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The Politics of Knowledge and the Reciprocity Gap in the Governance of Intellectual Property Rights

**A Thesis Submitted in Fulfilment of the Requirements for the
Degree of Doctor of Philosophy
Department of Political Science and Public Policy, University of
Waikato, Hamilton, Aotearoa/New Zealand**

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2007

ABSTRACT

This study examines the politics of knowledge benefit-sharing within the re-regulatory framework of the Trade-related Intellectual Property Rights (TRIPS) Agreement which entered into force in 1995 under the auspices of the World Trade Organisation (WTO). The thesis argues that TRIPS both represents a mainstream legal mechanism for states and organisations to govern ideas through trade, and is characterised by a commercial direction away from multilateralism to bilateralism. In its post-implementation phase, this situation has seen the strongest states and corporations consolidate extensive markets in knowledge goods and services. Through analyses of the various levels of international and national governance within the competitive knowledge structure of international political economy (IPE), this study argues that the politicisation of intellectual property has resulted in the dislocation of reciprocity from its normative roots in fairness and trade equity. In conducting this enquiry the research focuses on the political manifestations of intellectual property consistent with long-standing epistemic considerations of reciprocity to test the extent to which the intrinsic public good value of knowledge and its importance to human societies can be reconciled with the privatisation of public forms of knowledge related to discoveries and innovations.

This thesis draws on Becker's virtue-theoretic model of reciprocity premised on normative obligations to social life to ground its claim that an absence of substantive reciprocal requirements capable of sustaining equivalent returns and rewards is detrimental, both theoretically and practically, to the intrinsic socio-cultural foundation and public good value of knowledge. The conceptual framework of reciprocity defined and developed in this study challenges the materialist controlling authority and proprietary ownership vested in intellectual property law. A new conceptual approach proposed through reciprocity, and provoked by on-going debates about IP recognition, knowledge protection, access and distribution is advanced to counter strengthened and expanded IPRs. Theories of knowledge and property drawn from political philosophies are

employed to test whether reciprocity is sufficiently robust enough, or even capable of, encompassing the gap between capital and applied science. This thesis argues that hyper-capitalism at global, national and local levels, accompanied by the boundless accumulation of technology, closes down competition both compromising IP as private rights and the viability of their governance. The political implications of the protection and enforcement of private rights through IP is examined in two key chapters utilising empirical data in relation to traditional knowledge (TK) and reciprocity; the first sets the parameters of TK and the second explores aspects of Maori knowledge systems and reciprocity directed at identifying national and local issues of significance to the debates on IP governance. As a viable direction for knowledge governance this thesis concludes that the gap between the re-regulatory trade framework of intellectual property on the one hand, and reciprocity on the other, requires closing to ameliorate the detrimental disruptions to democratic integrity, fairness and trade equity for significant numbers of communities and peoples around the world.

Acknowledgments

There are many people whose assistance and support made this thesis possible. In the Department of Political Science and Public Policy I wish to thank Dr. Patrick Barrett, Professor Dov Bing, Dr. Geoffrey Cupit, Mrs. Frances Douch, Dr. Colm McKeogh, Dr. Mark Rolls, Emeritus Professor Theo Roy and Dr. Ronald Smith. Sincere thanks are extended to the academics, government officials and individuals from business organisations in New Zealand, Australia and the United Kingdom who willingly agreed to be interviewed and gave so magnanimously of their time. I am grateful to (the late) Dr. Ross Casci, Kevin Churchill, Amy Fitzgerald, Geraldine Canham-Harvey, Sheeba Devon-Rolls, Dr. Suzanne Gower, Melissa Hackell, Betty-Ann Kelly, Hume Johnson, Dr. Lynda Johnston, Dr. Kristina McGuinness-King, Tracey Morgan, Dr. Deane Searle and Jeanette Wright for assistance and encouragement. Thanks to Social Science librarian Jillene Bydder whose knowledge has been invaluable to this research and also Jenny McGhee for her help with the intricacies of endnote. The computer support staff in the Faculty of Arts and Social Sciences are owed thanks for 'smoothing my feathers with equanimity' on many occasions. Patricia Stannard deserves special thanks for her comments and wise counsel. Gratitude is owed Dr. Philippa Miskelly, also on a Ph.D journey, for making the task lighter with the kind of care and support that only good friends can provide.

I am profoundly grateful to my friend and mentor Dr. Wayne Robinson for his interest in this thesis. His willingness to give freely of his time in retirement to listen and challenge me at every opportunity, and with good humour, has been truly inspirational. A special thanks to Vera Robinson for the convivial atmosphere whenever we gathered together. My chief supervisor Dr. Alan Simpson agreed to supervise this research when I first presented with the topic despite an incredibly busy schedule. I offer my deepest gratitude to him for identifying issues and generously sharing his knowledge with me during the writing process. Lorraine Simpson's practical advice was given openly in the spirit of friendship. Sincere thanks goes to my second supervisor Dr. Priya

Kurian for her insightful comments and help in shaping ideas. She has been a beacon over the years offering robust criticism along with consistently cheerful encouragement. Appreciation and thanks for all the personal support is extended to friends, my sisters Elizabeth Sinclair and Lorene Shaw, and especially my loyal immediate family: Zachary, Nina, Joshua, Marion, Rebecca, David, and Christopher. All the long distant calls, e-mails and special times together sustained me during the writing process. Finally, to Roger for his love, and unwavering belief that a task started should be a task finished, I give my heartfelt thanks.

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GLOSSARY

ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
BIRPI	United International Bureau for the Protection of Intellectual Property
CBD	Convention on Biological Diversity
CEO	Chief Executive Officer
DNA	Deoxyribonucleic Acid
EPO	European Patent Office
FDI	Foreign Direct Investment
FFM	Fact Finding Mission
GATT	General Agreement on Tariffs and Trade
HIV	Human Immune Deficiency Virus
ICC	International Chamber of Commerce
IK	Indigenous knowledge
IMF	International Monetary Fund
IP	Intellectual property
IPE	International Political Economy
IPRs	Intellectual property rights
MED	Ministry of Economic Development
MSF	Médecins Sans Frontières
NAFTA	North American Free Trade Agreement
NGO	Non-governmental Organisation
NIC	Newly Industrialised Countries
OECD	Organisation for Economic Co-operation and Development
PBRs	People's Biodiversity Registers
TGKP	Traditional Group Knowledge Practices
TK	Traditional knowledge
TNC	Transnational Corporation
TRIPS	Agreement on Trade-related Aspects of Intellectual Property Rights.
TRR	Transferable Resource Rights
UNCTAD	United Nations Conference on Trade and Development
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
US, USA	United States of America
USTR	United States Trade Representative
WB	World Bank
WIPO	World Intellectual Property Organisation
WTO	World Trade Organisation

MAORI TERMS AND WORDS

AOTEAROA	New Zealand
HAPU	Sub-tribal group
HIKOI	Long Walk
KAI (-nga)	Food
KAITIAKITANGA	Guardianship and protection
KAPA HAKA	Team of ceremonial dancers
KAUPAPA	Philosophy - a Maori way of doing things
KORU	Shrub - symbolised fern
KUMARA	Sweet potato
IWI	Tribal group
MARAE	Focal point of settlement, meeting area
MATAURANGA	Traditional knowledge
MAURI	Life principle or special character
PA	Stockaded village
RANGINUI	Sky father
TAIAHA	Long club
TANE MAHUTA	Guardian spirit of the forest
TANGAROA	Ancestor, guardian of the sea
TANGATA WHENUA	Local people of the land
TAONGA	Property, treasure
TAONGA TUKUIHO	Legacy, essence of a treasured possession
TAPU	Sacred, forbidden
TE PUNI KOKIRI	Ministry of Maori Development
TIKANGA	Maori customary values, obligations and conditions
TINO	
RANGATIRATANGA	Sovereignty
TOHUNGA	Specialist, spiritual healer
TOI IHO	Maori trademark
TOW	Treaty of Waitangi: Te Tiriti o Waitangi
WAI 262	Waitangi Tribunal Claim number 262
WAIRAU	Bruised
WHAKAPAPA	Genealogy, cultural identity
WHANAU	Family

CHAPTER ONE

INTRODUCTION: BACKGROUND AND BOUNDARIES

The seeds of this thesis were sown in the late 1970s on a cattle and maize farm in rural Aotearoa/New Zealand. A personal interest in the politics of national and international trade developed through years of experience as a fifty per cent property owner exporting manufactured bull beef to the United States of America predominately for the McDonald's fast-food chain. By the mid-1980s, the farming sector was haemorrhaging from falling commodity prices generated by a global production over-supply and two oil price rise shocks. Combined with tariff and subsidy cuts, introduced by successive governments to attract market competition, on-going economic and social adjustments proved a painful experience for many. At the level of the farm gate, salutary lessons were learnt about the political implications of global trade with rational economic policies led by Anglo-American states and corporations intensifying efforts to forge trading links through the application of innovative knowledge-based technologies. These were highlighted by the commercial profile and economic importance of intellectual property rights (IPRs)¹ to trade.

