal and religious words, for the first time the past could effectively control the future, squelching the spontaneous and easy adaptation to changing times and needs which the eternal present of oral societies made possible. While it might seem to one living in an oral society that norms and mores were eternal, in fact they were for the most part highly ephemeral and fleeting. Old norms were quickly forgotten when they proved dysfunctional and new ones easily adopted in ways that made them seem eternal.

Jack Goody writes about law: "The very fact that laws exist in written form makes a profound difference, first to the nature of its sources, secondly to the ways of changing the rules, thirdly to the judicial process, and fourthly to court organization." Once written and enforced, rules are harder to change than they are in oral societies. Moreover, "Legal norms no longer reside in the memory of each and every individual (at least of every elder) but may be literally buried in documents to be disinterred only by specialists in the written word." [Jack Goody, *The logic of writing and the organization of society,* Cambridge University Press*, 1986, p.134,143].

7. Law and Gutenberg's Printing Press

The next transformative big step in communication and governance was the printing press--and now we are approaching modern times and the kind of governance, law, and courts with which we are all familiar. Though printing was known first in China and Korea, and played a role in forming the legal systems of those cultures, it was the printing press (and auxiliary developments) of Gutenberg and others of the 15th and 16th Centuries that enabled the spread and success of the Protestant Reformation, the flowering of old knowledge as new that energized the Renaissance, the creation of Westphalian nation-state system, the cosmologies of Copernicus, Bacon, and Newton and other ideas and technologies of the modern scientific-industrial revolution, culminating in the maturing of theories of "democratic" governance of Hobbes, Montesquieu, Locke, Rousseau and others. [McLuhan, Marshall. *Understanding media: The extensions of man*. McGraw-Hill, 1964; Eisenstein, Elizabeth. *The printing press as an agent of change: Communications and cultural transformations in early modern Europe*. Cambridge University Press, 1979. Two Volumes; Baron, S. et al., eds. *Agent of change: Print culture studies after Elizabeth L. Eisenstein*. University of Massachusetts Press. 2007]

8. The First New Nation

Fortuitously "America" provided the *tabula rasa* upon which the fantastic idea formed of "constituting" a new nation out of widely separated and diverse, artificially-created colonies by assembling a group of highly privileged men to come together, talk, and then eventually write down a (handwritten!) Constitution for the United States. Informed by Greek and Roman Classics, and based on cutting edge ideas and technologies of the day—especially Newtonian mechanics, Deistic theology, and the hand-powered printing press (steam-powered printing presses did not come into existence until about 30 years after the US did)--The US Constitution was a breath-taking social invention, brilliantly

overcoming a host of design-challenges, though by no means all of them, while creating serious future problems as well. It was designed for, and fit for, a vast, overwhelmingly agricultural society with a small, widely-scattered, rural population of semi-illiterate farmers and plantation owners many of whom wanted political independence from their mother country, far, far away.

9. "Constitutionalism"and the Magic of Words

The fundamental principles of "constitutionalism" have been widely copied. Since 1789, there have been very many opportunities for polities to envision and fashion new forms of governance—the governments of new American states themselves; the political revolutions in England, France and elsewhere in Europe in the 19th centuries; Russia in 1918; Japan, Germany and other "Axis" nations after the second world war; numerous former colonies in South America, Africa, the Middle East, and Asia, also after the second world war; the collapse of socialist systems in 1990; the attempt to create a European union; and most recently "nation-building" opportunities after America attacked and destroyed existing governments.

And yet, people sat down and "wrote a constitution", which, at the end, unreflexively imitated the Newtonian mechanistic and rationalistic assumptions of the late 18th Century, ignoring the subsequent scholarship of Darwin, Freud, Einstein, Heisenberg, and Foucault. Moreover, they have acted as though the only communication technologies available for governance are still the printing press and the spoken word. In spite of the social revolution produced by electric and then electronic communication technologies that increasingly enable people to participate directly in governing so many aspects of their lives, all formal structures of government make direct involvement in government difficult to impossible. They still require "representatives" physically to assemble somewhere in a central location, debate policies, and "make law" by writing down their decisions, which are then administered by bureaucratized humans and enforced by officers of the law backed by the threat or use of deadly force. All of that made sense at one time. It is problematic now, and has been for quite a while.

