



Theomai

ISSN: 1666-2830

theomai@unq.edu.ar

Red Internacional de Estudios sobre Sociedad,  
Naturaleza y Desarrollo  
Argentina

Reynolds, Paul

Property, Patents, or People: What part of NO don t you understand?

Theomai, núm. 5, 2002

Red Internacional de Estudios sobre Sociedad, Naturaleza y Desarrollo

Buenos Aires, Argentina

Disponible en: <http://www.redalyc.org/articulo.oa?id=12400507>

- Cómo citar el artículo
- Número completo
- Más información del artículo
- Página de la revista en redalyc.org

redalyc.org

Sistema de Información Científica

Red de Revistas Científicas de América Latina, el Caribe, España y Portugal

Proyecto académico sin fines de lucro, desarrollado bajo la iniciativa de acceso abierto

## REVISTA THEOMAI / THEOMAI JOURNAL

Property, Patents, or People:  
'What part of NO don't you understand?'

Paul Reynolds\*

\*Ngati Tuwharetoa & Nga Puhi tribal affiliations, New Zealand. Doctoral Candidate, Simon Fraser University, Vancouver, Canada. E-mail: [preynola@sfu.ca](mailto:preynola@sfu.ca)

I was wondering why I was disturbed at the rather innocuous finding of the chicken purchased from the supermarket, that the bones of portions of chicken were, more often than not, smashed and splintered (apart from the despicable life of battery hens that is). I realized that even in death all things deserve respect, even in the form of how meat is cut and prepared for sale. This realization is a culmination of learning gained from my upbringing in New Zealand, my Maori culture, and my parents, grandparents, peers and professors. My father who is a hunter has a respect for nature and for life; even in hunting he and many of his peers follow an unwritten law (almost reminiscent of a Lockean principle but certainly well practiced in indigenous and various other cultures) of taking only what you need to fill the freezer and leaving the rest. My mother and grandparents instilled in me a love and respect for all life in all of its diversity and beauty, a belief deeply held in Maoridom. I am always delighted with the environment (this is very Lewontinian of me!) of peers and friends surrounding me, and feel great warmth in their love and respect for each other. My professors over the years have taught me to be critical in my analysis of the world around me, to understand how the world works and illustrate that there are many people who also respect life.

Respect and dignity for life are paramount for me and a lot of other people. Maori and other indigenous people have always respected the sanctity and reciprocity of life. Many non-indigenous people have this affinity and are also realizing that there are upper limits to the manner in which life is being treated. My belief is that there should be no patenting on life; that includes all life. It is undignified, disrespectful, short-sighted and is just 'bad,' to use a term commonly used by numerous authors critical of patenting and genetic engineering (Kneen, Ho, Kimbrell, Shiva, Rifkin and many others). My intention with this paper is to illuminate how and why patents have been made on life. The historical and genealogical construction of property has impacted on the creation of patents entitling the patent holder to private ownership of a life form. Myriad arguments will also be made as to why patenting on life is 'bad.' I will end with a selection of vibrant methods and ideas that I think are helpful in the recapturing of life..

### How, and why, patents have been made on life

There is a political economy of patent work going on here. Within the international trade scene, countries are bound by trade pacts that are devised, by the dominant industrialized nations of the world, with the explicit purpose of opening up the worlds diversity (namely the global commons) to capitalist exploitation. This push for opening up the 'global commons' will result in the dismantling of the commons and the transformation of common property into private individual ownership. For this reason, Loeppky (1999) believes it is important to locate "...genome work within the political economy of contemporary capitalism...[and that there is a] continual struggle to restructure capital, labour and the institutions of the State, to protect the circulation and accumulation of capital..." (52).

The developments in genome research and production since the emergence of recombinant DNA technology in the early 1970s, has led to a fantastic growth in patenting. As of 2000, approximately 6,000 patents have been issued on full-length genes from human, animal, plant, bacterial and viral sources, of which 1,000 of these are specifically drawn to human genes and human gene variations that distinguish individuals, and 20,000 patent applications relating to genes are still pending (Parr & Preston, 2000).