Raising beef and growing corn using Monsanto chemicals on the paddocks of 'liquid gold'— as the maize crop was called by the seed marketers — drove home a

¹ For the purposes of this thesis 'intellectual property rights' (IPRs) is interchangeable with intellectual property (IP), property rights or intangible rights. IPRs are defined as intangibles; they are images in the mind that may eventually be produced as text, design, symbols and marks. Alternatively, they may be referred to in legal language as incorporeal rights. Because of their intangible nature, IPRs are abstract objects, unlike natural objects such as land, minerals or water. They reside in written formulae, new discoveries, inventions and secret business information. Patents cover industrial property, layout of integrated circuit designs and new plant varieties, while trademarks are a service mark for locating the origin of design by branding and naming the product type inclusive of geographical indicators designating appellations of origin. Copyright is linked to 'natural rights' of ownership in literary authorship and the creator's effort in artistic works or performance covering sound recordings and broadcasting organisations. Intellectual property laws seek to provide a controlling and restraining device, not only to cope with the introduction of new technology, but to prevent imitation or plagiarism and uphold and protect original ideas for private benefactors from counterfeiting or piracy. See Firth, A. (1997). *Perspectives on Intellectual Property: The Pre-history and Development of Intellectual Property Systems*, p. v. Trade secrets are integral to intellectual property and commerce coming under the umbrella of a wide range of common-law practices relating to various government statutes including trade commission policies, contractual agreements, fair trade practices, patent and copyright policies. See Snapper, J. (1991). 'The Uses and Justifications for the Regulation of Intellectual Property', *Social Epistemology*, 5 (1), p. 78.

compelling reminder of the escalating proprietary² nature of multinational branding in the agri-business sector. While corporations were increasing their commercial stake in patents and plant variety rights for shareholder profit, the highly rated business value of trademarks and the increasing importance of trade secrets was propelling the chemical, seed, pharmaceutical, and food industries into giant monopolies. A similar picture was evident in other sectors such as entertainment, tele-communications, computers and bio-technology where monopoly control and substantial monetary returns were accumulating around ownership rights, licensing fees and royalty revenues obtained from copyright. The farm experience is but one illustration, and a small part of a large and complex story, characterising political demands for new trade avenues. Behind the changes to the global and national governance of IP were state and corporate influences which looked for new knowledge in information age³ technologies to accelerate the commercial profile of rights and invite capital investment.

² Proprietary relationships around intellectual property are forged by the grant of a monopoly right for a set period to safeguard the initial risk and uncertainty of capital investment in innovative ideas. The globalisation of proprietary ownership intensified from the 1990s becoming consolidated in a capital base tied particularly to patents that gave key corporations a competitive edge over business rivals. For an erudite discussion on the proprietary role of corporate business see Drahos, P. (1996). *A Philosophy of Intellectual Property*, p. 204. Proprietary clauses are defined in various legal statutes inclusive of entitlements, liberties and exclusions. In response to economic demands, governments have also included articles covering powers-of-transfer and immunities-from-divestiture, in order to foster competition and provide commercial protection for business. See for example, Kramer, M. H. (1999). *In the Realm of Legal and Moral Philosophy*, p. 116.

³ The constituent elements of the information age, in the view of Castells, are made up of three independent processes linked to the commercialisation of knowledge. First, the technological revolution is represented as a dominant new social structure built around the international capital value of theoretical knowledge. Second, political restructuring central to neo-liberal strategies allowed for capitalist expansion premised on economic wealth creation. Third, corporatisation and privatisation opened the way for markets to expand in the international political economy. These three factors are representative of the political dimensions of the knowledge revolution. See Castells, M. (2000). *The Rise of the Network Society: The Information Age*. Bell's 1973 study of the characteristics of post-industrial society preceded Castell's well-laid out discussion of information and knowledge, and sits comfortably with Stehr's contention that information is assorted facts and opinions (inclusive of anecdotal elements meaning it is often dismissed as unimportant), that rapidly become data when classified, patterned and made to fit with assorted areas or schemes fundamental to the building blocks of knowledge. In contrast, knowledge has a theoretical base making its production far more complex and time consuming demonstrated by rigorous review processes including being "methodically sorted, categorised and judged". See Stehr, N. (2001). *The Fragility of Modern Societies: Knowledge and Risk in the Information Age*, p. 43 and pp. 106-109. Distinctions between knowledge and information are also found in Toffler's (1991). *Powershift*, chapter six, 'Knowledge: A Wealth of Symbols'. While information is important to institutions and societies for short term politico-economic manipulation, it is theoretical knowledge that is at the cutting edge of economic competitiveness in advanced capitalist states. For an instructive discussion on knowledge and information and IPRs see May, C. (2000). *A Global Political Economy of Intellectual Property: The New Enclosures?* pp. 4-8.

I. Background

From the mid-1990s the re-regulation of intellectual property (IP) consistent with strengthened and expanded rights under market competition was posing a significant challenge to the public ownership and control of knowledge. The political implications arising from commercialisation⁴ calls for an interrogation of IPRs and the governing structures of capitalist trade around knowledge in terms of reciprocal principles fundamental to benefit-sharing and trade equity. This thesis is a study of the re-regulation of intellectual property effective from 1995 when GATT member states signed the TRIPS (Trade-related Aspects of Intellectual Property Rights) Agreement operational under the auspices of the newly created WTO (World Trade Organisation). In examining the governing framework within which TRIPS is institutionalised, it is necessary to move beyond the specific context of re-regulatory trade rules to philosophical interpretations of knowledge and their relation to the normative reciprocal justifications and long-standing social and cultural foundations of IPRs as a public good. In May's (2004) view, the public-regarding aspects of IP are problematic because, although the public good is not completely missing from TRIPS, it is subsumed by individual rights central to the normative justifications of IP and its legitimate exercise.⁵ This important concern does not detract from the normative arguments of this thesis that reciprocity is vital to the fair and equitable exchange of knowledge consistent with the standardisation of TRIPS, and relevant to its trading role. In that context, both the normative justifications of IP based on individual rights, and the value of trade to build strong reciprocal public good communities of knowledge, are examined.

⁴ Commercialisation, in this study, refers to the strategic role of proprietary ownership to satisfy the market demands of shareholder interests and capital value from investment portfolios in IPRs consistent with the accumulation of knowledge technologies. Commercialisation is distinguished from commodification, the latter seen as a more static and product-based process of industrial development, compared to the intense scale of commercialisation concentrated in all sectors and cutting across multifarious industries within the political economy, spanning not only products and ideas, but encompassing expanded global governing rules that give controlling authority to business performance and legitimacy to implementation objectives.

⁵ May, C. (2004). 'Cosmopolitan Legalism Meets 'Thin Community': Problems in the Global Governance of Intellectual Property', *Government and Opposition: An International Journal of Comparative Politics*, 39 (3), p. 405.

There are two main strands to this thesis. One draws on virtue-theoretic principles of reciprocity, conceptualised in chapter two, to advance a normative perspective identifying the politicisation of IP as not just about individual rights, but also about obligations within knowledge governance and trade that requires explanation in a substantive theory of moral values. These values are present in political philosophy. They are characterised by codes of conduct consistent with reciprocal national and international commitments to social life, and are employed in this study to explain the way IPRs have become detrimental to knowledge dissemination, and the access and delivery of public good outcomes for large numbers of people. The other strand investigates IPRs subsequent to their reorganisation in national law from the mid-1990s and in conjunction with the remodelling of Anglo-American competition policy to institute a commercial role for knowledge.⁶ From this period, governments were no longer merely granting individuals and organisations IP for set periods of time to allow production to materialise, but IP had acquired an assigned political role, reinforced by competitive bargains and material demands for increased profits from trade in innovative ideas. TRIPS signatories, by virtue of their WTO status as competing trading states, agreed not only to open markets to competition, but also to adopt measures for the adequate and effective protection of IP as a means of reducing distortions and impediments to international trade. In support of these governing goals, an economic argument was made that competition assisted reciprocity by “maintaining healthy inter-firm rivalry in markets, which itself is a vital pre-condition for innovation and the timely adoption of new technologies”.⁷

The post-TRIPS period is especially significant because, for many states, the mid-1990s had not only ushered in the re-regulation of IP, but had also seen the consolidation of a phase of economic restructuring paralleled by public and private demands for greater trade integration. This restructuring was dominated by varying forms of capitalist enterprise models marked by the expanded principles of free trade and the build-up of capital goods and assets in knowledge technologies (see for

⁶ Braithwaite, J. and Drahos, P. (2000). *Global Business Regulation*, p. 215.

⁷ Anderson, R. D. (2003). ‘Intellectual Property Rights, Competition Policy and International Trade: Reflections on the Work of the WTO Working Group on the Interaction between Trade and Competition Policy’, in T.Cottier and P. C. Mavroidis (eds), *Intellectual Property: Trade, Competition and Sustainable Development*, p. 237.

example, Robertson 1992; Cerny 2000). Both Drahos and Braithwaite (2002), argue it was “the relentless global expansion of the IP *systems* rather than the individual possession of an intellectual property right”⁸ that posed the greatest threat to social knowledge becoming a *tour de force* for a small number of firms to amass large IP portfolios and establish a significant foothold over emerging technologies. A major contention in much of the writing from scholars working in the area of IPRs reveals concerns about an unequal balance in knowledge ownership and exchange characterised by technological deficits and trade inequalities between rich and poor states portending to real and potential sources of social and economic conflict (see for example, Arup 2000; Braithwaite and Drahos 2002; Dutfield 2003; May 2000, 2002; 2003a, Sell 2003).

