1.1. Extractive property

Economically successful states can be non-developmental for indigenous people. It may be that the state is always non-developmental for indigenous people. The pages of this book offer some reasons for formulating this strong claim, but they do not contain the data needed to test it. One would have to examine the history of many states. My case studies are mainly based on fieldwork carried out in Australia between 2008 and 2011, although I do draw on the literature that examines the experience of indigenous groups with state property orders in other countries, such as Canada and India. The case studies reveal a property order that remains extractive for Aboriginal and Torres Strait Islander people, albeit one that is masked by the complexity of property law.

But it is also a time of opportunity for Australia's indigenous people. As we will see in Chapter 4, the symbolic recognition of the value of their knowledge has never been greater. They have also regained some or most of the incidences of ownership over more of their land than at any other time in the history of colonization. The percentage of land in Australia owned or controlled by indigenous people is 16 per cent, with 98 per cent of this land being in very remote locations.¹ If they can overcome the danger of symbolic regulation that follows symbolic recognition, they may yet be able to find a better future for themselves. They are, the cases studies suggest, dealing with the effects of the state's extractive property order on their knowledge systems through a combination of secrecy and the formation of indigenous developmental networks.

As we will see, under extractive intellectual property systems indigenous people tend to end up in an economic no-man's-land. They face the problem of asset transfer under the public domains of intellectual

¹ Steering Committee for the Review of Government Service Provision, *Overcoming Indigenous Disadvantage: Key Indicators 2011* (Canberra: Productivity Commission, 2011), 56.

property systems, and they often fail to achieve ownership of an asset because they do not have the capacity to transform the asset in a way that is required under the rules of the system (for example, the inventive step requirement as applied to biotechnology inventions). One approach to this problem is to develop a sui generis system for indigenous knowledge. Within the World Intellectual Property Organization (WIPO) many states support the creation of such sui generis standards (see chapter 4). I argue that sui generis systems pose Weberian dangers of bureaucracy for indigenous people. Instead it might be better to contemplate adjustments to current intellectual property systems based on a combination of simple rules, principles and a system of regulatory convening (see chapter 5).

Returning to my opening claim, Australia, Canada, New Zealand and the United States are examples of prosperous states, but all four have living within their borders indigenous people that do poorly on socioeconomic measures. For example, the United Nations Special Rapporteur in 2004 drew attention to the 'human development gaps' existing for indigenous people in Canada in areas such as health care, housing and education.² Australia has a long history of underdevelopment of its indigenous people. Faced by continuing poor outcomes on matters as basic as the mortality rates for indigenous children, the Australian federal and state governments in 2008 launched a long-term initiative called 'Closing the Gap'.³ In New Zealand, socio-economic measures also paint a picture of disadvantage for indigenous people. So, for example, rates of suicide and incarceration amongst indigenous people remain disturbingly high.⁴ In the United States, the census data for 2010 shows that approximately 28 per cent of American Indians and Alaska Natives were living in poverty compared to 15 per cent of people for the nation as a whole.5

The economic and social problems of indigenous people are not confined to these four states. A UN special report on the position of indigenous people in Asia offers the following bleak summary:

² See UN Commission on Human Rights, Report of the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people, Rodolfo Stavenhagen, Mission to Canada, E/CN.4/2005/88/Add.3, 2 December 2004, available at http://daccess-dds-ny. un.org/doc/UNDOC/GEN/G05/100/26/PDF/G0510026.pdf?OpenElement.

³ See www.coag.gov.au/closing_the_gap_in_indigenous_disadvantage.

⁴ For the details see UN Human Rights Council, Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya. The Situation of Maori people in New Zealand, A/HRC/ 18/35Add.4, 31 May 2011 available at www.ohchr.org/Documents/Issues/IPeoples/SR/ A-HRC-18-35-Add4_en.pdf.

⁵ Taken from the US Census Bureau, www.census.gov/newsroom/releases/archives/ facts_for_features_special_editions/cb11-ff22.html.

1.1. Extractive property

Indigenous peoples in Asia are among the most discriminated against, socially and economically marginalized, and politically subordinated parts of the society in the countries where they live. ... They are victims of serious human rights violations as a consequence of the dispossession of their lands and natural resources, widespread violence and repression, and assimilation.⁶

The evidence points to a globally persistent pattern of indigenous peoples' disadvantage that occurs in both developed and developing countries. This persistence in developed countries is striking because, on indices of institutional integrity relating to matters such as rule of law and control of corruption, Australia, Canada, New Zealand and the United States do very well.⁷ What might explain the seemingly intractable problem of indigenous peoples' underdevelopment in rich states?