It is believed that the main purpose of patents on life forms is to provide significant incentives for important genomic research that needs to be conducted but is too costly. Patents protect the intellectual property of the person or organization awarded the patent as they are likely to make large investments in research to bring a product, if any, to market. The impetus for patenting is also self-fulfilling because for gene patenting,

## REVISTA THEOMAI / THEOMAI JOURNAL

"...the focus remains almost exclusively on the deleterious effects brought about by a failure to patent: missed opportunities in commercial technology transfer, future economic development and corporate growth" (Loeppky, 1999, 39). Similarly, McNally & Wheale (1999) note that "...at the same time as patenting is a stimulus to corporate investment in research and development, it is also a stimulus to patenting itself, even amongst those opposed to the principle of patenting, because if one organization does not patent a process or product, another one might" (p. 175). Loeppky believes this fear is exacerbated on the international front by countries who are worried about being left behind if they don't conduct more research and find other patentables, which spurs governments to fund and encourage more genomic research and employ policy that is supportive.

Lets us turn now to the genealogical construction of patents. Chakrabarty has been a significant case in relation to conceptions of property in contemporary society and the construction of property law impacting on what can be considered privately owned and therefore patentable. Kevles, Kimbrell and Rifkin outline the case history amicably, as do other authors, including James Boyle, and Richard Gold.

The first patent on life was given in 1971 to Ananda Chakrabarty, who worked for the General Electric Company, on a genetically engineered organism designed to consume oil spills on the ocean. In this one case, "The court's action laid the all-important legal groundwork for the privatization and commodification of the genetic commons" (Rifkin, 1998, 43). Kimbrell (1997) says, "All nine justices deciding the *Chakrabarty* case did agree on one thing. They specifically noted that this was a 'narrow' case - one that did not affect the 'future of scientific research'"(p. 234). However, Kimbrell (1997) sees this as a "...complete failure by the Court to correctly assess the impacts of the *Chakrabarty* decision may go down as among the biggest judicial miscalculations in the Court's long history" (p. 234).

It is my belief, however, that the courts frame everything that passes before the court room as having economic value, basically because noneconomic value is difficult to measure (Gold, 1996). Further, court decisions rely significantly on precedent setting cases, as was mentioned in a brief supplied to the court by The People's Business Commission, headed by Jeremy Rifkin (Kimbrell, 1997, p. 232). Kimbrell (1997) is adamant though that "The Supreme Court would never have ruled for the patenting of these other living organisms or human subparts. Any such decision would have led to an immediate public uproar" (p. 253). Public outcry would certainly have occurred had they known. However, I imagine the general public would have thought that the future scenarios held by Rifkin would be too fantasmic to be a real possibility, especially since developments in genome research and recombinant DNA technology were relatively new. Given what most of the public know now, or even 10 to 20 years ago, this case would have generated a lot more questions and support for The People's Business Commission. Another possibility for this erroneous decision could be that the justices were just not in a position to adequately analyze and critique the science for themselves. Basically, they're not scientists. Which begs the question, why are they deciding in the first place and, therefore, who should decide? A follow-up question would be, if courts are only equipped to value things economically, why are they making decisions on life?

A plethora of ground breaking court cases since Chakrabarty further entrenched the belief that the commodification of life was full-on: Allen, Downing, Chaiton, & Coast Oyster Company; Hibberd application; Harvard oncomouse application. In September 1984 Allen, Downing, Chaiton, & Coast Oyster Company applied for a patent on a Pacific oyster that had been improved, as well as the process for improvement. Although denying the patent in 1987, the Board of examiners in the U.S. Patent Office "...declared that patents could in principle be granted on nonhuman animals" (Kevles, 1998, p. 74). In 1985 a patent was awarded by the Patent and Trademark Appeals Board to Kenneth Hibberd, a Minnesota scientist working for Molecular Genetics Research, for a variety of genetically engineered corn (Kevles, 1998, p. 74).

In 1988 the first mammal patented, invented by Harvard Professor Philip Leder & licensed to Du Pont, was "...a genetically engineered mouse [dubbed oncomouse] containing human genes that predispose it to developing cancer" (Rifkin, 1998, 47). The main utility claim for the oncomouse was "...as sources of malignant or proto-malignant tissue for cell culture and as living systems on which to test compounds for carcinogenicity or...power to prevent cancers" (Kevles, 1998, p. 75). However, the claim went even further to include "...any transgenic mammal, excluding human beings, containing in all its cells an activated oncogene that had been introduced into it - or an ancestor - at an embryotic stage" (Kevles, 1998, p. 75). In 1992, three more patents were awarded by the PTO for genetically engineered research mice (Kimbrell, 1997, p. 237).