Other political issues linked to knowledge access, distribution and the impact of unfair practices on states and trade viability are countenanced by protectionist economic barriers including subsidies, tariffs and sanctions raising issues of trade equity and reciprocal exchange in many areas of social and economic life, for example, the provision of pharmaceuticals for the poor. For indigenous peoples and minority populations in developed and developing states, the impact of TRIPS, economic restructuring and trade protection is closely associated with efforts to gain recognition for traditional knowledge⁹ (TK) resources and to maintain and protect access to possessions that have sustained the social structures and economic livelihood of communities for centuries (see, for example, Brush 1993; Carmen and Saldamando 1999; Correa 2000; Halewood 1999; Shiva 1997, 2001). Manek and Lettington (2001) put it this way: the re-regulatory framework of TRIPS is consistent with, and deeply entrenched in, the broad span of Western economic power that over time and through political means has compromised the deep anthropological and historical roots of collective notions of community associated with land and

⁸ Drahos, P. with (sic) Braithwaite, J. (2002). *Information Feudalism*, p. 5.

⁹ The terms traditional knowledge, indigenous knowledge and indigenous peoples’ intellectual and cultural property are used interchangeably. Halewood (1999) describes traditional knowledge as knowledge possessed by indigenous and minority groups that is “collectively derived and held and holistic in nature, stressing the interconnectedness of all things (as opposed to the archetype of Western reductionist scientific thinking and knowledge), incrementally developed, and closely tied to the environment of the culture in which that knowledge arises”. Halewood, M. (1999). ‘Indigenous and Local Knowledge in International Law: A Preface to *Sui Generis* Intellectual Property Protection’, *McGill Law Journal*, (44), p. 959.

goods making it necessary for groups to seek redress.¹⁰ In the context of governing rules and the implementation of TRIPS, this study inquires into the impact and political implications of key reciprocal exchange issues particularly in relation to knowledge and indigenous groups.

II. Research Questions

This thesis starts with the *prima facie* evidence that constellations of state and private power use IPRs as strategic instruments of trade policy-making under the institution of global governance.¹¹ The central normative question is how reciprocity can inform IPRs to produce significantly different outcomes in trade policies and practices governing knowledge. From this an ancillary question arises over whether, under TRIPS, knowledge is able to act as a catalyst for reciprocity between capital and applied science. To address these questions, and link them to the hypotheses derived from an analytical framework for reciprocity, set down in chapter two section five, reciprocity is examined in light of tensions involving the imperatives of capital at the intersection of trade equity. Correspondingly, the instrumental character of governance in terms of the nature of disruptions to the long-standing public good foundation of IP is explored. In examining the privatised and deregulated governing frameworks of trade within which TRIPS is institutionalised, this study moves beyond the specific legal context of IP, to the role of the state and the firm politicised by particular interpretations of knowledge recognition and protection. Extensive efforts to re-regulate IP, and subsequent to that in the post-implementation phase of TRIPS, to ring-fence knowledge, as evidenced in the shift from multilateral to bilateral agreements and private contract, is integral to understanding the dominant political order of IP governance which has been structured for commercial purposes to become a potent form of national and international strategic power.

¹⁰ Manek, M. and Lettington, R. (2001). 'Indigenous Knowledge Rights Recognizing Alternative Worldviews', *Cultural Survival Journal*, 25 (4), p. 8.

¹¹ Governance is the task of managing complex societies involving the coordination of many public and private sector bodies. Government is only one actor, and not always the leading one, in governance. Global governance is distinct from government and governance operating to apply effective institutional rules for trade and other categories bound by IPE imperatives that, in terms of IPRs, function outside the conventional area of state politics, but are informed by states in consensually agreed upon governing regulations to mediate global interaction. For one of many commentaries on global governance see Koenig-Archibugi, M. (2002). 'Mapping Global Governance', in D. Held and A. McGrew (eds), *Governing Globalization: Power, Authority and Global Governance*.

The core commercial tenet of market-led economic growth from the mid-1980s was based on the ideological assumption that IP, goods and capital would be most efficient if unimpeded by regulation. The apparent contradiction between economic deregulation, attributed in state restructuring and demands for free trade and open competition, is ironically revealed in international pressure for a re-regulatory framework around IP that brought with it significant market implications for trade reciprocity. As Shaw (2003) observes, the altered political landscape made salient by state-led privatisation and deregulation means that we ought to theorise about the governance of knowledge in a radically different way. No longer can we accept assumptions about international politics that view the capture of the state or the establishment of benign forms of global governance as sufficient enough to drive our primary research motivation.¹²

It is apparent that at the interface between re-regulation under TRIPS, and global governance rules, lie key legal and economic areas of trade that interrupt reciprocity and detract from democratic accountability. The problem stems from the limitations of global governance theory to act as a reliable guide to uphold obligations of public good practise and foster policies based on the norm of reciprocity substantiated by trade equity and fairness. The post-implementation phase of TRIPS is analysed to evaluate whether the norms associated with reciprocity, such as most-favoured nation status and national treatment and including trade competition rules and regulations, can then shift knowledge away from its current commercial trajectory under which access to knowledge privileges and gives authority to some, over others, in its governing arrangements. The issue in other words, is whether reciprocity can play a role in the governance of IPRs to consolidate democratic practices. The political attention in this study is focused on critiquing the inter-relationships between assemblages of global trading power and the interests that perpetuate and sustain private authority.¹³ In addressing the political proposals of

¹² Shaw, K. (2003). 'Whose Knowledge for What Politics'? *Review of International Studies*, 29 (December), p. 199.

¹³ The relationship between private and public authority is analysed in chapter nine. For an excellent discussion on the dimensions of public, private authority and the IPE see Cutler, A. C. (2003). *Private Power and Global Authority: Transnational Merchant Law and the Global Political Economy*, pp. 61-70.

this enquiry a wide body of legal and economic research on the subject of IPRs is acknowledged and examined (for example, Bhagwati and Hudec 1996; Braithwaite and Drahos 2000; Dutfield 2003; Freund 2003; Maskus and Reichman 2004; Trebilcock and Howse 1995) in investigating knowledge re-regulation.

The political dynamics under which IPRs operate, together with the provisions of private economic rights establishing how knowledge is used, by whom, and for what period of time, illustrate the ways in which IP governance has transformed the original public good intentions of reciprocity. Although the essence of reciprocity is present in the preamble to TRIPS¹⁴ (noted in chapter two), TRIPS has effectively consolidated a system of global monopoly ownership whereby knowledge has been made economically scarce to extract a market price for its use.¹⁵ The extent to which knowledge production and competitive markets serve as a basis for economic growth rather than legitimising equitable trade has repercussions for reciprocity and is crucial to the political maintenance of civil societies and governing institutions. The acceleration of technological advances in the areas of computers, satellite communication and on-line entertainment increasingly tied to an asset base in IPRs reveals the commercialisation of this potent form of property and the efforts to protect and create private wealth linked to powerful economic imperatives of intense monopolisation.

III. Research Project

(A) Reciprocity

Reciprocity is not a typical approach to the study of IPRs, its importance only recently brought to debates on knowledge and trade by Kuruk (2004) in terms of its application to TK. Yet reciprocity as a normative construct has a valuable philosophical pedigree and empirical foundation alongside positivist law to mediate instrumental authority. It is also integral to the exchange of ideas seen in cross-

¹⁴ The full text of the TRIPS Agreement can be accessed at the WTO website. See Appendix (B) for the preamble and Part 1 Articles 1-8 of TRIPS which has most relevance to this research.

¹⁵ Arup, C. (2000). *The New World Trade Organization Agreements: Globalizing Law through Services and Intellectual Property*, p. 177.

cultural interactions consistent with the sharing of knowledge. In addition, customary practices and social and cultural relations invoke reciprocity to maintain communal stability and order. However, because it is not seen as a mainstream approach in the study of knowledge and its associated technologies, the political dimensions of reciprocity and its importance to the development of IP policies, remain relatively poorly understood and institutionally organised at national and international level and within the IPE literature.

Reciprocity has an historical and philosophical lineage detailed in chapter two and elaborated on in subsequent chapters. The roots of reciprocity are identified within the foundations of “Roman, Germanic and Anglo-Saxon contract law, treaty law and international law generally”.¹⁶ As a normative principle, reciprocity entered the lexicon of international law under the Treaty of Westphalia (1648) where diplomatic agreement combined with rule-making authority concluded that sovereignty is not sustained by coercion and arbitrary power alone, but requires a moral foundation to induce cooperation between states in order to expedite trade. In this enquiry, the normative value of reciprocity to states and organisations is examined along with its impact as a strategy employed by institutions in arrangements between consenting yet competing parties. It is argued that the long-standing normative value of reciprocity has been divested of much of its public good character under the trade framework of IPRs which routinely severs creators from their innovations without due reward.¹⁷ As a result, reciprocity has been suspended as a co-operative notion in the face of highly competitive trade practices linked to potential and real material returns from knowledge technologies exploited through a global governance framework.

Understanding the philosophical and normative values of reciprocity and their implications for trade is required in assessing the factors impeding fair commercial exchange between states and groups within the IPE. Sell (2003a) has noted how the normative public-regarding gains of IP have been obscured by commercialisation

¹⁶ Braithwaite, J. and Drahos, P. (2000). *Op cit*, p. 21.

¹⁷ Drahos, P. with Braithwaite, J. (2002). *Op cit*, p. 15.

and could be undone further if an eye is not kept on the larger picture.¹⁸ Reciprocity, as conceptualised in this thesis, is an essential aspect of that larger picture. With that objective in mind, this research examines the tensions arising from the private goals and public rewards of knowledge justified under what May (2003a) observes is a “global regime that attempts to treat all countries and regions similarly when knowledge is made property”.¹⁹ This enquiry argues that the political manifestations of knowledge, apparent in the harmonised trade relations between states, institutions and groups, impinges upon the disparate requirements of geographically distinct groups, and the knowledge particularities of diverse people. This thesis, then, will investigate the various elements of IPR governance in relation to the conceptualisation of reciprocity and its framework of obligations for knowledge.