One influential idea within economic history is that it is institutions that set a country upon the path to rags or riches.⁸ Private property rights are generally the heroes in this story. Institutions that provide individuals with the opportunity to make secure investment decisions at the micro level lead to the macro success of a country. However, institutions can also play the role of villain. Some institutional arrangements concentrate power in the hands of an elite few and allow this elite to prey on the economic efforts of the larger population. Termed 'extractive institutions' by Acemoglu *et al.*, they generally reduce the growth prospects of a country.⁹

Acemoglu *et al.* use the distinction between secure property institutions and extractive institutions as part of a larger analysis aimed at explaining why the countries that were formerly linked to the flourishing economics of the Aztecs, Incas and Mughals experienced a decline in economic prosperity while countries that began as colonies (Australia, Canada, New Zealand and the United States) became much richer. The critical factor in explaining why these colonies prospered lies not in their

3

⁶ UN Human Rights Council, Report of the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people, Rodolfo Stavenhagen, General considerations on the situation of human rights and fundamental freedoms of indigenous peoples in Asia, A/HRC/ 6/15/Add.3, 1 November 2007, 4, available at http://daccess-dds-ny.un.org/doc/ UNDOC/GEN/G07/148/22/PDF/G0714822.pdf?OpenElement.

⁷ Results of various indices for these countries can be found at Transparency International's website at www.transparency.org as well as at the Worldwide Governance Indicators Project at http://info.worldbank.org/governance/wgi/index.asp.

⁸ For examples of this line of argument see D. C. North and R. T. Thomas, *The Rise of the Western World* (London: Cambridge University Press, 1973); D.C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press, 1990).

⁹ D. Acemoglu, S. Johnson and J. A. Robinson, 'Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution', *Quarterly Journal* of Economics, 117 (2002), 1235.

geographical endowments but rather in their institutional inheritance. When colonists created property rules that were broadly enfranchising of individual productivity they set a colony upon a long-run growth path. Where they established extractive institutions, as did the Spanish and Portuguese in the Americas, they created the conditions for long-term decline. The choice between establishing productive property rights and extractive ones was heavily affected by population density and whether or not Europeans decided to settle in the colony in large numbers.¹⁰ In places where Europeans became populous, they were more likely to end up with property arrangements that were less discriminatory as amongst themselves than if they were an elite minority seeking to subjugate an indigenous population.

In the colonies that became rich, the colonists progressively created an autonomous legal system. Such a system is characterized by a formal independence from politics and a commitment to rules as tools of governance, accountability and procedure.¹¹ A property order embedded in autonomous law meets the economist's ideal of well-defined and secure property rights. However, as we will see in the case of Australia, autonomous law's promise of secure property institutions for the colonists has not been extended to indigenous people. Instead indigenous people have had to adapt to an extractive property order that has institutionalized insecurity for their assets. This basic line of argument occupies the first four chapters of the book. The central challenge for indigenous people is to find ways in which to overcome the disadvantages of a property order of the state that is largely non-developmental for them in terms of economic opportunities.

For present purposes, the concept of an extractive property order refers to property systems in which the systems allow one group (the extractor group) to obtain control of assets belonging to a second group without the extractor group obtaining consent and offering proper compensation for the asset transfer. The second group is made worse off and the extractor group is made better off. An extractive property system can also contain rules that prevent a particular group from gaining ownership of assets. Over the course of history indigenous people, women and religious groups have had their property rights restricted by extractor groups. Extractive property systems exclude particular groups from participation in economic life because they cut groups off from the ownership of productive assets.

¹⁰ *Ibid.*, 1231.

¹¹ P. Nonet and P. Selznick, Law and Society in Transition: Toward Responsive Law (New York: Harper & Row, 1978), 54.