## REVISTA THEOMAI / THEOMAI JOURNAL

What was apparent from all of these cases was that the courts task was to interpret "...the broad language that Thomas Jefferson had written into the patent law of 1793, which remained at the core of the patent code: he [Chief Justice Warren Burger in delivering the majority opinion in the Chakrabarty case] called it expressive of its author's 'philosophy that 'ingenuity should receive a liberal encouragement'" and noted that all succeeding Congresses had left Jefferson's language virtually intact" (Kevles, 1998, p. 70). The Chakrabarty case was the beginning of the end in court history of what was definable as patentable life and what wasn't. "The radical new patenting policy suddenly transformed a decision about patenting microbes into one that allowed the patenting of all life forms on earth, including animals" (Kimbrell, 1997, p. 238).

### A critique of patenting on life

The harm in patenting these miniscule bits of life and their capacities is enormous. Not only are we seeing the commodification of life, of nature, but also the desecration (Ho) and negation (Rifkin) of it. The desecration of the sacredness of life is overlooked in the name of science, where "there is an underlying attitude that Science is, indeed, beyond reproach, that it can never be wrong, while 'moral attitudes' or ethics are infinitely negotiable and evolvable" (Ho, 1998, p.174). Shiva (1997) sees that patenting of living organisms has two violent consequences: "First, life-forms are treated as if they are mere machines, thus denying their self-organizing capacity. Second, by allowing the patenting of future generations of plants and animals, the self-reproducing capacity of living organisms is denied" (p. 23).

The concept of the enclosures (given prominence by such authors as Shiva, Mies, Rifkin, and Goldman) has been integral to a critique of the conception of privatizing life. Rifkin calls this a race, where "The worldwide race to patent the gene pool of the planet is the culmination of a five-hundred-year odyssey to commercially enclose and privatize all of the great ecosystems that make up the Earth's biosphere. The history of 'enclosures' is critical to understanding the potential long-term consequences of current efforts to enclose the world's gene pool" (Rifkin, 1998, 38).

Enclosure is "...merely the logical convergence of the instrumental view of nature sanctioned by reductionist science and its kindred capitalist ideology that is driving the new biotech industry towards the limit of the exploitable" (Ho, 1998, p.25). Integral to enclosure of the commons are trade agreements that are touted as 'free,' in the sense that you are free to open up your markets, your biodiversity, your resources, for wholesale exploitation by a more developed country who is 'free' to take what you have freely offered in the global market. Trade Related Intellectual Property Rights (TRIPs), within the auspices of the General Agreement on Trade and Tariffs (GATT) and governed by the World Trade Organization (WTO), "...extend Western models of intellectual property rights to less developed countries" (McNally & Wheale, 1999, p. 170), and are only recognized "...when knowledge and innovation generate profits, not when they meet social needs" (Shiva, 1997, p. 122).

Enclosure, in the form of intellectual property rights, guaranteed to have international currency through the TRIPs agreement, "...formalize[s] the continuing piracy of Third World genetic resources by Northern biotech companies, effectively sanctioned by the science of genetic engineering" (Ho, 1998, p. 23), and is seen as a "...neocolonial attempt at enclosure or piracy of indigenous peoples' traditional common knowledge" (Mies & Bennholdt-Thomsen, 1999, p. 151). Shiva, as well as Debra Harry and other indigenous authors such as New Zealander Aroha Mead, call this piracy bioprospecting and biocolonialism. Ho (1998) believes this 'pilfering' "...has intensified as agricultural bio-technology drives 'gene hunters' to prospect for commercially lucrative genetic resources in the South, in the new regime of intellectual property rights that allows patenting of living organisms and their genes" (p. 24).

