

**Chapter 1 : The Medicalization of Cyberspace : Emma Rich :**

*The document contains a section on intellectual property rights protection, which examines current problems and recent development concerning the protection of intellectual property rights in foreign countries.*

Other categories need further elaboration and to some extent subdivision in order to cover the issues at hand. This table is intended to provide the basis for a detailed discussion of what rights a person should have to some biological material. Right to security in life. The right of a person to keep a part of her body, and not have it removed or destroyed. Becker 1, 2, 9, Right to security after death. The right of a person that a part of her body is buried or disposed of in the way that she wishes. Right to donate for removal in life. The right of a person to give up a part of her body without remuneration, to be removed in her lifetime. Right to donate for posthumous removal. The right of a person to give up a part of her body without remuneration, to be removed after her death. Right to sell for removal in life. The right of a person to give up a part of her body against remuneration, to be removed in her lifetime. Right to sell for posthumous removal. The right of a person to give up a part of her body against remuneration, to be removed after her death. The right to receive the profits obtainable from the use of a biological material such as the profits from a cell line. This differs from a right to sell in referring to the profits obtained at points in time after the initial removal of the material. Open in a separate window 3. One problem for the constructivist approach is that it may have difficulties in determining which bundles constitute ownership. On this view, there is no single criterion or combination of criteria that have to be met in order for ownership to be present. In modern society there exist a vast number of transferable rights to different types of entities. Instead of creating a complete set of legal regulations anew for each of these types of rights, they are all subsumed under the unifying institution of property. This is done by the construction of legal entities, such as shares, options, patents, and copyrights, which can be owned and traded. Different bundles of rights to material objects are created by constructing various types of immaterial objects, which are all combined with the same system of ownership. Another important category is the inalienable simple rights that are legally impossible to part. The right to vote is another inalienable right, and so are the basic human rights. The reason for this seems to be that the lawgiver wishes to protect us against loss of organs in much the same way as we are protected from becoming slaves by a legal system that does not honour a voluntary agreement to enter slavery. Thus, a person does not either own or have his body or liberty, though perhaps he owns dead parts of his body such as his hair and nails. In general he has, instead, a right to bodily security or liberty, and a right to determine how parts of his body, such as his kidneys, are to be used during his lifetime if he chooses to forego their use or, being dead, no longer has use for them. Here the analogy with the ownership of a thing is tenuous. These rights are either inalienable or can be dealt with only by something in the nature of a gift. As a consequence of this, a third type of rights bundle has emerged in modern legal systems, which is distinguishable both from full property rights and from inalienable rights: This is the type of right that most modern jurisdictions assign to us with respect to our kidneys. An important lesson to be drawn from this is that the issue of property rights to biological material should not be reduced to a simple binary issue of owning or not owning. The primary normative issue is what such a bundle of rights should contain. It is only a secondary issue whether the chosen bundle of rights should be called a property right. Discussions of this secondary issue are complicated by terminological ambiguities. This is an established usage of the word that cannot easily be eliminated. Five principles of bodily rights Equipped with the distinctions introduced in the previous sections, we can now turn to the normative task of developing principles for what kind of ownership or other rights a person should have to parts of her own body. We will do this by proposing five moral principles of bodily rights. A bodily right may, but need not, give rise to a property right. Therefore, none of the five principles mentions ownership or property. We can express it as follows: This is a very general principle. It has exceptions in certain applications, such as the treatment of patients unable to give informed consent, and blood testing for forensic purposes. Since these exceptions are peripheral for the purposes of the present paper, we will not give an account of them here. In combination, these two components stipulate that no human being can be justly deprived of a part of her body without her