Certain printed words (and those who wield and interpret them) have obtained over time a kind of arcane, magical, holy, super-human power vastly exceeding that of other printed words. When the power of these words seems to fail, instead of reaching beyond the logo-centric cosmologies and technologies that underlie them, and trying to base social order on newer cosmologies and technologies, most people, rulers and ruled alike, look for stronger words and more powerful, more magical, phrases.

Things in the United States are especially glaring in this regard. A stunning kind of logo-fundamentalism has captured both church and state. The US Supreme Court is currently controlled by people who believe that the original words of the US Constitution have an essential and unchanging meaning that is not only separate from and superior to what those words might have evolved to mean now (much less, how they might now be better interpreted to mean), but also have essential meanings separate from what even the Founding Fathers themselves might have intended the words to mean. The source of this

kind of interpretation might be the fact that some of the most influential members of the Court were educated at a time when what was known as "The New Criticism" was popular in departments of English in US universities. [Margaret Talbot, "Supreme Confidence: The Jurisprudence of Justice Anton Scalia" *The New Yorker*, March 28, 2005, pp. 40-55.]. According to the New Criticism a work of literature must be interpreted on its own terms alone. An author's intentions, his experiences, or the historical period in which a work was written have no relevance. All that matters is the meaning of the words themselves as discovered by a close reading of the text itself.

10. The Word is Out; The Image is In

Some years ago, Ethan Katsch insisted that the Word was out—or soon would be—and that law, in form and practice, was about to be transformed by electronic communication technologies. Basing his argument on analogies from the role of the printing press as pioneered by the works of Marshall McLuhan and Elisabeth Eisenstein cited above, Katsch argued that law needed to, and would, find a new basis in electronics, and that new forms of governance would emerge. Many legal scholars seem not to have recognized the role that the printing press itself played over past centuries in making "law" the conservative, change-resistant agency that it is--or was, as electronic media began to play a new, more dynamic role. [Katsh, Ethan. *The electronic media and the transformation of law*. New York: Oxford University Press, 1989; Tehranian, Majid, *Technologies of power: Information machines and democratic prospects*. Ablex Publishing, 1990].

11. Consequence over Precedents?

The concept of "law" thus may be shifting once again from being the fluid, adaptive oral statements of judges in the old medieval courts, to fixed print documents (expressed in written "constitutions" and "positive" laws) in the recent modern age, and now to being fluid electronic bits. With the advent of the curiously-named "word processor" forty years ago, everything written has become a draft that can be "cut and pasted" into other documents for numerous purposes. In the current "Information Age", nothing written is ever final. Everything is fluid, flexible, temporary. "Consequence" seems more important than "Precedents". As we move beyond the information age, perhaps to a "Dream Society," law may become as temporary as everything else in the society it seeks to regulate. Law might become a fleeting suggestion expressed in audio/visual/olfactory/tactile images in N-dimensional cyberspace. [Jim Dator, "Judicial governance of the Long Blur," *Futures*, Vol. 33, No. 1, January 2001; Jim Dator and Yongseok Seo. "Korea as the wave of a future: The emerging Dream Society of icons and aesthetic experience." in Susan Pares and J. E. Hoare, ed., *Korea: The past and the present; selected papers from the British Association for Korean Studies BAKS Papers Series, 1991-2005*. Oxford: Global/Oriental, 2008].

12. Social Media and the Law

Presently social media and social networking are reshaping how people interact with themselves and with former "authorities". When sick, many people prefer to link-in and seek remedies from friends than to go to a doctor. When faced with a problem, they seek the advice of each other and not that of a priest or a lawyer. On juries, they will Tweet their friends if they can get away with it. They only go to libraries if they want a quiet, safe, dry place to sleep. They have decreasing respect for formal authorities and more faith in the judgment of their Friends.

13. Extraterrestrial Law?

Electronic communication technologies are also changing the practice of law with a clear movement from geographically-defined "law offices" and "law libraries", to "virtual communities"--and virtual courthouses globally-dispersed. Though many patriotic jurists strongly protest, there are many good reasons to encourage the emergence of law beyond that of sovereign nations alone, and beyond "international" law as well. By adopting "best practices" from one another, a functional global law is emerging to address the challenges of our increasingly globalized humanity. But since settlements on the Moon, Mars, asteroids, and various L-5 locations are once again being seriously considered by China, India, Japan, Brazil, Russia, Europe--if not yet the United States--it is also time for future-oriented jurists to contemplate the emergence of law for the inner-solar system, which, being electronic--or "post-electronic"--can be "located" wherever intelligence is found throughout the universe.