Another international forum sanctioning the science of genetic engineering and patenting is the UN Biological Diversity Convention (1992), which actively encourages marriage contracts between developing countries and developed country corporations. In 1991 a biodiversity prospecting contract was signed between Merck and the National Biodiversity Institute of Costa Rica – INBio. "This contract gives Merck the rights to screen, develop and eventually patent new products from the resources (plants, micro-organisms and animals) in Costa Rica's rain forests. In return, Merck has paid US\$1.3 million to aid Costa Rica's conservation programme and has agreed to give INBio an undisclosed percentage of any royalties" (McNally & Wheale, 1999, p. 173). In 1991 annual sales for Merck were US\$8600 million. Although the inequity here is glaring, what is even more disturbing is "Given that Costa Rica holds 5 percent of the world's biodiversity, the entire

## REVISTA THEOMAI / THEOMAI JOURNAL

global stock of biodiversity could be sold in similar deals for just \$26 million" (McNally & Wheale, 1999, p. 173).

Ruth McNally & Peter Wheale (1999) believe "this new regime of biotechnological patenting has generated a field of public conflict which has rendered visible a social movement opposed, for a variety of cultural, ethical and symbolic reasons, to the patenting of genetically engineered life-forms" (p. 184). The Human Genome Project is a significant site of resistance. For Maori however, as with other indigenous peoples, the Human Genome Diversity Project, in its efforts to save the DNA of 'fast-dying out' races of indigenous peoples, is the most threatening area of patenting because, "the commercial value is not in conserving indigenous peoples *per se*, only their extracted genes. Indeed, once genetic samples have been taken, the peoples become devalued from the researchers' point of view and their genes can become patentable subject matter of other agents" (McNally & Wheale, 1999, p.172).

Blood is life. Saliva is life. Hair is life. Even before the intervention of genetic technologies, there is life that has been taken from indigenous peoples through dubious means. This is disrespectful. Even more disrespectful is the impact on future generations of all types life forms from the intervention of these new genetic technologies.

### The reclamation of life

Numerous authors (including Keller, Kimbrell, Hubbard & Wald, Rifkin, Winner) advocate opportunities for public debate about serious issues relating to patenting of life forms. The recent consultations with the public conducted by the Canadian Biotechnology Advisory Committee are a good illustration of this point. This is necessary, and indeed should be mandatory, because as Hubbard & Wald (1997) eloquently put it: "If you want to build a skyscraper, you need an architect who specializes in building skyscrapers, but if you want a panel to decide whether or not to build more skyscrapers, you do not want it to consist mainly of those architects. Nor, in the case of either genetics or skyscrapers, should the decisions be based on the interests of businesses which stand to profit from them" (p. 160). However, the forums for debate need to be more than just token efforts at showing that 'we are listening to you' but then act in ways that illustrate that 'we didn't really listen but gave you an opportunity to do so because you wanted it.'

The recent decision by the New Zealand Government to lift the ban on field trials for genetically engineered crops but impose new controls on trials and ban the release of genetically engineered products for the next two years has come about after conducting a 2001 Royal Commission on Genetic Engineering. The Commission called for expansive input from the public, different groups and organizations, and so-called 'experts.' This process could be seen as verging on the token by some, and totally unnecessary by others (most, I would say, with vested interests). However, it must be acknowledged that there is a whole economy of players at work here that are pushing and pulling the government in it making its decision. Let us not forget though that the decision still rested with the government. The decision no doubt could be seen as a compromise between vastly opposing camps.

Prominent throughout the Royal Commission process in New Zealand were the Anti-GE activist groups, including a strong and dedicated contingent of Maori Anti-GE activists. A number of strategies were used by Maori to highlight their concerns, including staging sit-ins at the ERMA (Environmental Risk Management Authority) office, demonstrations at various events and venues, and voicing concern about and opposition to genetic research in formal submissions to various authorities including ERMA and the Royal Commission on Genetic Engineering. In addition, Maori were informing Maori. Various works were created to bring an awareness of genetic engineering issues to Maori people in general, including information booklets, video, CD, artwork, and hui (meetings) to discuss the impact of genetic engineering on Maori. An important philosophy of the whole movement is growing your own kai (food), because genetic engineering has shown us how dangerous our food is, and can be. Encouraging organics is a part of this move toward growing our own kai.