explicit consent, neither in life nor in death. The informed consent referred to in the first principle should specify the intended usage of the material. As the experience with biobanks shows us, however, it is no trivial matter to determine how precise that specification has to be. It is included for completeness. The second principle of bodily rights Under conditions of informed consent, removal of bodily material is allowed as a means to obtain significant therapeutic advantages for the person herself. Our third principle brings us to the more difficult cases, namely the removal of biological material from one person in order to obtain advantages for somebody else. Transplantation of organs from living donors has saved thousands of lives, and blood transfusions probably many more. A reasonable normative framework of bodily rights should facilitate these practices, and the same applies to other practices under development that may be therapeutically useful while imposing at most very small risks on the persons from whom the material originates. Just as in current practice and in accordance with our first principle, informed consent should be a prerequisite for any such procedure. The third principle of bodily rights Under conditions of informed consent, removal of bodily material is allowed as a means to obtain significant therapeutic advantages for one or more other persons, provided that the removal does not cause serious or disproportionate harm to the person from whom the material is taken. For practical purposes, this principle can be taken to imply the inclusion of components 3 right to donate for removal in life and 4 right to donate for posthumous removal. The third principle is compatible with components 5 right to sell for removal in life and 6 right to sell for posthumous removal, but does not imply either of these. Trading on a market is known to be an efficient means of distributing commodities to people who need them. Therefore, a general prohibition against selling biological material may be unnecessary and even counterproductive. An alternative approach that needs to be considered is to allow trade in at least some types of biological materials but prohibit exploitative practices. A major problem with this proposal is its practicability. A famous artist has decided to create a sculpture made entirely out of human earlobes and receipts showing that they have been bought at ten dollars a piece. Before she can create this masterpiece she has to decide how to obtain the raw material. There are two options: Clearly, the former option is more exploitative than the latter one. A consistent legal system cannot, however, be so constructed that the earlobe of one person is tradable but not that of another. We arrive at the following principle. The fourth principle of bodily rights If there is a significant risk that a certain practice in dealing with a biological material will result in exploitation of human beings, then that practice should either be disallowed or modified so that the exploitation is brought to an end. This principle provides an empirical criterion for whether components 5 right to sell for removal in life and 6 right to sell for posthumous removal should be included in the bundle of rights that individuals have with respect to a particular type of material from their bodies. In the application of this criterion it is important to pay attention to the social conditions under which trade in biological material takes place. As we noted above, the risk for exploitation may not be the same for a full market and for a restricted market where buyer and seller are part of the same healthcare system, where prices are fixed, and the same type of queuing system for recipients is used as in the present donation based systems. The fourth principle is also applicable to components 3 right to donate for removal in life and 4 right to donate for posthumous removal, since donations may well be exploitative. It is no easy matter to turn down a close relative who asks for a kidney. According to this principle, systems for organ donation have to be arranged so that they leave potential donors with a real, autonomous choice. Finally, the fourth principle has relevance also for component 7 right to income. Economic offers to people who part with organs may be exploitative in much the same way as excessive payment to research subjects. Scarcity in medical resources gives rise to difficult distributional problems. These can be solved either by letting such resources be allocated outside of the market or by regulating the market in such way that justice in distribution is obtained. For medical resources that are not scarce, a market in human biological material does not seem to threaten the supply to patients at least not in any other way than any market in medical supplies can. This can be summarised as follows. The fifth principle of bodily rights The system of legal rights should promote the efficient distribution of biological material for therapeutic purposes to patients according to their medical needs. It provides additional support for components 1 right to security in life and 2 right to security after death, since any stable system of distribution has to provide security for people so that they know that their wishes will be respected.

It provides support for components 3 right to donate for removal in life and 4 right to donate for posthumous removal, on the assumption that any efficient distribution system contains donation either as the only way or at least as one of the ways in which human biological material can be obtained for therapeutical principles. It provides a criterion to be used in appraisals of components 5 right to sell for removal in life, 6 right to sell for posthumous removal, and 7 right to income. Here, it is important to note that it is an empirical issue to what extent and for what types of biological material this principle supports trade in biological material. In our view, the appropriate choice of a bundle of rights may differ for different types of biological material, for instance according to how scarce they are and how important they are for the health of the person from whom they are taken. It is, for instance, probable that the disadvantages of a market system will be smaller, and the advantages greater, for material that can be duplicated, such as stem cells and genetic material than for material such as complete organs, which cannot be duplicated. For the final analysis, ethical principles will have to be combined with empirical information about the actual consequences of different procurement and distribution procedures, both for the individuals from whom the biological material is taken and for those who depend for their health on the availability of such material. The gift relationship from human blood to social policy. Conference on Altruism and Economic Theory; May 3-4 2003. *Philos Public Aff* 32: 3. Is a market in human organs necessarily exploitative? *Public Aff Q* 28: 1-12. The morality of a free market in transplant organs. *Morality and the market in blood*. *J Appl Philos* 19: 1-12. Erin C, Harris J. An ethical market in human organs.

**Chapter 2 : International Intellectual Property Law**

*Biological Property Rights in Cyberspace 8. The Online Pro-Ana Movement 9. The Bioethics of Cybermedicalization. Conclusion: After-Cyborgs or Artificial Life.*