(B) TRIPS and Governance

IPRs entered the agenda of the Uruguay Round of GATT negotiations (1986-1994) converging with significant political influences and proprietary trading demands (see, Farrands 1996; May 2000). For the strongest states,²⁰ in particular the United States (US), concerns about eroding technological leadership coupled with aggressive competition from the newly industrialising states of Asia and parts of South America challenged domestic competitiveness and a declining manufacturing sector.²¹ Responding to US government demands for fiscal deregulation, the US-dominated

¹⁸ Sell, S. K. (2003a). ‘Competing Knowledge Networks: The Quest for Global Governance in Intellectual Property’, *Issue brief prepared for SSRC Workshop, Intellectual Property, Markets, and Cultural Flows*. New York, p. 1.

¹⁹ May, C. (2003a). ‘Why IPRs are a Global Political Issue’, *European Intellectual Property Review*, 25 (1 January), Opinion, p. 1.

²⁰ In this thesis the term strong state refers to the industrialised country members of the WTO: The United States of America (US), the leading European Union (EU) members-states including Britain, France Germany and Spain, also Australia, Canada, Japan, and Singapore. The US, EU, Japan and Canada are often referred to as the ‘Quad’. Throughout this study strong states and developed states will be used interchangeably to mean those industrialised states that denote they were the key initiators of the TRIPS Agreement. The numbers of industrialising countries are growing with Argentina, several prominent African states, Brazil, China, many in the Commonwealth of Independent States (CIS), India, Malaysia, Taiwan, Thailand and Vietnam involved in economic programmes for advancing capitalist development. All countries, including industrialising states and emerging economies, are classified by economic measurement standards developed by organisations such as the IMF, World Bank, the OECD, Standard and Poors, and Moody’s. For many industrialising states criteria such as levels of health, education and living standards form the basis of structural relief loans and investment programmes underpinned by guarantees that measures to liberalise economies will give trade access to powerful states. Many industrialising, and weak states in the international system, face civil war, famine and political instabilities that severely restrict their capacity to benefit from, or engage in, trade relations. For this group of states, in sub-Saharan Africa and parts of Asia, the Pacific and South America, double exploitation is common. At the domestic level there is political corruption, while at IPE level market access is highly restricted often through protectionist measures from strong states.

²¹ Correa. C. M. (2000). *Intellectual Property Rights: The WTO and Developing Countries*, p. 5.

corporations pursued international investment to enhance the economic and financial well-being of the world's largest debtor nation — the US. From the mid-1980s and into the 1990s Washington set itself the goal of maintaining a post-Cold War global balance to ensure its own technological lead and military domination. In the course of these actions it assumed the role of expanding privatisation beyond its own shores to create an economic climate favourable to its domestic and corporate interests.²²

By offering support for strengthened intellectual property law, the US, a number of European Union (EU) states and Japan, joined business in paving the way for the re-regulation of property rights opening up ideas to greater forms of commercial expansion and economic controls including trade competition laws under globalisation²³ processes aimed at the trade integration of IP services. These developments coincided particularly with the remodelling of US and EU competition policy,²⁴ which extended corporate aims to generate knowledge technologies in order to secure capital interests through the expansion and integration of trade. As privatisation and deregulation policies were put into practice, the long-standing principle of reciprocity that had guided GATT was replaced by rigid new forms of protectionist policies around ideas. The introduction of IPRs into the competitive global trading system and their subsequent reorganisation in national law since the mid-1990s represents an unprecedented strengthening in the scope and value of IPRs. Expanded trade rules have accelerated the potential and real profit margins to be gained from a new system of regulations governing discoveries and innovations. The intensification of technologies surrounding the productive capacity of new discoveries and technological innovations became the key to economic wealth

²² Burgi, N. and Golub, P. S. (2000). 'Has Globalisation Really Made Nations Redundant? The States we are still in', retrieved, 6 June, 2002: www.monde-diplomatique.fr/en/2000/04/07golub, p. 2.

²³ Globalisation is a new term for an on-going process of internationalisation which gained traction in the 15th century, and corresponds to 19th century *laissez faire* economic policies and expanded forms of industrialisation. Economic globalisation is unique for its correlation to markets in ideas accelerated by a technological base dominated by varying forms of capitalist enterprise models, networked patterns of privatisation and capital mobility arising from deregulation. For one of many analyses of globalisation see R. Robertson, (1992). *Globalization: Social Theory and Global Culture*, pp. 58-60. A useful discussion on the historical roots of globalisation can be found in R. Germain, (2000). 'Globalisation in Historical Perspective', in R. D. Germain, *Globalisation and its Critics*, pp. 67-89.

²⁴ Braithwaite, J. and Drahos, P. (2000) *Op cit*, p. 215.

creation particularly for the developed states where commercial attention focussed on the ability to generate revenue from genetics, micro-electronics, computer software and related technologies.

Much of the re-regulatory change came in response to the imperatives of neo-liberal trade²⁵ which was a deliberate political project to advance Western economic and political dominance. By instituting trade liberalisation as economic development Anglo-American states were able to make the case for the re-regulation of knowledge through IPRs in the name of material progress for all.²⁶ Taken in the context of inter-capitalist rivalry, IPRs provided a new avenue to stem the exponential growth of markets in counterfeit goods enabling the US to reassert its economic power in the post-Cold War era.²⁷ Instituting IPRs as part of the global trading system allowed the US to use the GATT not only to lobby for the subsequent creation of the WTO, but also to by-pass already existing international IPR treaties.

As a result World Intellectual Property Organisation (WIPO) was side-lined as the lead institution on IPRs in 1995 in favour of the WTO. An institutional pathway was cleared for a change in the voting structure existing under previous UN regulations whereby the Group of 77 could vote as a bloc and dilute the power of the highly industrialised countries.²⁸ To gain access to FDI, and in order to foster economic development under International Monetary Fund (IMF) restructuring programmes, the least developed countries had little choice but to sign up to TRIPS and the WTO. Pressure in the intervening years from developing countries has led to important

²⁵ Neo-liberal trade was a feature of 1980's new right government policy-making. However, not all states adopted the model of economic rationality to the same extent. The strongest adherents included Thatcher's Conservative Party in Britain, the Republicans under Reagan in the US and New Zealand's Labour Party led by Lange and Douglas. Neo-liberal policies are underpinned by the primacy of the free market and competing individuals. Central to the political project is recognition that markets are superior to government in creating wealth. To this end, privatisation and deregulation drove the down-sizing of the public sector allowing for the expansion of private sector interests attuned to the economic ideals of efficiency, profitability and accountability. For one of many descriptions of economic rationalism, see W. Hutton, and A. Giddens (2000). *On the Edge: Living with Global Capitalism*, p. 44. Competitive individualism linked to possession is found in C. B. Macpherson, in an erudite 1962 study *The Theory of Possessive Individualism*.

²⁶ Gill, S. (2002). 'The Political Economy of Globalization: The Old and the New', in E. Aksu and J. A. Camilleri (eds), *Democratizing Global Governance*, p. 77.

²⁷ Farrands, C. (1996). 'The Globalization of Knowledge and the Politics of Global Intellectual Property: Power, Governance and Technology', in E. Kofman and G. Young (eds), *Globalization: Theory and Practice*, p. 184.

²⁸ Cheek, M. L. (2001). 'The Limits of Informal Regulatory Co-operation in International Affairs: A Review of the Global Intellectual Property Regime', *The George Washington International Law Review*, 33 (2), pp. 277-323.

changes to the voting system and challenged trade policies that impact upon knowledge access and technology transfers from rich to poor. At Cancun, Mexico, in 2002, the Group of 77 involved in the Doha Round managed to thwart the US trade agenda by stalling the talks until agreement could be reached on reducing protection in key sectors including agriculture and access to medicines. The operation of TRIPs as a legal mechanism to assist in trade liberalisation has also been challenged by the African Aids epidemic along with continuing criticism from groups alarmed at the extensive bio-prospecting being carried out in the least developed countries. To Michalopoulos (2001), little by way of economic or monetary benefit has flowed back to local communities through royalties, licensing agreements or technology transfers in return for access to TK resources with only weak support offered for technology transfers.²⁹ In short, intellectual property has become an area of tension and contest with the global supply of public goods and reciprocal exchange at the centre of political debates on private access and control over knowledge.

