Taking Nature Seriously: An Implied “Natural Contract” to Patents?

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Patents protect inventions. Inventions are the manmade. They embody human mastery over nature.

Patent law was developed significantly during the Industrial Revolution, which shaped the modern patent system into what it is today.¹ The Industrial Revolution, in turn, took place within the “modern era”, and the socio-political and epistemological philosophies of this era form the bedrock of contemporary patent law.² The “modern era” is considered to include the early modern period from 1500 to 1800 (encompassing the Age of Enlightenment, Age of Exploration and the Industrial Revolution), followed by the late modern period (encompassing Machine Age, Age of Oil, Jet Age, Atomic Age, Digital Revolution, Space Age and Information Age), which continues.

It was an Enlightenment-era project to find objective truths, which were universal and homogenising. This had the effect of creating “other”, or the impure,³ and thereby dyadic pairs, including culture/nature, mind/body and subject/object. Within these binary pairs, one is only genuine or “pure” in relation to its other. For example, for there to be “culture” and the made, there must be “nature”, or for there to be objects of observation, there must be subjects undertaking the observation. Hence, neither part of a binary can stand on its own. They are interdependent.

¹ See Christine MacLeod, *Inventing the Industrial Revolution: The English Patent System, 1660–1800* (Cambridge University Press, 1988).

² Brad Sherman and Lionel Bently, *The Making of Modern Intellectual Property Law: The British Experience, 1760–1911* (Cambridge University Press, 1999).

³ Iris M Young, “The Ideal of Community and the Politics of Difference” (1986) 12(1) *Social Theory and Practice* pp. 1, 3.

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The culture/nature binary has a twin in the mind/body duality.⁴ This duality casts the mind (thought and language) as separate from the physical form embodying it. The mind constitutes the self and creates culture, whereas the body is dictated by nature. These dualities in turn birth further binaries, including subject/object and agency/essential. It is the mind that is the subject of observation and that has agency to act upon objects, which are essential. Put another way, it is culture that acts upon nature.

This is reflected in Lockean labour theory – a natural-rights theory based on social-contract theory, which was used to develop modern patent law in England,⁵ to justify property rights in the intangible.⁶ Locke stated:

every man has a property in his own person: this no body has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property. *It being by him removed from the common state nature hath placed it in, it hath by this labour something annexed to it, that excludes the common right of other men ...*⁷

Using the examples of collected acorns and picked apples, Locke continued that one has property in the fruits of one's labour because:

That labour put a distinction between them and common: that added something to them more than nature, the common mother of all, had done; and so they became his private right. ... The labour that was mine, removing them out of that common state they were in, hath fixed my property in them.⁸

In other words, the mind controls and owns the body. When the mind uses the body to control nature, it owns the product. Culture is the master of nature. The human master owns the nature slave.

Yet, not all labour is rewarded with property. Patent exclusive rights can inhibit follow-on innovation. Thus, there is an implied "social contract" of patent law: in exchange for exclusive rights, the patentee must provide an enabling disclosure of

⁴ René Descartes, "Meditatio Sexta: De rerum materialium existentia, et reali mentis a corpore distinctione" (1641), in John Cottingham (ed. and trans.), *Meditations on the First Philosophy* (Cambridge University Press, 1996) p. 100.

⁵ Cf. Immanuel Kant "On the Injustice of Counterfeiting Books" (1785), reprinted in JAL Sterling, *World Copyright Law* (2nd edn, Sweet & Maxwell, 2003); GWF Hegel, *Philosophy of Right* (Thomas M Knox Eng tr, Oxford University Press, 1967).

⁶ Lockean labour theory was used more to justify copyright than patent rights; Brad Sherman and Lionel Bently, *The Making of Modern Intellectual Property Law: The British Experience, 1760–1911* (Cambridge University Press, 1999) pp. 23–24. See, however, Adam Mossoff on the effect of Lockean labour on patent law development; Adam Mossoff "Rethinking the Development of Patents: An Intellectual History, 1550–1800" (2001) 52 *Hastings Law Journal* p. 1255.

⁷ John Locke, *Two Treatises of Government* (Peter Laslett ed, 2nd edn, Cambridge University Press, 1960) Sec. 27 (emphasis added).

⁸ *Ibid*, Sec. 28.

an invention that satisfies certain criteria (in particular, novelty, non-obviousness and utility).⁹

But, what about nature? We have taken care of the mind, but what of the body?