Look Before Taking Another Leap for Mankind By Patrick Lin Abstract Commercial space travel is looking more like a real possibility than science fiction, but tied to that ambition, we may be held back by the gravity of emerging ethical dilemmas. The usual ethical issues related to environmental and safety concerns are only the tip of this iceberg and are not so much the focus here. Rather, there are many other interesting questions, such as: What would be a fair process for commercializing or claiming property in space as opposed to a chaotic land-grab similar to that with Internet domain names? How likely would a separatist movement be among settlements who want to be free from their mother nations on Earth? Are reasons such as for adventure, wanderlust or "backing up the biosphere" good enough to justify our exploration of space? At the least, this would give the public more confidence that we are looking ahead before we take another leap for mankind. Because for the first time, the average Joe now has a real chance to reach for the stars. Space travel will soon no longer be just for an elite group of highly-educated and disciplined astronauts; instead, the possibility of commercial space travel is just over our horizon. But lost in all this excitement, there is a crescendo of ethical dilemmas that is building up and may put the brakes on our adventures, if not considered early in our journey. Our efforts to introduce everyday individuals into space are aggressive, with private individuals and corporations unwilling to wait for the government to open the doors. So with the growing possibility of commercial space travel, we appear to truly be on the cusp of a new frontier. But what does that imply? Are there any ethical and social considerations we should consider beforehand? It was not at all obvious that colonialism was an unproblematic practice, and in fact, it seemed to be such an intractable and important ethical dilemma that it inspired some of the most notable thinking in political philosophy. Rather, the point here is if we are taking another giant leap into the space frontier, our position is not too different from that of colonialists: Our last New World proved to hold many conflicts and challenges – from territorial disputes with other nations to the chaos of the Wild West to current population-related issues – that may similarly arise in the context of space exploration. But now, we have the benefit of hindsight and another unique opportunity to identify and defuse those potential landmines before we step on them. It has not been easy getting from pre-United States to where we are now, and we might expect similar trials on our road to space settlements as well. Other relevant lessons from history may include our recent development of cyberspace, or the Internet frontier. Without planning ahead for related intellectual property issues as well as online sales tax, Internet crimes and other areas, the rush into cyberspace has been messy at best. If they had, domain names might have been auctioned off to the highest bidder. So it is unclear what our guiding philosophy or strategy is in developing cyberspace, and the absence of an overarching strategy is a likely contributor to our current problems in the Internet Age. We might also draw an analogy between developing space to, say, developing Antarctica: We would not rush to develop the South Pole without a well-thought plan, so the same reasonable precaution would seem to apply to colonizing space. Addressing these issues would at least give the public more confidence that governments, scientists and astronauts are thinking ahead in our collective interests, rather than barreling forward with little regard or public discussion of important consequences, for example, as we have done with biotechnology – which created an entirely new discipline of bioethics – and what seems to be occurring now to an extent with nanotechnology. These are somewhat familiar questions, and though they will not be the focus of this paper, we will discuss them briefly here for the sake of completeness. One of the first and natural reactions of many is to ask: As examples, an over-developed sense of nationalism may again lead to war with other humans in space, and ignoring the cumulative effects of small acts may again lead to such things as the over-commercialization of space and space pollution. Have we learned enough about ourselves and our history to avoid the same mistakes as we have made on Earth? Preserving the pristine, unspoiled expanses of space is a recurring theme, much as it is important to preserve wetlands, rainforests and other natural wonders here on Earth. We have already littered our outer atmosphere with floating space debris

that rockets and satellites need to track and navigate around, not to mention abandoned equipment on the moon and other planets. Are we prepared to risk accidents in space from the technologies we might use, such as nuclear power? Another common concern is for the safety of our pioneering astronauts: Should we send people to other planets when robots might do the job just as well but more safely and less expensively? Even if safety is not a key ethical concern for astronauts who have consented to the risks, what about any children that are born in or taken to space who cannot give legal consent? Many critics have also asked whether we should be redirecting our significant investments in space exploration – much of it funded by taxpayers – to solve more pressing problems on Earth, such as helping economic development in depressed areas, alleviating poverty and hunger, providing access to clean and affordable water and energy, and addressing other issues including human rights violations. Others are also worried about the militarization of space, given a history of weaponizing new technologies and carrying old conflicts over into new lands. Many of these questions are familiar in philosophy, but this section will help connect the dots to their relevance in space exploration. Just as a patent provides an inventor with the protection needed to invest the time, money and hard work required in the first place, a company may be less willing to invest hundreds of millions or billions of dollars to, say, build time-share condos on the moon without having clear rights to that property. At any rate, it seems to be in our nature to acquire or want things to be ours and ours alone, so these issues will naturally arise. Note that lawsuits have already been filed on Earth to lay claim to such things as asteroids[3], so the idea of dividing up property in space may not be so far-fetched. First of all, we need to understand what it means to own space in common with others. If so, several other questions come up here. To illustrate the point, imagine if there were only eight people alive on Earth and only eight other planets in our solar system: And how do we account for future people – must we factor in their legacy before we can claim our shares, e. This raises the question of how it is possible to gain ownership of unowned objects. Some of the mechanisms or processes by which we can legitimately acquire property might include laboring upon the object e. And what is the extent of our property rights – are we permitted to destroy what we own, e. Of course, we might simply extend our existing rules of property to govern space as well, assuming all nations involved endorse a free-market system. But in uncharted territory, such as with cyberspace, our options seem to be limited to first-come-first-served and to the highest bidder, which we have seen lead to the inefficient and disorderly Internet gold rush. And because how we formulate property rights sets the tone for whatever economic model is adopted – e. If entering space marks our opportunity to start over again, then it seems that unfettered capitalism should no longer be a sacred cow and should be subject to critical evaluation along with other competing economic models. For instance, a purely free-market economy, while efficient at allocating scarce resources and inspiring innovation, is not so much concerned with need or merit, so a hybrid model may be desired. Without a police force in space, it may first start with individuals or corporations defending their parcel against competitors in turf battles, despite any prevailing laws on Earth. Even among enlightened people, there will inevitably be property-rights disputes in space, just as there is on terra firma between reasonable parties, so we will need a regulatory or administrative body that has jurisdiction over those lands, in addition to an enforcement agency. Again, these concerns point to our new era in space exploration as a true opportunity to start over from scratch, bringing with it new responsibility to architect a blueprint for society in space. Why should humans on Mars think of themselves as an extension of any nation today, if they can form – and defend – their own government and start from a clean slate? Think again about colonial America: For all practical purposes, America was already a different nation and culture from England, given the vast distance between them. Even here in the U. Indeed, there are good reasons to want to explore space. In this section, however, we will take a critical look at these reasons to explore new worlds, since finding a moral imperative or justification for such a venture in the first place must be a fundamental part of space ethics. Sir Richard Branson explained on his Virgin Galactic website: The development will also allow every country in the world to have their own astronauts rather than the privileged few. Perhaps the difference between space and Antarctica or protected parks is that there may be much more to discover in space, including possibly the origins of Earth and the universe. Social dynamics may be an interesting area of investigation – such as how people self-organize and live in an isolated environment, or how basic government might arise – but these