IV. TK, IPRs and Reciprocity

Nowhere has the political will to resist the commercialisation of knowledge been more clearly demonstrated than in the efforts of indigenous peoples and communities within post-colonial societies to protect their intellectual creative expression, scientific knowledge, cultural objects and social practices from market exploitation. The extent to which commerce intrudes upon the cultural traditions and values of peoples at the local, regional and international level is open to much debate in the fields of anthropology, political sociology and cultural studies in terms of the socio-legal rights of TK resources (Addis 1997; Brush 1993; Johnson 1992; Loring and Ashini 2000; Niangado and Kebe 2003; Patel 1996; Sahai 2003; Utkarsh 2003). While the knowledge claims of indigenous people and minority groups have become highly politicised, the political will to address exploitative practices by recognition or compensation has been difficult to achieve, in part, because TK resources are of significant commercial value to strong states and the wealth-creating objectives of corporations and controlling authority over IP. There have been many instances

²⁹ Michalopoulos, C. (2001). *Developing Countries in the WTO*, p. 134.

where corporations have filed for and won patent rights through US domestic courts over numerous products from developing states, the most notable examples being the Indian neem tree (which had its patent right overturned after years of activist pressure), the African soapberry, and Central Asian cotton. Furthermore, “by adopting and developing traditional knowledge in laboratories through genetic engineering, corporations established patent monopolies that denied access to competitors”.³⁰

Orchestrated efforts by traditional knowledge-holders to point out the importance of cultural and social traditions to the sustainability of communities has allowed for interpretations of TK to be recognised in the Convention on Biological Diversity (CBD), although there is no specific mention of TK in TRIPS articles.³¹ Political lobbying by indigenous groups to have the value of diverse knowledge systems recognised in treaties such as the CBD and other declarations has strengthened the resolve to seek further protection for TK whether by *status quo* IP rights or by customary rights. In addition, expert groups, governmental and non-governmental organisations, have intensified efforts to reconcile the rapid commercialisation of TK resources with claims for justice around human rights.³² WIPO has been instrumental in making itself relevant to the controversial debates that have gone on between industrialised and developing countries over the extent to which IPRs meet the needs of diverse knowledge-holding groups. Indigenous stake-holders and those with investment interests are being consulted and are involved in establishing jurisdictions for protecting TK. In 2003 WIPO notified its intention to work more rigorously toward options for an international treaty to protect traditional group knowledge and practice.³³ While recognition for TK has the support of many those items which require protection has become a significant political issue. Central to the debates on how an IP framework could be constructed are clear directives from

³⁰ Tehranian, M. (2002). ‘Globalization and Governance: An Overview’, in E. Aksu and J. A. Camilleri (Eds), *Democratizing Global Governance*, p. 8.

³¹ Dutfield, G. (2002). ‘Protecting Traditional Knowledge and Folklore: A Review of Progress in Diplomacy and Policy Formation’, *UNCTAD/ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development*. London/Geneva, p. 6.

³² *Ibid*, pp. 1-47.

³³ *The Lancet*, (2003). ‘WIPO Steps up Action on Traditional Knowledge’, SciDevNet, Science and Development Network, retrieved 14 October, 2003: www.SciDevNet.3929301, p.1.

groups (and those consulting on IP) that significant amounts of TK is culturally diverse and geographically specific. This research examines the link between TK, IPRs and reciprocity, which encompass legal issues, political and economic factors that bring into sharp relief social and cultural considerations, as well as intra and inter-state competition under trade integration. Associated with economic competition are developments based around interpreting, contesting, and laying claim to both intangible knowledge and customary practices.³⁴

The case of aspects of Maori knowledge systems in relation to the politicisation of IP is of considerable importance in these matters. First, Maori groups have a long history of political activism having led debates and set benchmarks for other indigenous and minority groups to follow in the retrieval of tangible and intangible resources. IPRs were highlighted as a political issue in 1993 when Maori tribes hosted 200 national and international organisations leading to a submission before the United Nations (UN) for the recognition of rights over TK systems. The Mataatua Declaration — the outcome of this gathering — preceded the TRIPS Agreement and became the yardstick for other indigenous groups to respond to the extension of IP into the area of TK. Collective appeals for justice to address the disadvantages arising from the encroachment of IP rights into the area of TK remain a political issue for Maori groups in relation to arguments that reparations are due for TK abuses in return for harm caused. To Solomon (2000), this is consistent with reciprocal obligations between groups over the use of knowledge compatible with the notion that “intellectual property focuses on the economic right to exploit for profit and gain”.³⁵ Second, while the application of IPRs may be viewed as a significant violation of treasured items or *taonga* by many groups, at the same time large numbers are defending and protecting resources through IP to maintain stakeholder rights over cultural heritage.³⁶ The debates around IP and TK are reflected in tensions between the production of new knowledge and the social stability and

³⁴ Mead, A. (2002). ‘Understanding Maori Intellectual Property Rights’, *The Inaugural Maori Legal Forum*, retrieved 13 November, 2003: www.conferenz.co.nz/library/m/mead_aroaha.html, p.1.

³⁵ Solomon, M. (2000). ‘Intellectual Property Rights and Indigenous Peoples’ Rights and Obligations’, *Inmotion Magazine*, retrieved 26 November, 2003: www.inmotionmagazine.com/ra01/ms2html, p. 2.

³⁶ Intellectual and cultural property is upheld in oral traditions and practices that have symbolic meanings tied to the innovation and authorship with ancestral connections. Aspects of Maori knowledge systems are discussed in chapter eight.

maintenance of longstanding practices and reciprocal understandings. Third, Maori groups have been to the forefront in establishing *sui generis* law in the area of trademarks. The political dimensions of IP, reciprocity and governance will be addressed in chapter eight to expand on the issues noted above. At a disciplinary level, the nexus between the governance of IP, TK and reciprocity has received little attention within the field of political science. Tensions between international and domestic legislation in terms of peoples' rights to access knowledge and the capacity of indigenous groups to direct and control intellectual resources are then critical to the scope given to reciprocity in this study.

V. Theoretical Dimensions

Working from elements of political philosophy and IPE this enquiry develops a conceptualisation of reciprocity and analyses the governance of knowledge under TRIPS. At the empirical level the TRIPS agreement has attracted considerable attention from lawyers and politicians seeking to interpret articles in parliaments and courts of law. Economists and trade negotiators theorise and argue about the globalising reality and commercial expectations of IPRs arising from market conditions including competition policy and FDI where manifestations of economic scarcity around knowledge and the impact on peoples' lives have become evident. In van Caenegem's (2003) view, the economists' approach to IPRs is long on theory and short on empirical proof that scarcity is necessary to the creation of property by failing to establish a satisfactory link:

between economic growth, technological change and individual welfare. Furthermore, in recent global debates the potential negative social, environmental and cultural impact of a purely market-based approach to intellectual property has become apparent.³⁷

Concerns about the impact of a market approach on groups at local and national levels, and at the intersection of global politics within the existing legal framework of TRIPS, have been expressed (see for example, Arup 2000; Braithwaite and Drahos 2002; Dutfield 2003). Within the debates on international relations some theorists

³⁷ van Caenegem, W. (2003). 'Intellectual Property Law and the Idea of Progress', *Intellectual Property Quarterly*, 3, p. 238.

have noted the disassociation of moral norms from empirical practice confronted in the latter half of the 20th century by an overt prominence on individualism and market economics. According to Brown (1992), one of the consequences of neo-liberalism has been to draw “a sharp distinction between positive and normative analysis, in effect eliminating the latter”.³⁸ This enquiry proceeds from the assumption that a commitment to reciprocity is a particularly important normative prerequisite. On the one hand, it is integral to cooperation around the mediation of trade relations and has relevance to matters of IP governance and, on the other hand, it is significant to any reconciliation of the explicit power and authority of market economics upon which knowledge commercialisation is based.

History and philosophy are relevant to this enquiry. History helps to define the political problems that surround reciprocity in a philosophical sense, creating a bridge to establish “the significant kinds of entities involved and the form of significant relationships among them”.³⁹ History and philosophy adds immeasurably to any political comprehension of scientific and technological change, as authors such as Drahos (1996), Dutfield (2003), and Warshovsky (1994) report. Accordingly, links between historical contingencies, scientific and technological change and philosophical norms are explained, and illustrated in this thesis, through the commercial imperatives of expanded trade. Any understanding of global change to the social foundation of knowledge, which is what TRIPS represents in its re-regulatory scope and effect, benefits from an historical epistemology. As Hewson and Sinclair (1999) observe, historical theory:

Aims at proximate explanatory constructions which correspond to the changing forms which social life assumes as new challenges are faced by human communities and transformed by hegemonic ascendancy and decline.⁴⁰

³⁸ Brown argues that the theory eschewed morals, treating values as mere data that had become “no more than expressions of preference” infused with individualism, nationalism and the doctrine as military security. Brown, C. (1992). *International Relations Theory New Normative Approaches*, pp.7- 8.

³⁹ Cox, R. W. (1996). ‘Towards a Post-Hegemonic Conceptualization of World Order: Reflections on the Relevance of Ibn Khaldun’, in J. N. Rosenau and E. O. Czempiel (eds), *Governance without Government: Order and Change in World Politics*, p. 132.

⁴⁰ Hewson, M. and Sinclair, T. J. (1999). ‘The Emergence of Global Governance Theory’ in M. Hewson and T. J. Sinclair (eds), *Approaches to Global Governance Theory*, p. 17.

It is argued in this enquiry that the governing structure of IPE has been re-ordered, in large measure, by the re-regulation of IP constructed within a trading network of competing states. To address the problems inherent in re-regulation in relation to competitive trade and IP, this study adopts a critical perspective on the value of knowledge and reciprocity using historical analysis to evaluate the contemporary forms of governance regulation that justify and codify intangible property rights.