1.1. Extractive property

Systems rather than institutions are the focus in the extractive property concept. Institutions are sometimes linked to the rules or constraints, both formal and informal, that shape human interaction.¹² One could substitute institutions for systems in the concept of an extractive property order without changing the concept too much, but the term systems does a better job of capturing the integrated complexity of property rules. The systems complexity of modern intellectual property aids extractor groups. Pharmaceutical companies, for example, use the complexity of the patent system to extract massive rents from assets that rightly belong in the public domain and should be the subject of competitive rather than monopoly pricing.¹³ The use of systems also draws attention to the fact that alongside rules there are other components, such as actors and values, in a given property system that contribute to its extractive function. The effects of the patent system, for example, do not just depend on its many rules, but on the behaviour of patent offices and patent attornevs.

The case studies and examples presented in the chapters that follow focus on indigenous knowledge assets and the use of intellectual property rights by indigenous people in economic enterprises of their own making. Assets are resources that can be used to generate a flow of income.¹⁴ They can be divided into tangible assets such as real property and intangible assets such as reputation and knowledge. The claim that the property orders of states have been extractive for indigenous people is easy to understand and illustrate using the case of land. Many indigenous groups around the world have lost ownership of their traditional lands and territories to states, a fact recognized by states in the sixth opening paragraph of the United Nations Declaration on the Rights of Indigenous Peoples: 'indigenous peoples have suffered from historic injustices as a result of, inter alia, their colonization and dispossession of their lands, territories and resources'.

How are intellectual property systems extractive when it comes to indigenous peoples' knowledge assets? There are examples in Australia where indigenous people have used copyright to protect their artistic works.¹⁵ These cases suggest that intellectual property systems might

5

¹² D. C. North, Institutions, Institutional Change and Economic Performance (Cambridge University Press, 1990), 5.

¹³ See Federal Trade Commission, 'Pay-for-delay: How drug company pay-offs cost consumers billions', An FTC Staff Study (Washington, DC, January 2010).

¹⁴ R. Cooter and T. Ulen, *Law and Economics*, 3rd edn. (Reading, MA: Addison Wesley Longman, 2000), 39.

¹⁵ For a critical discussion see K. Bowery, 'Indigenous Culture, Knowledge and Intellectual Property: The Need for a New Category of Rights?' in K. Bowery,

offer indigenous people some security of property in some contexts. They gain security of property for objects that fit the criteria of commodification to be found in these systems. But as the next section makes clear intellectual property systems continue to have extractive effects for indigenous people.

1.2. Extractive intellectual property

While there are many differences of detail amongst different kinds of intellectual property rights such as copyright, designs, patents, trade marks, plant breeders' rights and so on, from an economic perspective all these rights deal with a free-rider problem. A rational economic agent will not invest in making a film, a design or an invention, or in building up the name of a business, if another economic agent can acquire the benefits of these investments for free by, for example, copying the film or manufacturing the invention without having paid the R&D cost. If society does nothing to address the free-rider problem, not enough resources will be devoted to innovation of various kinds.¹⁶ Intellectual property rights, by creating some form of exclusivity, enable their owners to make a private return on their investment. They enable private rent riding. At the same time the social benefits of innovation are only fully realized if an innovation is widely diffused, the diffusion of life-saving medicines being an obvious example of the importance of diffusion to social gain. The mechanism of diffusion within capitalist systems is primarily the market. Markets deal with the problem of private rent riding through competition. In theory, private rents should be dissipated. In order for diffusion to take place, the owners of intellectual property rights cannot through these rights acquire absolutist power. Instead, all intellectual property rights have rules that in one way or another allow for the possibility of their subject matter of protection being returned to the market, or not being removed from the market in the first place.

The rules of intellectual property can be seen as creating a series of relative public domains in which producers know, for example, that under the rules of the patent system an invention has lost the exclusivity conferred upon it by patent rules. Public domains are best thought of as being relative to an intellectual property system. The claim that

M. Handler and D. Nicol (eds.), *Emerging Challenges in Intellectual Property* (Melbourne: Oxford University Press, 2011), 46.

¹⁶ But there are those who argue that markets will perform better without intellectual property monopolies. See M. Boldrin and D. K. Levine, *Against Intellectual Monopoly* (New York: Cambridge University Press, 2008).

1.2. Extractive intellectual property

7

something is in the public domain should be read as saying that, for the purposes of a given system such as copyright or patents, the relevant subject matter in question has lost the degree of exclusivity conferred upon it by the system (or it may not have fallen within the protection of the system in the first place).