seem to be experiments we can already conduct on Earth, and even more so in the future if we ever acquire the technology to terraform inhospitable environments. If not for adventure or curiosity, there are other, more pragmatic reasons to consider. If we have put ourselves in a position where we need a back-up plan, it is unclear how colonizing space will improve our predicament until we address those root issues. Less metaphysically, does having a safety net, such as a back-up planet, make it more likely that we take more chances and treat our current planet less carefully? This would seem to be consistent with human behavior: And the converse is true as well: However, an argument might be made that people who engage in possibly-catastrophic acts are not the kind of people worried about our future and would proceed ahead regardless of a back-up biosphere. Another reason, and one that is perhaps too straightforward, was recently articulated by Elon Musk, co-founder of PayPal and founder of SpaceX: Either case should give us pause: Would we have a moral issue with populating the moon with, say, monkeys or dandelions instead? And if not, what are the relevant differences between that and populating certain areas of Earth with non-indigenous animals, such as letting loose rabbits in Australia or ferrets in California? Even if a more defensible reason is that space exploration pushes human limits, that drive to break past existing boundaries surely must be subject to reasonable limitations. For instance, we are able to clone human beings, yet we refrain from that practice for ethical reasons. We are physically able to build homes inside national parks and other uninhabited areas, but we refrain from doing so, at least to comply with laws designed to preserve that environment. One possible reply to this series of irritating questions might be the following: This seems to be an intellectually-lazy answer and perhaps the burden of proof should fall on both sides. Further, if we truly believe that space exploration is so obviously unproblematic in a moral sense, then we should be able to defend that intuition or claim. The strongest defense may be to argue that we have a presumptive right to explore space and interact with the cosmos as we see fit, particularly if 1 there is no one else in the universe to object, 2 no one else to harm, and 3 plenty of room for everybody. If this is a reasonable line to take, then our focus should be on understanding the origin and nature of that right as well as any responsibilities tied to that right. If there are other beings in the universe to object or harm, then the task of justifying space development, which brings us closer to encroaching on their domain, may become more complicated. The atoms that make up our bodies “as well as everything else around us” are the exact same atoms that originated from the singular point that once contained all that is. If that is the case, and we view ourselves in the simplest materialistic terms, then why would we not have the right to travel back from where we came? Or so that argument might go. And at any rate, it may be an exaggeration to say that there are serious opponents to space exploration or development. It seems to be more the case that there are many concerns surrounding our space efforts, and these may very well be solvable concerns. But until they are fully investigated and taken seriously by the space community, the public perception might be that our exuberant rush into space comes at the expense of these concerns. If this is our chance for a fresh start, then we should be deliberate and careful with our actions, thinking through as many of the unintended consequences as possible. We already have centuries of philosophical, political and economic theories in our stockpile; now is the time to dust them off, re-evaluate them, and finally turn theory into action. Applying the veil of ignorance to rules in space, this helps ensure that the processes we set up are fair and consider the interests of all people, including protecting the worst-off people from an even worse and uncaring fate. Had we given that kind of forethought to administering the Internet, we might not have had cyber-squatters camping out on domain names, or disgruntled teens writing virus programs that exploit gaps in the technology, or unscrupulous companies clogging our in-boxes with spam, or any number of issues related to IP, privacy, security and other key areas. The automobile, for example, enabled us to more easily and quickly travel greater distances, but it also created pollution, urban sprawl, pressure on natural resources, and other problems “things we could have addressed much earlier. Nanotechnology, as another example, promises to give us great benefits, but it also holds great potential for misuse and raises ethical questions, e. This is not to say that we should not move ahead with nanotechnology or space exploration, but simply that we need to pay attention to possible harms and conflicts as well as develop plans to mitigate those scenarios.