Players other than states clearly have a role in determining what knowledge is produced, by whom, who is rewarded and who is denied reward.⁴¹ There are implications arising from the reorientation of knowledge boundaries related to eliciting consensual rule-making and important to the effective monitoring of global governance, by all parties. A component part of the joint re-regulatory framework between state and global levels of governance is the extent to which private interests influence states through the organisation of powerful global networks. Smouts (1998) contends that the principal performers are “the very people for whom the rules of the game are designed” and therefore it is not norms that are highlighted in their bargaining but, rather, the patterns of dialogue that lead to politically negotiated actions based on significant competitive demands that are “constantly forming and reforming” the commercialisation of knowledge.⁴² The nuanced patterns of trade competition characterised by power arrangements seen in governing structures that frame knowledge as a scarce resource operate in a symbiotic relationship with private power. The nature of public, private power and the institutional arrangements supporting the commercialisation of knowledge through public law remains a key area of contest between states and national groupings. As will be discussed in later chapters (particularly chapter nine), the failure to recognise the significant role private power plays in the remodelling of public law underestimates the political manifestations of IP and the way it is regulated, controlled and informed by the economic power represented by private interests. These comments apply to both IP as individual rights and the authority that individual rights invite on entry to

⁴¹ Strange, S. (1996). *The Retreat of the State: The Diffusion of Power in the World Economy*, p. 70.

⁴² Smouts, M. (1998). ‘The Proper Use of Governance in International Relations’, *International Social Science Journal*, 155 (March), p. 86.

the trading system. Establishing how access to knowledge is governed at the global level is central to this enquiry, particularly over the implications for reciprocity and its normative value and limits.

VI. Chapter Organisation

The main themes of IPRs, governance and reciprocity are examined in the subsequent chapters in light of the re-regulatory trading framework of knowledge and its impact on reciprocal exchange. In essence, this study defines reciprocity as the glue that binds our social relations, thereby focussing attention on the significance of social exchange in the development, maintenance and advancement of community in our interactions. Consideration of reciprocity is integral to, and inseparable from, the development of community at every level. Chapter two conceptualises reciprocity, describing its distinctive social and normative characteristics and establishing its link to the institutional governance of IP and trade law. The research methodology used in examining the way IP lends itself toward addressing the political considerations of knowledge and reciprocity is also set down. Chapter three examines the social and cultural construction of knowledge, as well as the key philosophies and historical transformations that have shaped and defined the trade in, and markets for, ideas. Chapter four focuses on theories of property, linking socio-cultural factors of knowledge production to reciprocity. Various practices pertaining to philosophies of property are examined, including a dialogue on rights that has political implications for the practice of reciprocity as a normative value. The examination of property in chapter four is expanded on in chapter five where distinctions are explored between tangible and intangible property, and the institutional procedures and operational aspects of governance informing the global extension and national strengthening of IP regulations are analysed. This chapter builds on the features of IPRs established by the conceptualisation of reciprocity and its links to trade and trade law in chapter two.

Chapter six focuses on the institutionalisation of knowledge as property, enlarging the political arguments in the previous two chapters that IPRs acquired a scarcity

value under the neo-liberal project and globalisation processes. Political actions and economic theories have been powerful in determining who gains and who loses from the production of ideas and provides the context for framing property in knowledge. The chapter analyses the implications for reciprocity from TRIPS governance, throwing light on and critiquing private authority and institutional power. Chapter seven examines the nature of TK from the perspective of long-standing historical developments. It discusses the various issues that impinge on indigenous and minority rights from commercialisation. The political basis and response to treaties, declarations, and conventions are explored in determining the extent to which reciprocity is able to be exercised in the post-TRIPS period. Preparations for a framework treaty on TK are also analysed. This chapter is largely concerned with explicating the qualitative basis on which the nature of reciprocal relationships and IPRs are being advanced by different groups. In chapter eight the qualitative evaluation of IP is continued in the examination of reciprocity and knowledge in relation to efforts by Maori to resist the appropriation of heritage items. Responses to international IP framework efforts and *sui generis* legal efforts consistent with proposals for IP protection underpinned by protocols designed and implemented by Maori stakeholders are also examined. Key to this chapter is the way in which communal interests (which domestic laws have allowed to be recognised) have implications for governance in terms of reciprocity.

Chapter nine draws together the threads of reciprocity in an analysis of political decision-making between the private goals of corporations and public law-making. This chapter argues that reciprocity requires reclamation in light of the competitive, highly self-interested national and international ethos driving knowledge commercialisation. The trade implications bound by discrete political disciplines that demand and service science in areas including molecular biology, databases and pharmaceuticals highlight the need to reassert the significance of reciprocity in the governance of knowledge. The final chapter establishes the prospects for reciprocity. Following its review of the strategic use of knowledge in governance the study also assesses the theoretical implications for knowledge and establishes the possibilities

for a new political agenda to accommodate reciprocity. The findings point to the capacity of private interests to penetrate procedural rule-making and shape the formation of public IP regulations. The chapter concludes by summing up the prospects for reciprocity to inform the governance of knowledge and enhance equitable trade.

CHAPTER TWO

RECIPROCITY: A FRAMEWORK FOR ANALYSIS

Conceptualising reciprocity and establishing its normative position within the knowledge structure of IPE, with particular reference to the trade-related intellectual property regime, is key to this enquiry. An emphasis on social and economic provisions aimed at mutual advantage and equitable trade is seen in Article 7 Part I of the TRIPS Agreement:

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge in a manner conducive to social and economic welfare, and to a balance of rights and obligations.¹

The objectives of balanced rights, also a fundamental principle of the GATT, promotes negotiations “on the basis of reciprocity and mutual benefits” underscored by the protection and enforcement of rights to knowledge.² Despite such explicit public affirmations that obligations and responsibilities toward reciprocity should apply, the concept, with its social nuances of fair and equitable distribution, remains ambiguous and loosely interpreted in practice. Implementing TRIPS at the national level has primarily been about interpreting and forging legal provisions to converge with international standard-setting rather than establishing proof that economic and social benefits have taken place.

The political context of the re-regulation of intellectual property in 1995, forged by a groundswell of strong state support for free trade and open markets under the Uruguay Round, highlights the position of reciprocity in a context of market competition and the global trading framework of IP law. In Arup’s (2004) view, the impact of international standard-setting under TRIPS should not be

¹See Appendix (B) Article 7 Part I, General Provisions and Basic Principles of TRIPS Agreement.

²Nogues, J. J. (2003) ‘Reciprocity in the FTAA: The Roles of Market Access, Institutions and Negotiating Capacity’, in INTAL – ITD – STA: Working Paper – SITI – 02, retrieved 12 September 2004: www.iadb.org/int/itd. Buenos Aires, p. 25.

underestimated and should allow space for “politics and culture to play, as much as it produces law to be applied”.³

While *sui generis* national systems of IP are available under TRIPS, one of the political elements arising from the post-TRIPS implementation phase of the late 1990s has been the manner in which states and firms have set out to standardise and homogenise public law around knowledge for commercial purposes. The strengthening of global harmonised rules makes further research into the way in which private entities, in particular, use public law to make knowledge part of capital accumulation vitally important. Understanding the capacity of a limited range of high profile Western governments and firms to influence a significant number of other states and shape the institutionalisation of regulation in order to re-constitute the administrative and judicial re-organisation of IP is central to this enquiry. As Sell (2003b) says, the way public and private agents interact and compete with one another helps illustrate the globalising political strategies, timing, commercial motivation and direction toward a harmonised agreement on IP, and the way it continues to be shaped in its post-implementation phase. More encompassing is “the entrepreneurial way in which agents linked intellectual property and trade fundamentally shaping the substance of the ultimate global property rules”.⁴ Reorienting the public, private boundaries of power has limited the political space available in institutional forums for public communities to raise objections about the capacity of private agents to influence, control and inform governance. According to May (2004), private agents and public institutions set up and continue to determine the commercialisation of knowledge through the governance and maintenance of ‘thick’ political, legal and transnational inter-connections. The global interconnectedness between these powerful groups is challenged by an underdeveloped (but emerging) ‘thin’ community of national groups contesting the global socio-political justifications

³Arup, C. (2004). ‘TRIPS Across the Global Field of Intellectual Property’, *European Intellectual Property Review*, (1), pp. 7-8.

⁴Sell, S. K. (2003b). *Private Power, Public Law: The Globalization of Intellectual Property Rights*, p. 4.

of IP and, in turn, the foundation of TRIPS.⁵ Converting this ‘thin’ community to one of ‘thick’ community fits with the global polity approach which Higgott and Ougaard (2002) have identified as necessary to rectify the current limitations of global governance theory.⁶ Reciprocity, as conceptualised in this thesis, is integral to a global polity approach aimed at broadening benefit sharing and reinvigorating knowledge access and mutual exchange. In terms of IPRs, both reciprocity and the global polity are important to the development and maintenance of accountability, legitimacy and democracy. However, as May (2004) points out, “the nascent global polity is still treated as an external element; NGOs and others may be placated but they are not treated as legitimate political actors representing the community of interests as regards IPRs”. In May’s view the problem is: “how can the communal interests (which domestic laws have allowed to be recognised) be (re)introduced at the global level of governance”?⁷ The conceptualisation of reciprocity as it has been framed here, and in subsequent chapters, seeks to address such political concerns.

Clearly, the modelling and reciprocity that drove the international introduction of the Paris (1883) and Berne (1886) treaties on IP can be contrasted with the power and coercion apparent in the establishment of the current trade-related regime where protection and enforcement standards of global convergence subtly belie “the wayward path that TRIPS is taking [indicating] the plurality and fluidity of the field”.⁸ While Article 7 Part 1 of TRIPS is grounded in public good standards, forging a durable dialogue and space for these important values to be recognised and applied has been harder to achieve. This enquiry argues that reciprocity has a major contribution to make in furthering prospects for political transformations to the knowledge structure, given the pervasive commercial imperatives of market assumptions and exchange practices.