A problematic strategy for reclaiming life is patenting as protection. My view is that the slippery slope that 'anti-patenting on life' groups enter to accommodatingly permit the patenting of some life forms and not others, in an effort to protect life forms in general, is counter productive and assimilationist in nature. I believe this is not the answer as once you fall into the trap of conceding that some life forms have

## REVISTA THEOMAI / THEOMAI JOURNAL

ownership, and others don't, there is absolutely no reason to stop further encroachment of what is considered ownable. However, alternatives to private property do exist but are very difficult to implement because of the power of international trade agreements, in particular TRIPs. In order to protect the biodiversity commons, Shiva advocates collective intellectual property rights (CIRs) which create "...an opportunity to define a sui generis system of rights centered on farmers' role in protecting and improving plant genetic resources..." (Shiva, 1997, p. 80). This will ensure the protection of farmers and their role in preservation and conservation of biodiversity. It will also "...be based on biodemocracy - the belief that all knowledge and production systems using biological organisms have equal validity" (Shiva, 1997, p. 80). A similar notion of acceptance of other worldviews is found in Genethics. Of the ten moral principles proposed by Suzuki & Knudtson (1990), number ten highlights the arrogant ethnocentrism inherent in science and in particular modern genetics, stating that we must go "...beyond the rigid boundaries of Western science and even Western philosophical thought to rich, cross-cultural realms that embrace other ways of knowing" (p. 337).

Another strategy for the fight against patents on life is popular among a variety of authors, and indeed different communities (with some successful microcosms of community already in existence in New Zealand with the popularity of organic agriculture, and even in North America, such as the Kneen's organic farm). Ho (1998) and other authors (Mies and Shiva in particular) see that sustainable development is the path to follow, rather than abandonment of science altogether, where we treat "...physical parameters as given, setting limits to the size of the economic system that can be supported. That is the basis of the ecological concept of *carrying capacity* [a problematic term in itself], which reflects the size of the economic system and some optimum rates of transformation of energy and resources compatible with sustaining the human beings within the system" (p. 231). Sustainable development for Mies & Bennholdt-Thomsen rests on the importance of being able to recycle the waste that we produce. Rather than do a NIMBY (not in my backyard) we all need to be responsible for our own waste. Their conception of sustainable development is held together in a reinvention of the commons and a recreation of communities. There is "...no commons without community, and no community without reciprocity" (Mies & Bennholdt-Thomsen, 1999, p. 161). Capitalism, and its exploitation of resources, as well as the ideology of individualism and the market, is a real obstacle to the expansion of sustainable development in North America in particular. However, as the Kneen organic farm in British Columbia, Canada, and other like microcosms of community illustrate, such an option is potentially viable on a small scale I believe.

A vibrant method for the recapturing of life and dignity illustrated by Kimbrell seems to me quite obvious (as Lewontin says, as obvious as the genetic principles in Genethics by Suzuki & Knudtson (1990)), yet to others would be a total nonsense. Kimbrell's way of putting dignity back into life is to start with the body and the non-compensation for human body parts. He envisages the notion of a gift relationship. He says, "In contrast to the horrors of the contracting and sale of human body parts, *giving* a body part creates moral cohesion in both the giver and the receiver" (Kimbrell, 1997, p. 356). This reaffirms "...the dignity of our persons and our community" (Kimbrell, 1997, p. 357). This is indeed a potent option, counter to the market ideology of privatizing and commodifying all life forms. There is no patenting of life! However, in gift giving I believe the giver must be mindful of what the gift is for. Too many times indigenous people have been giving in the belief that the gift would be received in good faith and that dignity would never be desecrated. This does not diminish the fact that there is a possibility of reciprocal gestures of respect and dignity for all life forms.

Although the reclamation of the dignity of life is problematic, as illustrated above, the fact remains that the simplest form of resistance is to say 'no' to patenting on life. We do not need to patent everything under the sun. Patenting has no respect for life or the dignity for all life forms. Not all things can be conceived of in economic terms. The patent system is an economic construction that utilizes 'bad' science. Especially for the majority (there are some who will obviously sell out for whatever reasons) of indigenous, including my own Maori people, and myself, there is no negotiation. In fact, there is a global chorus of people who say that patenting on life is non-negotiable. The courts are not the arena for deciding life because there is no decision to make. We need to get the patenting of life out of the courts and out of the commodity and property discourse. In the words of one of the Maori Anti-GE activists, "What part of no don't you understand?" And that's how Maori spell it out. And people still ask questions so the next part of the question should be, "What part of no don't you understand?"