**Chapter 3 : Bodily rights and property rights**

*This book is the most authoritative Book on the evolution, development and current state of legal frameworks on electronic commerce and intellectual property rights in cyberspace as also various legal, policy and regulatory issues connected with use of the computers, computer systems, computer networks, computer resources and communication.*

Conclusion Introduction Global computer-based communications cut across territorial borders, creating a new realm of human activity and undermining the feasibility--and legitimacy--of applying laws based on geographic boundaries. While these electronic communications play havoc with geographic boundaries, a new boundary, made up of the screens and passwords that separate the virtual world from the "real world" of atoms, emerges. This new boundary defines a distinct Cyberspace that needs and can create new law and legal institutions of its own. Territorially-based law-making and law-enforcing authorities find this new environment deeply threatening. But established territorial authorities may yet learn to defer to the self-regulatory efforts of Cyberspace participants who care most deeply about this new digital trade in ideas, information, and services. Separated from doctrine tied to territorial jurisdictions, new rules will emerge, in a variety of online spaces, to govern a wide range of new phenomena that have no clear parallel in the nonvirtual world. These new rules will play the role of law by defining legal personhood and property, resolving disputes, and crystallizing a collective conversation about core values.

Breaking Down Territorial Borders

A. Territorial Borders in the "Real World" We take for granted a world in which geographical borders--lines separating physical spaces--are of primary importance in determining legal rights and responsibilities: There has until now been a general correspondence between borders drawn in physical space between nation states or other political entities and borders in "law space. The Trademark Example Consider a specific example to which we will refer throughout this article: Trademark law is distinctly based on geographical separations. Different countries have different trademark laws, with important differences on matters as central as whether the same name can be used in different lines of business. In the United States, the same name can even be used for the same line of business if there is sufficient geographic separation of use to avoid confusion. A trademark owner must therefore also be constantly alert to territorially-based claims of abandonment, and to dilution arising from uses of confusingly similar marks, and must master the different procedural and jurisdictional laws of various countries that apply in each such instance. Although they may be based on historical accident, geographic borders for law make sense in the real world. Their relationship to the development and enforcement of legal rules is logically based on a number of related considerations. Control over physical space, and the people and things located in that space, is a defining attribute of sovereignty and statehood. For example, the U. The correspondence between physical boundaries and boundaries in "law space" also reflects a deeply rooted relationship between physical proximity and the effects of any particular behavior. That is, Brazilian trademark law governs the use of marks in Brazil because that use has a more direct impact on persons and assets located within that geographic territory than anywhere else. We generally accept the notion that the persons within a geographically defined border are the ultimate source of law-making authority for activities within that border. Similarly, allocation of responsibility among levels of government proceeds on the assumption that, for many legal problems, physical proximity between the responsible authority and those most directly affected by the law will improve the quality of decision making, and that it is easier to determine the will of those individuals in physical proximity to one another. Physical boundaries are also appropriate for the delineation of "law space" in the physical world because they can give notice that the rules change when the boundaries are crossed. Proper boundaries have signposts that provide warning that we will be required, after crossing, to abide by different rules, and physical boundaries -- lines on the geographical map -- are generally well-equipped to serve this signpost function.

The Absence of Territorial Borders in Cyberspace Cyberspace radically undermines the relationship between legally significant online phenomena and physical location. The rise of the global computer network is destroying the link between geographical location and: The Net thus radically subverts a system of rule-making based on borders between physical spaces, at least with respect to the claim that cyberspace should naturally be governed by territorially

defined rules. Cyberspace has no territorially-based boundaries, because the cost and speed of message transmission on the Net is almost entirely independent of physical location: Messages can be transmitted from any physical location to any other location without degradation, decay, or substantial delay, and without any physical cues or barriers that might otherwise keep certain geographically remote places and people separate from one another. Location remains vitally important, but only location within a virtual space consisting of the "addresses" of the machines between which messages and information are routed. The system is indifferent to the physical location of those machines, and there is no necessary connection between an Internet address and a physical jurisdiction. Although a domain name, when initially assigned to a given machine, may be associated with a particular Internet Protocol address corresponding to the territory within which the machine is physically located. Or, alternatively, the owner of the domain name might request that the name become associated with an entirely different machine, in a different physical location. Physical borders no longer can function as signposts informing individuals of the obligations assumed by entering into a new, legally significant, place, because individuals are unaware of the existence of those borders as they move through virtual space. The power to control activity in Cyberspace has only the most tenuous connections to physical location. Many governments first respond to electronic communications crossing their territorial borders by trying to stop or regulate that flow of information as it crosses their borders. Efforts to stem the flow increase as online information becomes more important to local citizens. The volume of electronic communications crossing territorial boundaries is just too great in relation to the resources available to government authorities to permit meaningful control. Customs officials have generally given up. They assert jurisdiction only over the physical goods that cross the geographic borders they guard and claim no right to force declarations of the value of materials transmitted by modem. Faced with their inability to control the flow of electrons across physical borders, some authorities strive to inject their boundaries into the new electronic medium through filtering mechanisms and the establishment of electronic barriers. The Attorney General of Minnesota, for example, has asserted the right to regulate gambling that occurs on a foreign web page that was accessed and "brought into" the state by a local resident. First, the determined seeker of prohibited communications can simply reconfigure his connection so as to appear to reside in a different location, outside the particular locality, state, or country. Because the Net is engineered to work on the basis of "logical," not geographical, locations, any attempt to defeat the independence of messages from physical locations would be as futile as an effort to tie an atom and a bit together. And, moreover, assertions of law-making authority over Net activities on the ground that those activities constitute "entry into" the physical jurisdiction can just as easily be made by any territorially-based authority. If Minnesota law applies to gambling operations conducted on the World Wide Web because such operations foreseeably affect Minnesota residents, so, too, must the law of any physical jurisdiction from which those operations can be accessed. By asserting a right to regulate whatever its citizens may access on the Net, these local authorities are laying the predicate for an argument that Singapore or Iraq or any other sovereign can regulate the activities of U. All such Web-based activity, in this view, must be subject simultaneously to the laws of all territorial sovereigns. Nor are the effects of online activities tied to geographically proximate locations. Information available on the World Wide Web is available simultaneously to anyone with a connection to the global network. The notion that the effects of an activity taking place on that Web site radiate from a physical location over a geographic map in concentric circles of decreasing intensity, however sensible that may be in the nonvirtual world, is incoherent when applied to Cyberspace. A Web site physically located in Brazil, to continue with that example, has no more of an effect on individuals in Brazil than does a Web site physically located in Belgium or Belize that is accessible in Brazil. Usenet discussion groups, to take another example, consist of continuously changing collections of messages that are routed from one network to another, with no centralized location at all; they exist, in effect, everywhere, nowhere in particular, and only on the Net. There is no geographically localized set of constituents with a stronger claim to regulate it than any other local group; the strongest claim to control comes from the participants themselves, and they could be anywhere. The rise of an electronic medium that disregards geographical boundaries also throws the law into disarray by creating entirely new phenomena that need to become the subject of clear legal rules but that cannot be governed, satisfactorily, by any current