⁵ May, C. (2004). ‘Cosmopolitan Legalism meets ‘Thin Community’: Problems in the Global Governance of Intellectual Property”, *Government and Opposition: An International Journal of Comparative Politics*, 39 (3), p. 410.

⁶ Ougaard, M. and Higgott, R. (eds), *Towards a Global Polity*, pp. 12-13.

⁷ May, C. *Op. cit.*, p. 410-411.

⁸ Arup, C. *Op cit.*, p. 16.

The first section of the chapter works from philosophical considerations in attaching reciprocity to moral obligations that find expression in duties and rewards. Such a conceptualisation of reciprocity is necessary for the political interpretations of knowledge, property and intellectual rights discussed in chapters three, four and five respectively. Section two discusses the different theoretical connotations of reciprocity in international relations. A framework of normative arguments, shaped by historical conditions and informed by the commercial imperatives of contemporary IPE conditions, is important for an understanding of the contribution reciprocity makes to codes of conduct. The development of reciprocity as a guiding principle that stands alongside law and interactions with competing state trading practices represented in conditional and unconditional forms of consent and most-favoured nation status are examined alongside the intellectual frameworks of the knowledge structure. Section three outlines how reciprocity and trade law have formed historical connections with instrumental values that have subsequently fed into the GATT/WTO framework. Section four investigates the political dimensions of traditional knowledge and sets out a diagrammatic model comparing reciprocity and market competition creating a foundation for this investigation into the relationships between normative values and trade imperatives. Section five outlines the methodology and section six the research design followed by concluding remarks in section seven.

I. Conceptualising Reciprocity

The normative value of reciprocity lies in its contribution to moral virtue, which is clustered around various forms and different levels of social and cultural interactions consistent with public good practices responsive to fair play, restitution and proportionate justice.⁹ Becker's comprehensive 1986 study of reciprocity sets down the philosophical justifications and moral framework for social interactions between groups in societies. For Becker, the human disposition to act and respond for good is mediated by balanced levels of personal, group

⁹ Becker, L. C. (1986). *Reciprocity*, p. 3.

and political power.¹⁰ Indeed, it may be argued that reciprocity has parallels with notions of social harmony between people that equate to ideas of ethical development set out in 1759 by Adam Smith in *The Theory of Moral Sentiments* where the virtue of reciprocity associates violations of justice with forms of human injury. An example of injustice is the human misery and disorder which arises from the stark inequality evident in vast power differentials. This occurs, according to Smith, when greed and materialism “overrate the difference between poverty and riches, ambition [intrudes upon] public and private station, [and] vain-glory between obscurity and extensive reputation”.¹¹ Our conduct toward one another, on such an understanding of the human propensity for injustice, is ameliorated by civic refinement privileged in dialogues of justice, and state actions necessary to induce stable societal development. Reciprocity gains its virtue-theoretic social foundation, then, in common understandings of justice based on the skill or art of living decently. Reciprocity finds moral cogency when supported by civil codes and open dialogue which, for Addis (1997), is characterised by individual and institutional empathy and respect.¹²

In this thesis, reciprocity is advanced as a normative concept guiding public good practices based on equity and civil rewards in terms of benefit-sharing which, it is argued, has not been adequately realised in institutional procedures of IPRs. The unashamedly normative dimensions of reciprocity can attract detractors. For example, realists and cynics may be quick to point out that public good practice, and the values associated with benefit-sharing, can be viewed as a major anomaly in the pursuit of political power. There is also dispute about whether reciprocity is an ideal or an obligation, derives from justice, or can disrupt benevolent actions. According to Becker’s conception of reciprocity, the roots of exchange ought naturally to lie in a normative foundation of obligations that avoids romanticising proportion but gives substance to virtue. This equates to a general conception of morality which we can apply to exchange by saying; “all

¹⁰ *Ibid*, pp. 4, 37.

¹¹ Smith, A. (1759). *The Theory of Moral Sentiments*, pp. 79 and 149.

¹² Addis, A. (1997). ‘On Human Diversity and the Limits of Toleration’, in I. Shapiro, and W. Kymlicka (eds), *Ethnicity and Group Rights*, p. 121.

things considered, here is what we should do ... and ... defined by a set of aims, limits, standards and procedures”¹³ uphold the virtue-theoretic moral foundation of reciprocity for mediating the rule-governed trade in knowledge. In this way virtue theory goes beyond a ‘feel good’ factor to the practical idea that we ought to be morally disposed to tie reciprocity to deeply-held duties, obligations and rights. Reciprocity then, is not merely a figurehead of civil consensus, but requires political will and substantive support in legal rules measured by ethical considerations based on rewards and benefits. These then become a vehicle for mutual exchange against threats and un-lawful actions of power and domination that might conceivably disrupt justice and fairness resulting in negative consequences for governance. As Alley (2005) observes, much of what reciprocity represents seems straightforward given that “apart from a minority of governments that are either dysfunctional or delusional, reciprocity in most fields is alive and well. Yet, within significant areas of international security, potentially shaping the lives of billions of people, this is a principle that is in deep trouble”.¹⁴

This research proceeds on the argument that the explication of reciprocity as a normative goal to secure knowledge access and benefit-sharing at risk from the privileging of market economics over social criteria serves to make reciprocity relevant. Core to the salience of reciprocity and its relevance as a philosophical notion that can transform existing conditions is the concept of the public good. The public good gives rise to arguments in favour of reciprocity brought about by states and institutions recognising and reconciling political and social conditions necessary for groups to bring about their own socio-economic transformations. Public good goals based on reciprocity reject imposed rules and regulations that might detract, marginalise or silence calls for justice. Securing the collective public good in order for normative values to become moral obligations requires not only political will, but socio-legal contributions to

¹³ Becker, L. C. *Op cit*, p. 5.

¹⁴ Alley, R. (2005). ‘Analysts, Practitioners and Not Getting It Wrong: Some Implications for New Zealand’s Foreign Relations’, in R. Pettman (ed), *New Zealand in a Globalising World*, p. 12.

uphold duties and responsibilities toward knowledge as a social construct. As a collective rational human goal, reciprocity acquires moral value in civil codes consistent with aims, limits, standards and procedures that uphold webs of social conduct guaranteed by legal norms of “desert, justice and fairness”.¹⁵ As Cupit (1996) explains, “a society which has just laws and a just division of benefits and burdens is superior to one which does not”.¹⁶ Accordingly, reciprocity is strengthened and legitimised by civil understandings and the political “obligations ‘to get things right’ – that abilities and actions are directed at legal and normative responsibilities rather than luck, chance” or inept decision-making.¹⁷ Conceptualising reciprocity as a normative construct offers, on the one hand, a route to examine epistemic points of cooperation associated with obligations, duties and rights rewarded through the equitable distribution of knowledge and, on the other, signals where significant tensions within the powerful global governance and trading framework of IP lie that threaten just and fair outcomes.

For May (2003), a long history of political and normative experience has given humanity continuity in relations of knowledge as a social good, meaning we cannot just say that making knowledge property is illegitimate or acts against the public good value of exchange.¹⁸ Rather, property offers states and civil society security and legitimacy. Nonetheless, what is commonly ignored or forgotten in the property debate, particularly in relation to ideas, is “the original bargain of IPRs, that is, if a privilege is being awarded, some form of connected [benefit] and duty should also be accepted”.¹⁹ While there is a continuity of social power and action that informs perceptions of knowledge and enhances human creativity by linking discovery and innovation to private rights and co-operative

¹⁵ Becker, L. C. *Op cit*, p. 73.

¹⁶ Cupit, G. (1996). *Justice as Fittingness*, p. 1.

¹⁷ Greco, J. (2003). ‘Knowledge as Credit for True Belief’, in M. De Paul and L. Zagzebski (eds), *Intellectual Virtue Perspectives from Ethics and Epistemology*, p. 111.

¹⁸ May, C. (2003b). ‘The Problems of Cosmopolitan Justification of IPRs in Global Knowledge Politics’, *Paper Presented at the Workshop Brief on Intellectual Property, Markets and Cultural Flows, New York University*, 24-25 October, retrieved 10 June, 2004: www.christopher.may.rtf+&hl=en&start=1&ie=UTF-, pp. 1, 3.

¹⁹ *Ibid.*

forms of exchange, at another level political tensions are never far from propertied relations. For these reasons, achieving the public good goals of reciprocity in order for knowledge to contribute to social and economic transformation is problematic, not only because political will is difficult to achieve in some states, but also because as property rights and economic competition come together, a range of responses are elicited from co-operation to coercion, with the latter posing the greatest threat to reciprocity. Not only do the assumptions underpinning positivist theory reveal that moral obligations can be difficult to achieve, but ideas and belief systems can also legitimise existing forms of domination produced by historical or social circumstances. This does not diminish the role of reciprocity to guard against power and domination. Reciprocity, evident in a commitment to normative values, is instructive for dealing with historical anomalies and social change to bring about the best outcome for audiences to whom it is addressed.

The conceptualisation of reciprocity offered thus far emphasises the importance of public good goals in guiding political conduct between groups and trading states, and in dealing with the complexities of the IPE and the powerful nature of vested interests manifest in diverse groups and states and institutions where they find support. This enquiry tests the efficacy of reciprocity in addressing vested interests by investigating the extent to which rights and obligations are recognised and reconciled with the competitive practices of trade and the institutions of global and national governance underpinning exchange. At the political level, assessments can be made of the way rich and poor states, institutions and private agents, conduct their relations with one another to achieve reciprocal outcomes. The relationship between reciprocity and socio-economic transformations to bring about equivalent trade and fair exchange requires a much greater political effort at the level of IPE in terms of knowledge as property. The key organising idea of this study and core to the normative arguments being advanced throughout the thesis is the contention that reciprocity is an essential part of social interactions and without it we threaten

the basis of our communities of knowledge. As the glue that binds our social relations, reciprocity cannot be seen as an optional extra, but intrinsic to the formation of ideas, human discoveries and innovations. With these provisos in mind the next section lays the groundwork for the way in which reciprocity, with its ethical mix of distributive justice through rewards and benefits, sits alongside the political manifestations of competitive markets in international theory and practice.