14. Rights of Robots?

Indeed, electronic communication technologies have changed the "persona" of law as well. Once upon a time, intelligence, such as it is, was considered a human monopoly. With the rise first of "expert systems" and now of robots with artificial intelligence, we might embrace the rule not only of "smart" legal and judicial software, but also of cyber lawyers, cyber judges, and Bills of Rights of Robots.

In fact, it is not clear why humans need to be involved in routine judicial decision-making at all any more. Of all social inventions (except mathematics itself), law is the most fit for computerization of all but the most novel aspects of judicial decision-making. For forty years, a major aim in most US legislatures has been to eliminate the discretion of judges by mandating determinant sentencing and other limitations on human judgment. It makes sense now to eliminate human error, fatigue, and bias altogether by eliminating humans wherever possible, relying entirely on judgments made by artificial intelligences. We do this in almost all areas of life already. Why should judiciaries remain aloof? [Jim Dator, "When courts are overgrown with grass: The role of courts in the 21st Century." *Futures*, Vol. 32, No. 2, March 2000; Jim, "Futures and Trial Courts," *Widener Journal of Law*, Vol. 18, No. 2, 2009].

15. Intelligent Law?

Marcel Bullinga has argued that "making rules and enforcing them are important government tasks. Right now, laws are written down on paper and enforced by individuals. In the future, all rules and laws will be incorporated into expert systems and chips embedded in cars, appliances, doors, and buildings—that is, our physical environment. No longer will police officers and other government personnel be the only law enforcement. Our physical environment will enforce the law as well." In his view, future governments will no longer write laws on paper that are interpreted and enforced by people. Instead, "laws" will be open-standards software with authoritative algorithms that contain the appropriate regulatory information and protocols over the operation of all human activities. Intelligent devices will "know" what laws or regulations apply and how to act upon them. They will make decisions and self-enforce them. They will resolve conflicts between them and conflicts of the laws among them. What were once called "constitutions" will be composed of algorithms, describing processes by which they shall be distributed, protected, implemented, and revised, and new authoritative algorithms formulated. What were once "courts", "judges", "lawyers" and the rest will be algorithms as well. No unagumented humans need be involved. [Marcel Bullinga, "Intelligent Government: Invisible, Automatic, Everywhere," *The Futurist*, July-August 2004, pp. 32-36].

16. Telepathic Law?

In the foreseeable future, biochemical processes may replace electronics and lead to brain-to-brain and source-to-brain transfer. Behavioral control may then move not only from humans to the environment, but also from the environment to the brain and central nervous systems. We may finally break through the limited interface of our biological input-output mechanisms. So far we can't make screens smaller than we can see or buttons too small to push. If we can go beyond the input-output mechanism of eyes, mouths, ears, and fingers, and communicate directly brain-to-brain, or source to brain, we can do away with all "media" and have direct mind-to-mind governance, either via electronic-like implants or direct mind transfer—"mental telepathy".

17. The End of Law and Order?

This kind of high-tech dream and post-dream society may not be realized as some of us have imagined. It may not be achieved at all. On the one hand our attachment to written words and to lawyers and judges who interpret may be too resistant. On the other hand, looming and neglected environmental, energy, and economic challenges may make continued high tech societies impossible. We may effectively "run out of oil" before we can develop and bring online viable alternatives. Long-deferred environmental challenges loom. Global population growth continues catastrophically at the same time that population is declining in some parts of the world. All economies are unsustainable to the extent they are based on endless debt and endless growth in a finite planet. These problems are global and yet we have no way to address them globally. Our obsolete nation-state system is powerless, and so the future of humanity on Earth is uncertain. It is entirely possible a way of life called "development" that we have only known for a few hundred years is coming to an end.

We may become farmers and hunters with their means of communication and conflict resolution once again. While I vastly prefer the high tech future I have outlined, the global trajectory seems to me to be largely in the other direction. [Jim Dator, "The Unholy Trinity, Plus One," *Journal of Futures Studies,* Vol. 13, No. 3, February 2009, pp. 33 – 48].