The public domains of intellectual property are profoundly important to a basic value that has been important in the common law tradition, the freedom of commerce. One can illustrate this using Hohfeld's theory of rights. Copyright is an example of a system that limits the duration of protection and does not extend protection to ideas. In Hohfeldian terms, my right to reproduce works out of copyright or to write detective novels drawing on the ideas of Dashiell Hammett and Raymond Chandler is a liberty (privilege).¹⁷ The correlative of liberty is 'no-right', i.e. copyright owners have no-rights to prevent the exercise of this liberty. Liberties are foundational to the operation of markets. Everyone has a liberty to use ideas to create works (not a claim-right since this would imply a duty on others not to use the idea) and can compete in doing so. Seen in terms of liberties, it is clear that the public domains of intellectual property are fundamental to the operation of markets and consumer interests. Intellectual property rights are rights that interfere in the freedom of commerce because they create duties of non-interference (rights have correlative duties). If we value freedom of commerce and markets then intellectual property rights cannot assume the form of absolutist monarchs, but have to be weakened in some way so that the liberties upon which markets depend ultimately prevail. It is the combination of liberties and no-rights that allows markets to drive down, for example, the cost of medicines that have fallen out of patent protection or books in which the copyright has expired.

Turning now to the protection of knowledge in indigenous societies in Australia, the first point to make is that knowledge is part of an ancestral place-time cosmology, something discussed in detail in chapter 2. Powerful ancestors have transformed the land into a territorial cosmos in which they remain present as active forces, with various geographical features such as waterholes, rock formations and hills marking their transformative work. The human inhabitants of these territories have to understand, respect and care for these territories (territories become divided into Countries, a basic unit of ownership by individual groups). Senior indigenous people are part of long chains of custody of knowledge

¹⁷ In Hohfeld's jural scheme, liberty and privilege are equivalent. See W. N. Hohfeld, 'Some Fundamental Legal Conceptions As Applied In Judicial Reasoning', *Yale Law Journal*, 23 (1913), 16, 36.

about Country and ancestors that they impart in various ways to others in order to ensure that the chain of knowledge continues. These senior people carefully stage and control the release of knowledge. Senior people can also draw on ancestral power through the use of songs, ritual, designs and sacred objects.¹⁸ The concepts that dominate the use of knowledge in this world are duty and permission. Senior people have duties in this ancestral system to ensure that the chain of custody of knowledge is maintained and that the ancestral system is used wisely to help indigenous groups adapt to change. It is also clear from the historical evidence that this system of permissions and duties did not prevent the rise of economically beneficial trading networks across Australia and beyond.¹⁹ Access to knowledge, along with use of things such as songs and designs are generally governed by conditional permission (use for a specific purpose) rather than what the lawyer would call a transfer of legal title. This is not so much a world of resources over which there is 'community title' as a world in which the use of knowledge and resources by individuals is governed by a web of duties and usepermissions steered by knowledgeable people.

One way in which to think about indigenous knowledge in this system is to imagine concentric circles made up of individuals. Those in the innermost circle are the most knowledgeable people (often referred to as elders). They have arrived in the inner circle through a life-long process of initiation. Those individuals who occupy the outer rings are at different stages of their initiation journeys. In those cases where this system still survives indigenous people see themselves as part of unbroken chains of custody of knowledge and accompanying duties that in their minds go back many thousands of years. The primary duties of those in the inner circle are to continue the chain of custody so that those who come after will know what to do to keep their Countries (estates) healthy. Elders have a paramount duty of care to keep Country healthy, a duty that is owed to the ancestors in the chain. It is probably not helpful to think about this system too much in Hohfeldian terms, but if a correlative right is required one can say ancestors and Country have rights to certain services that will keep Country healthy for past, present and future generations. The important point here is that it is this inner circle that has responsibility for the purposive steering of an ancestral system for a

I. Keen, 'Ancestors, Magic and Exchange in Yolgnu Doctrines: Extensions of the Person in Time and Space', *Journal of the Royal Anthropological Institute*, 12 (2006), 515, 523.
See M. Langton, O. Mazel and L. Palmer, 'The "Spirit" of the Thing: The Boundaries

¹⁹ See M. Langton, O. Mazel and L. Palmer, 'The "Spirit" of the Thing: The Boundaries of Aboriginal Economic Relations at Australian Common Law', *Australian Journal of Anthropology*, 17 (2006), 307.