territorially-based sovereign. For example, electronic communications create vast new quantities of transactional records and pose serious questions regarding the nature and adequacy of privacy protections. Yet the communications that create these records may pass through or even simultaneously exist in many different territorial jurisdictions. The question who should regulate or control Net domain names presents an illustration of the difficulties faced by territorially-based law-making. The engineers who created the Net devised a "domain name system" that associates numerical machine addresses with easier-to-remember names. Thus, an Internet Protocol machine address like " Currently, domain names are registered with specific parties who echo the information to "domain name servers" around the world. Defining rights in this new, valuable property presents many questions, including those relating to transferability, conditions for ownership such as payment of registration fees , duration of ownership rights, and forfeiture in the event of abandonment, however defined. Who should make these rules? Consider the placement of a "traditional" trademark on the face of a World Wide Web page. This page can be accessed instantly from any location connected to the Net. Otherwise, any use of a trademark on the net would be subject simultaneously to the jurisdiction of every country. Should a Web page advertising a local business in Illinois be deemed to infringe a trademark in Brazil just because the page can be accessed freely from Brazil? But these same names and symbols could also be validly registered by another party in Mexico whose "infringing" marks are now, suddenly, accessible from within the United States. Upholding a claim of infringement or dilution launched by the holder of a U. Migration of Other Regulated Conduct to the Net. Almost everything involving the transfer of information can be done online: The laws regulating many of these activities have developed as distinctly local and territorial. Local authorities certify teachers, charter banks with authorized "branches," and license doctors and lawyers. The law has in essence presumed that the activities conducted by these regulated persons cannot be performed without being tied to a physical body or building subject to regulation by the territorial sovereign authority, and that the effects of those activities are most distinctly felt in geographically circumscribed areas. These distinctly local regulations cannot be preserved once these activities are conducted by globally dispersed parties through the Net. When many trades can be practiced in a manner that is unrelated to the physical location of the participants, these local regulatory structures will either delay the development of the new medium or, more likely, be superseded by new structures that better fit the online phenomena in question. We know that the activities that have traditionally been the subject of regulation must still be engaged in by real people who are, after all, at distinct physical locations. But the interactions of these people now somehow transcend those physical locations. The Net enables forms of interaction in which the shipment of tangible items across geographic boundaries is irrelevant and in which the location of the participants does not matter. Efforts to determine "where" the events in question occur are decidedly misguided, if not altogether futile. A New Boundary for Cyberspace Although geographic boundaries may be irrelevant in defining a legal regime for Cyberspace, a more legally significant border for the "law space" of the Net consists of the screens and passwords that separate the tangible from the virtual world. Traditional legal doctrine treats the Net as a mere transmission medium that facilitates the exchange of messages sent from one legally significant geographical location to another, each of which has its own applicable laws. Yet, trying to tie the laws of any particular territorial sovereign to transactions on the Net, or even trying to analyze the legal consequences of Net-based commerce as if each transaction occurred geographically somewhere in particular, is most unsatisfying. Cyberspace as a Place Many of the jurisdictional and substantive quandaries raised by border-crossing electronic communications could be resolved by one simple principle: Instead, the more salient questions become: What rules are best suited to the often unique characteristics of this new place and the expectations of those who are engaged in various activities there? What mechanisms exist or need to be developed to determine the content of those rules and the mechanisms by which they can enforced? Answers to these questions will permit the development of rules better suited to the new phenomena in question, more likely to be made by those who understand and participate in those phenomena, and more likely to be enforced by means that the new global communications media make available and effective. The New Boundary is Real. Treating Cyberspace as a separate "space" to which distinct laws apply should come naturally, because entry into this world of stored online communications occurs through a screen and usually a "password" boundary.