## REVISTA THEOMAI / THEOMAI JOURNAL

### Bibliography

GOLD, E. R.: **Body parts: Property rights and the ownership of human biological materials.** Washington, D.C., Georgetown University Press, 1996.

GOLDMAN, M.: *"Inventing the commons: Theories and practices of the commons' professional"*. In: M. Goldman, **Privatizing nature: Political struggles for the global commons.** London, Pluto Press: 20-53, 1998.

HO, M.-W.: **Genetic engineering - Dream or nightmare? The brave new world of bad science and big business.** Bath, UK, Gateway Books, 1998.

HUBBARD, R. & E. WALD: **Exploding the gene myth: How genetic information is produced and manipulated by scientists, physicians, employers, insurance companies, educators, and law enforcers.** Boston, Beacon Press, 1997.

KELLER, E. F.: **The century of the gene.** Massachusetts, Harvard University Press, 2000.

KEVLES, D. J. : *"Diamond v. Chakrabarty and beyond: The political economy of patenting life"*. In: A. Thackray, **Private Science: Biotechnology and the rise of the molecular sciences.** Philadelphia, University of Pennsylvania Press: 65-79, 1998.

KIMBRELL, A.: **The human body shop: The cloning, engineering, and marketing of life.** Washington, D.C., Regnery Publishing, Inc, 1997.

LOEPPKY, R.: *"Gene production: A political economy of human genome research"*. **Studies in political economy: A socialist review**, n° 60(Autumn): 29-57, 1999.

MCNALLY, R. & P. WHEALE: **Bio-patenting and innovation: Nomads of the present and a new global order.** In: P. O'Mahoney, **Nature, risk and responsibility: Discourses of biotechnology.** New York, Routledge: 165-184, 1999.

MIES, M. & V. BENNHOLDT-THOMSEN: *"Chapter 6: Defending, reclaiming and reinventing the commons"*. **The subsistence perspective: Beyond the globalised economy.** London, Zed Books Ltd.: 141-164, 1999.

PARR, M., & PRESTON, T: *"Patenting human gene-based inventions"*. **USPTO**, (2000, August).

Rifkin, J.: **The biotech century: Harnessing the gene and remaking the world.** New York, Jeremy P. Tarcher/Putnam, 1998.

Shiva, V.: **Biopiracy: The plunder of nature and knowledge.** Toronto, Between the Lines, 1997.

Suzuki, D. and P. Knudtson: **Genethics: The ethics of engineering life.** Toronto, Stoddart Publishing Co. Limited, 1990.

Any patent granted for any such invention or discovery is revoked, and just compensation shall be made therefor. (b)Denial of rights; revocation of prior rights. No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that. Continue Reading. In the United States: 42 U.S. Code Â§ 2181 - Inventions relating to atomic weapons, and filing of reports. (a)Denial of patent; revocation of prior patents. No patent shall hereafter be granted for any invention or discovery which is useful solely in the utilization of special nuclear material or atomic e People perceive me as someone who is accommodating, friendly, and kind. Yes, itâ€™s still part of my personality, but itâ€™s not something I spent most of my time. Itâ€™s just how I cope with the external world. Compared to someone like an ENFJ or ESFJ whose dominant function is extraverted feeling, I donâ€™t really have as much desire to meet the needs of others like them. And my extraverted feeling function is also less visible to others.Â Therefore, examine your need for people to understand you. Do you get happier when someone understands you? Do you really need everyone to understand you? Showing yourself more love and acceptance may be more important than getting people to know you. 2. Understand how you contribute to the misunderstanding. What's the meaning of the phrase 'What part of no do you not understand?'. I am plainly saying no, and I mean just that. What's the origin of the phrase 'What part of no do you not understand?'. The phrase 'won't take no for an answer' has been in the language since at least the mid-19th century.Â 'He wouldn't take no for an answer,' which gave meaning to the T-shirt Jim presented Carl printed with 'What part of No don't you understand?' The context there suggested that this was already an understood phrase and so probably dates from before 1988. It is an example of the many phrases of a mildly confrontational nature that emerged in the USA in the late 1980s and 1990s; for example, 'talk to the hand', 'so sue me', etc.