1.2. Extractive intellectual property

given territory, including responsibility for adapting land tenure systems to changing circumstances.²⁰ Such inner circles would have stretched across Australia in a networked fashion prior to colonization. Native title in Australia is probably less a bundle of customary rights and more a system of knowledge in which the most knowledgeable have the authority to make decisions for their particular ancestral territory. While one can describe an indigenous knowledge system in terms of rights and correlative duties, it may be better to think simply of duties and conditional permissions as lying at the centre of the system. These conditional permissions may be very strong for some resource uses and appear to function as rights to outsiders. However, if the claim that knowledge is at the centre of the ancestral system is correct then those in the outer concentric circles would likely be given permissions rather than an exclusive right. Ancestral systems made up of primary duties to Countries, along with permissions that confer entitlements of varying strength may help to explain why indigenous groups were able to adapt to the great droughts and ice ages that occurred during their 50,000-year occupation of Australia. For a social system to be able to cope with such large-scale environmental changes, it had to have both the stability of structure and the mechanisms to deal with environmental changes.

If now we overlay ancestral systems with systems of intellectual property rights we can see how extractive transfers of knowledge assets may occur. An image on a rock of an ancestor generated long ago by custodians in the chain of knowledge may continue to remain important in ceremonies, with only the initiated having permission to use the image. Under an ancestral system access to and use of the image remains the subject of restrictions. Under copyright law the image as an artistic work enters a public domain in which there are liberties to use and correlative 'no-rights' to prevent use after a period of life of the author plus seventy years. Indigenous knowledge reported as scientific facts in journals and other publications enters a public domain that may have all sorts of ripple effects for indigenous people's knowledge assets as economic assets. The Northern Territory's Biological Resources Act of 2006, for example, extinguishes knowledge as an indigenous person's knowledge if it is to be found in the public domain.²¹

The patent system provides another example of a possible asset transfer. A plant in an ancestral system may be part of a long chain of custody

9

²⁰ For examples of the work of this inner circle see P. Sutton, 'The Robustness of Aboriginal Land Tenure Systems: Underlying and Proximate Customary Titles', *Oceania*, 67 (1996), 7, 15–20.

²¹ See paragraph 29(2)(b).

in which successive generations of indigenous women pass on knowledge and duties of care for the plant. In this kind of system there is no sharp dividing line between the natural and social world. Instead, there is a territorial cosmos in which the human and non-human members are part of an integrated system. For the purposes of patent law the plant exists in a natural world, its genetic information constituting a discovery, a discovery open to all to use for the purposes of patentable invention. The public domain of the patent system is a deeply chronological one in which protection begins with an event (first filing) and is projected to run into the future based on a calculation a company makes about the cost of renewal versus the benefit of renewal of the patent. While indigenous systems of knowledge vary in the way that they structure secrecy within a group, they probably all share the feature that the entry of knowledge into a group does not entail a loss of control over that knowledge. An open secret in an indigenous group does mean it is open to anyone to use, in stark contrast to the knowledge in a public domain. Some knowledge within an ancestral system may over time become more diffused, but the system itself remains linked to a permanent presence of ancestral forces, a system in which there are no clocks that set limits on the duration of protection.²² This conception of time and knowledge is very different to a chronological approach to protection in which the system shifts dramatically from strong monopolistic protection to no protection of knowledge.

The liberties that structure the public domains of intellectual property systems can bring about the non-consensual asset transfers of indigenous people's knowledge and material assets. The effects of intellectual property are part of the cumulative effects of the state's property order on indigenous people. The poor developmental position of indigenous groups described in the previous section is hardly puzzling when the extractive effects of state property orders on the tangible and intangible assets of indigenous people is summed. Plants that were important assets in their pre-colonial economies slip away from their control because indigenous people lose their land and their plants enter the public domains of intellectual property. There is also something that a summing of economic losses does not capture, and that is the effects of these extractive property orders upon the authority of indigenous people's ancestral systems. Their fight for the return of their assets is not just a fight for economic independence, although this is vitally important. It is also a fight to preserve or rebuild ancestral systems of decision making. In

²² H. Morphy, Ancestral Connections: Art and an Aboriginal System of Knowledge (Chicago and London: University of Chicago Press, 1991), 89.