As noted, a primary function and characteristic of a border or boundary is its ability to be perceived by the one who crosses it. For example, you would know to abide by the "terms of service" established by CompuServe or America Online when you are in their online territory, rather than guess whether Germany, or Tennessee, or the SEC will succeed in asserting their right to regulate your activities and those of the "placeless" online personae with whom you communicate. The ultimate question who should set the rules for uses of names on the Net presents an apt microcosm for examining the relationship between the Net and territorial-based legal systems. There is nothing more fundamental, legally, than a name or identity--the right to legally recognized personhood is a predicate for the amassing of capital, including the reputational and financial capital, that arises from sustained interactions. The domain name system, and other online uses of names and symbols tied to reputations and virtual locations, exist operationally only on the Net. These names can, of course, be printed on paper or embodied in physical form and shipped across geographic borders. But such physical uses should be distinguished from electronic use of such names in Cyberspace, because publishing a name or symbol on the Net is not the same as intentional distribution to any particular jurisdiction. Instead, use of a name or symbol on the Net is like distribution to all jurisdictions simultaneously.

**Chapter 4 : SocioSite: SOCIOLOGY OF RIGHT**

*Get this from a library! The medicalization of cyberspace. [Andy Miah; Emma Rich] -- The entire infrastructure and culture of medicine is being transformed by digital technology, the Internet and mobile devices.*

Subjects Description The entire infrastructure and culture of medicine is being transformed by digital technology, the Internet and mobile devices. Cyberspace is now regularly used to provide medical advice and medication, with great numbers of sufferers immersing themselves within virtual communities. What are the implications of this medicalization of cyberspace for how people make sense of health and identity? The Medicalization of Cyberspace is the first book to explore the relationship between digital culture and medical sociology. It examines how technology is redefining expectations of and relationships with medical culture, addressing the following questions: How will the rise of digital communities affect traditional notions of medical expertise? What will the medicalization of cyberspace mean in a new era of posthuman enhancements? How should we regard hype and exaggeration about science in the media and how can this encourage public engagement with bioethics? This book looks at the complex interactions between health, medicalization, cyberculture, the body and identity. It addresses topical issues, such as medical governance, reproductive rights, eating disorders, Web 2. It is essential reading for healthcare professionals and social, philosophical and cultural theorists of health. Highly recommended for anyone interested in how the digital cultures of cyberspace are shaping the practice, understanding, and consumption of medicine in the contemporary period. Its value is found in the fact that rather than duplicating arguments already advanced on the positives and negatives of medical information being presented on the web or the horrors which stalk online discussion forms, it digs to the deeper issues of why cyberspace is altering the interaction between medicalization, health and body - a question which is often overlooked. Medicine in Society Section 1: Medicalization in Cyberspace 2. Cybermedicine and Reliability Discourse 4. Virtual Governance of Health Behaviour 5. Cyberpatients, Illness Narratives and Medicalization Section 2: Biological Property Rights in Cyberspace 8. The Online Pro-Ana Movement 9. The Bioethics of Cybermedicalization.

**Chapter 5 : Law And Borders--The Rise of Law in Cyberspace**

*Medicalization in cyberspace --The cyborg body --Cybermedicine and reliability discourse --Virtual governance of health behaviour --Cyberpatients, illness narratives and medicalization --Partial prostitution --Biological property rights in cyberspace --The online pro-ana movement --The bioethics of cybermedicalization --Conclusion: after.*