Locke’s treatise included a proviso that the commons should only be exploited to extent that “there is enough, and as good, left in common for others”.¹⁰ This, however, was not about preserving nature per se, but about ensuring there was enough nature left for other humans to exploit.

In a reaction to climate change and related events, Michel Serres has described the culture/nature binary as a relationship of parasite and host, where “[t]he parasite takes all and gives nothing; the host gives all and takes nothing. Rights of mastery and property come down to parasitism.”¹¹ He noted that those in power have forgotten nature, and transformed the world into “fetishes or commodities”;¹² mastered and possessed, dominated and appropriated.¹³ Human beings, as culture, are separate and masters of nature:

We imagined that we’d be able to live and think among ourselves, while things around us obediently slumbered, crushed by our hold on them: human history could take pleasure in itself in an a-cosmism of inanimate matter and of other living things.¹⁴

Through climate change, the world “could be said to be taking its revenge but which, more to the point, is reminding us of its existence”.¹⁵ There is an uprising of the enslaved,¹⁶ because “[s]laves never sleep for long.”¹⁷

Serres, therefore, argued that we need to move to a relationship of symbiosis, where the world hosts humans in a symbiotic relationship. In his words:

Back to nature, then! That means we must add to the exclusively social contract a natural contract of symbiosis and reciprocity in which our relationship to things would set aside mastery and possession in favor of admiring attention, reciprocity, contemplation, and respect; where knowledge would no longer imply property, nor action mastery, nor would property and mastery imply their excremental results and origins.¹⁸

⁹ Peter Drahos, *The Global Governance of Knowledge: Patent Offices and their Clients* (Cambridge University Press, 2010) pp. 27–32.

¹⁰ John Locke, *Two Treatises of Government* (Peter Laslett ed, 2nd edn, Cambridge University Press, 1960) Sec. 27.

¹¹ Michel Serres, *The Natural Contract* (Elizabeth MacArthur and William Paulson trans., University of Michigan Press, 1995) p. 38.

¹² *Ibid.*, p. 29.

¹³ *Ibid.*, p. 32.

¹⁴ *Ibid.*, p. 39.

¹⁵ *Ibid.*, p. 29.

¹⁶ *Ibid.*, p. 33.

¹⁷ *Ibid.*, p. 39.

¹⁸ *Ibid.*, p. 38.

In creating natural contracts, “however much nature gives man, man must give that much back to nature”.¹⁹ Furthermore, nature would be given legal subjectivity.²⁰ The idea of natural contracts is still based on the culture/nature binary – culture and nature remain two separate entities that can enter into a contract. However, natural contracts break the link between culture/nature and subject/object, as nature is not just an object.

The question remains of how this would work in reality. Modernity views only humans as having agency through their thought, language and ability to act with intention. Nature cannot speak so cannot form a contract. In nature’s defence, Serres pointed out the social contract is also unspoken and unwritten.²¹ Furthermore, he argued that, “[i]n fact, the Earth speaks to us in terms of forces, bonds, and interactions, and that’s enough to make a contract.”²²

What could an implied natural contract mean for patent law? It could change the way that we think about materiality when considering the meaning of the inventor, the invention and the inventive step. If nature has agency, we can recognise the material contingencies of invention. This removes the pedestal upon which we place the “genius inventors” who contribute to the conceptualisation of inventions. Invention becomes more symbiotic. This in turn affects the way we perceive inventiveness.

Furthermore, the agency of nature could result in different limits to patentability. For example, it could force us to re-think the invention vis-à-vis the discovery or the natural, and the kinds of things that should be patentable. In this vein, it could also change our understanding of inventions that are not patentable because of *ordre public* or morality because of serious prejudice to the environment.²³

Finally, it might shift the way that we think about access to the materials that lead to inventions, such as biological materials. Perhaps access to such materials might become part of the patent contract.

In any case, we need to start taking nature seriously, because nature’s revolution has begun.

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¹⁹ *Ibid*, p. 38.

²⁰ *Ibid*, p. 38. Note that, in New Zealand, Te Urewera and Whanganui River have legal personhood. Catherine J Iorns Magallane, “Nature as an Ancestor: Two Examples of Legal Personality for Nature in New Zealand” (2015) *Vertigo* <https://journals.openedition.org/vertigo/16199>; and Kennedy Warne, “A Voice for Nature” (2019) *National Geographic* <https://www.nationalgeographic.com/culture/2019/04/maori-river-in-new-zealand-is-a-legal-person/>.

²¹ Serres (*supra* note 11) p. 39.

²² *Ibid*, p. 39.

²³ TRIPS Agreement, Art. 27.2.