Like those awesome wireless headphones you recently searched for and now seem to see everywhere you go online! Personal health information, genetic data, and even human cells themselves are being freely traded for commercial gain – often without the consumer being aware. While there are some consumer protections in place, technological developments have outstripped their effectiveness. The implications for individual privacy and property rights are significant, and consumers are beginning to look for better ways to protect and manage their personal health data. Brokering patient data feeds big business in the U.S. To get a sense of just how much personal health data is being collected, look at the 10K filing for IQVIA, the leading healthcare research and data firm. Perhaps the largest broker of healthcare data in the world, IQVIA, boasts having over half a billion comprehensive, anonymized patient records in its database – Source All kinds of health data are being scooped up, archived, and sold. Every sales transaction at a pharmacy is archived. Your steps, heart rate, and location data are being sent to the cloud. Even human cells and genetic material from biopsies are being captured and resold. The many ways patient data is used may surprise you. Some of it is used to develop new drugs, medical devices, and therapies. Some to market healthcare services and insurance coverage. Still other data finds its way to law enforcement agencies. Human cells take on a life of their own In 1962, a woman named Henrietta Lacks died of cervical cancer. Her cells were the first that were successfully grown in the lab, making them useful as a basis for ongoing scientific research. Over the next 60 years, HeLa cells, as they became known, were grown in research labs and sold to pharmaceutical companies worldwide. HeLa cells were instrumental in the development of the polio vaccine, AIDS treatments, gene-mapping, cloning, in-vitro fertilization, and much more. In her bestselling book, *The Immortal Life of Henrietta Lacks*, Rebecca Skloot explains that neither Henrietta Lacks nor her family received any compensation for the use of her cells. On the contrary, recent developments like the partnership between the consumer genomic company 23andMe and pharmaceutical giant GSK have only served to keep these debates going. Genetic data tells more than your ancestry The 23andMe announcement that it would share genetic data with GSK for the purpose of developing new drugs and therapies once again pushed the issue of biological property rights to the forefront. Through this agreement, both companies share the rights to profits and royalties that result from the use of their shared genetic data. The consumers who supplied the raw genetic data are not entitled to any compensation. Several companies sell home genealogical DNA kits. One company offers a way to fill out your family tree by matching your DNA to living relatives who have matching DNA samples in their database. For a slightly higher fee some of these companies also report certain genetic predispositions to illness the consumer may have, such as breast cancer or psoriasis. Just recently genetic material was used to identify and arrest a suspect in the case of the Golden State Killer from the 1970s. Commercial DNA companies have policies in place requiring a subpoena before surrendering genetic information to law enforcement. But, in this case, no subpoena was needed because the records searched by law enforcement were voluntarily submitted to an open source database. Investigators found a DNA match to a distant relative who lived in the 1970s with their suspect, and from there created dozens of family trees made up of several thousand people. Based on their data model, police set up surveillance and collected a matching DNA sample from a year-old retiree, who was eventually arrested and charged. Home DNA kit companies offer people a way to opt out of having their data shared. As the Golden State Killer case illustrates, since a person can be identified based on the DNA of a biological relative, opting out may not be sufficient to protect privacy. Digital footprints leave health-related tracks everywhere In our everyday lives we generate an incredible amount of data that can be linked to our health, often in surprising ways. Take digital activity trackers. Much has been made of how these devices can improve health and healthcare. And their use continues to grow. These trackers collect and store data, often in the cloud, and typically include tools to enable data-sharing. But trackers are just one of countless sources. Loyalty card

purchases are tracked as well. Our jobs and hobbies are used as data points for statistical profiling. Our zip code is used as a source of socio-demographic data. All of these data sources are being used to piece together our digital footprints. In a recent article entitled *Health Insurers Are Vacuuming Up Details About You – And It Could Raise Your Rates*, ProPublica reported that health insurers are joining forces with data brokers to collect personal information about hundreds of millions of Americans with little oversight or regulatory scrutiny. Much like a credit score, insurers and actuaries are working on a scoring algorithms that could impact both access to and the cost of health insurance. Use of fitness trackers while on deployment has raised security concerns – Source Do those of us using trackers know where all our data is going? Turns out, the U. Not until it was discovered that some fitness trackers were enabling the enemy to use heat maps on the internet to see the location of service personnel who were running or cycling. The heat maps revealed both the location and traffic patterns within military bases around the world – including some classified locations. As a result U. Legal protections are limited There are few legal protections when it comes to the privacy and ownership of our health identity data. Laws governing the use of personal health data were enacted before the widespread use of wearables, activity trackers and the rise of big data. HIPAA, the Health Insurance Portability and Accountability Act of , protects only the privacy of patient information held by healthcare providers, insurers, data clearinghouses, and their partners. However, GINA does not apply to life insurance, disability insurance, or long-term care policies. Which means that insurance companies selling these policies can access genetic data and use it to make decisions about price and coverage. Individuals often give up their ownership rights, without even realizing it, when they agree to the terms and conditions on social media platforms or some apps. And court cases like *Moore v. Regents of University of California* have ruled that an individual does not actually own their own biological cells. The path ahead for biological privacy and property rights Few people expect legislation anytime soon that will strengthen individual biological property or privacy rights. In June , the U. The report was six years late and did not include any recommended policy changes. A new approach is needed. The post *Biological Property Rights*:

### Chapter 6 : [calendrierdelascience.com](http://calendrierdelascience.com) - The Ethics and Societal Impact of Nanotechnology

*The Sixth Edition of CyberEthics: Morality and Law in Cyberspace provides a comprehensive examination of the social costs and moral issues emerging from the ever-expanding use of the internet and new information technologies.*

### Chapter 7 : The Medicalization of Cyberspace: 1st Edition (Hardback) - Routledge

*3\_Biological Property Rights in Cyberspace Cornell University ENG - Spring*

### Chapter 8 : The Medicalization of Cyberspace (ebook) by Andy Miah |

*The implications for individual privacy and property rights are significant, and consumers are beginning to look for better ways to protect and manage their personal health data. Brokering patient data feeds big business.*

### Chapter 9 : - NLM Catalog Result

*The Medicalization of Cyberspace is a compelling and comprehensive consideration of how the internet and web are impacting medical practice, communication between experts and patients, the construction of the posthuman body, and many other pressing issues.*