II. Reciprocity in International Politics: Theory and Practice.

Together with philosophers, legal scholars, economists and sociologists, political scientists have set out the conceptual elements on which the normative elements of reciprocity rest. The main hindrance for conceptualising reciprocity in international politics, particularly in conjunction with trade, is the perceived moral ambiguity of establishing how benefits can be equitably distributed between competing states and other market competitors. For Keohane (1986) ambiguity surrounds reciprocity because the notion represents both a symbol within politics and a concept for scholars that throws up tensions between political theory and empiricism.²⁰ Political philosophy, as a discipline, construes reciprocity as normative – its value lying in moral theory – while, empirically, law reflects reciprocity back on to civil society to bring fair and just outcomes to social interactions involving trade exchanges and other forms of transaction. Earlier attempts to address the problem of ambiguity between political theory and empiricism led Gouldner (1960) to emphasise certain conditions as beneficial to the establishment and maintenance of equity. Drawing on Lockean ideas that good ought to be returned for good and bad seen as a betrayal of the good, Gouldner set up conditions for a ‘tit for tat’ response aimed at inducing a semblance of equity between competing parties.²¹ On this basis various institutions and agencies have the task of establishing and maintaining the public good by aiming for equity through unbiased legal rights and obligations that

²⁰ Keohane, R. O. (1986). ‘Reciprocity in International Relations’, *International Organization*, 40 (1), p. 4.

²¹ Gouldner, A. W. (1960). ‘The Norm of Reciprocity: A Preliminary Statement’, *American Sociological Review*, 25 (2), p. 171.

translate into fair outcomes. Roadblocks inevitably occur, as Strange (1996) notes, with political problems arising from state and institutional attempts to standardise or “persuade others to share fundamental beliefs about society and economy” that may not be attainable, or are rejected as inconsistent with religious values or cultural norms.²²

Common amongst the normative elements of reciprocity associated with what is good and fair in terms of trade and exchange are expectations that individuals or groups give in the hope of receiving. This implies that if a moral imperative is given centrality in trade, then reciprocity follows. Whether it is goods or love, giving in return for receiving can serve to counter humiliation, build up trust and prevent withdrawal or conflict from arising out of the inability to reciprocate. Accordingly, reciprocity has an underlying presumption that symmetry is a worthy goal germane to establishing and maintaining equality between people and groups. Cupit (1996) argues that a “lack of equality undermines the symmetry to which the idea of reciprocity appeals”.²³ Equally important for the purposes of this study in terms of the philosophical value of reciprocity to trade relationships is Cupit’s observation that while symmetry is a critical component of reciprocity, “it does not follow that those who cannot reciprocate cannot be owed justice”.²⁴ Rather, reciprocity disposes us toward repairing the harm we do to one another and also pre-empts harmful actions by providing a starting point whereby social relationships can overcome mistrust and contingent insecurities that may arise in civil society. This initial normative assessment of reciprocity is advanced in the next three sub-headings, and elaborated on in subsequent sections to establish the position of reciprocity within past and current governing arrangements.

²² Strange, S. (1996). *The Retreat of the State: The Diffusion of Power in the World Economy*, p. 70.

²³ Cupit, G. *Op cit*, p. 31.

²⁴ *Ibid*, fn 10, p.18.

(A) From the Historical to the Contemporary

Reciprocity entered the lexicon of international law prior to the 18th century as a guide to direct sovereign relations between states notably in grants of privilege amounting to sovereign immunity for government officials.²⁵ As a normative concept it converged with international relations through the notion that sovereignty is not sustained by coercion and arbitrary power alone but requires state and civil compliance based on trust and open exchange. By the latter half of the 19th century, with almost half the world enslaved by colonial powers, a framework of action for reciprocity was sought between the dominant sovereign states that contained provisions to begin dismantling colonial practices, protectionist policies and work toward greater levels of international co-operation. These were strengthened in 1947 with the consolidation of GATT multilateral rules aimed at expanding trade and lowering protectionist barriers. Consensus on achieving these goals is seen in Article XXIV of the GATT where non-discrimination clauses uphold reciprocity under the principle of sovereign equality. Non-discrimination allows governments to “seek a ‘balance of concessions’ and when presented with the withdrawal of a trade concession, its trade partner is permitted to withdraw a substantially equivalent concession”.²⁶

By 1974 the US Trade Act had become the main “statute used in making the reciprocity argument” serving as an international guide for trade obligations,²⁷ even though the aim of promoting consensus and co-operation at this point in time was seen by many structuralists as a thinly disguised effort by the West to dominate markets and institute neo-colonial dependencies.²⁸ The idea of reciprocity as a co-operative concept to enhance goodwill in national and international trading relations did not diminish despite the US embarking upon unilateral action to retaliate against partners who refused to allow American

²⁵ Yanai, A. (2001). ‘Reciprocity in Trade Liberalization’, (Working Paper Series 00/01 - No 2). *Chiba Japan: APEC Study Centre Institute of Developing Economies*, p. 3.

²⁶ Freund, C. (2003). ‘Reciprocity in Free Trade Agreements’. Washington, *The World Bank*, p. 2.

²⁷ Kuruk, P. (2004). ‘Bridging the Gap between Traditional Knowledge and Intellectual Property Rights: Is Reciprocity an Answer?’ *Journal of World Intellectual Property*, 7 (3), p. 432.

²⁸ O’Connor, J. (1981). ‘The Meaning of Economic Imperialism’, in M. Smith, R. Little, and M. Shackleton (eds), *Perspectives on World Politics*, p. 282.

firms access to their markets.²⁹ Throughout the 1990s reciprocity was acknowledged in trade liberalisation policies centred around sovereign equality and the idea of ‘a level playing field’ where weak and developing states, as well as many developed states, would rationalise their economies and adopt the free market model to foster technological expansion.

Under TRIPS developed states forged ahead with trade agreements to promote arguments in favour of technological transfers from rich to poor on provisos that exchange would be most rapid where open borders and deregulatory processes were in place to facilitate “the movement of goods, services and capital unimpeded by government regulation”.³⁰ The role of reciprocity, in the view of Sorenson (2002), was as a systemic norm providing grounds for equal opportunity and trade bargaining exchanges:

Reciprocity should be seen as less of a bargaining strategy employed by single actors and more as a systemic norm according to which bargains are made between parties. A game based on reciprocity is a symmetric game where the players enjoy equal opportunity to benefit from bi-lateral and multilateral transactions.³¹

However, efforts to encourage liberal trade growth had a negative impact on attempts to achieve trade equity as the strongest economies remained highly protectionist and the virtues of open markets were sold to the least advantaged in the global economy. As a political instrument to forge sovereign equality, and provide an “effective strategy for maintaining co-operation among egoists”, reciprocity faltered in its efforts to promote equal national treatment as protectionist policies threatened to eclipse actions to make trade more open and free.³² By the end of the 1990s the uneasy juxtaposition between trade protectionism and trade liberalisation challenged reciprocity as a means of attaining national harmony and international co-operation.

²⁹ Kuruk, P. *Op cit*, p. 432.

³⁰ MacEwan, A. (1999). *Neo-Liberalism or Democracy? Economic Strategy, Markets and Alternatives for the 21st Century*, p. 31.

³¹ Sorensen, G. (2002). ‘Global Polity and Changes in Statehood’, in M. Ougaard, and R. Higgott (eds), *Towards a Global Polity*, pp. 46-47.

³² Axelrod cited in R. O. Keohane, (1986). *Op cit*, p. 2.

(B) Diffuse and Specific Reciprocity

The political challenge for governing institutions such as the WTO, following its creation in 1995, and the systematic attempts to harness reciprocity to trade liberalisation led by Anglo-American states, was to reconcile how benefit-sharing, premised on equivalent outcomes, could be established and maintained between rich and impoverished states. Making reciprocity compatible with achieving and maintaining free trade among a network of highly competitive states bargaining trade deals in an increasingly integrated technological world posed both threats and opportunities. For Yannai (2001) consideration needed to be given to shortcomings. She suggests “equivalence might elicit substantial inequality and unfairness among states because reciprocity entails equal treatment among unequal partners on the basis of the sovereign equality principle”.³³ To overcome this apparent anomaly in the principle of sovereignty, two forms of reciprocity emerged: diffuse reciprocity, where the definition of equivalence is less formalised and one’s partners may be a group such as a regional body rather than a particular state actor, and specific reciprocity, which carries conditional obligations, rights, and duties commonly seen, for example, in the US granting China most-favoured nation status (MFN),³⁴ a step which allowed the Chinese to expand their economy based on capitalist enterprise principles. The US grant to China of MFN status might also be seen as a strategic move by the Americans to give its many national-based corporations access to a low-wage Chinese workforce with foreign investors guaranteed mutual recognition under the principle of national treatment which means the host country offers the outsider recognition equivalent to that it would receive at home.

Certainly, the normative position of reciprocity with its attendant conventions such as MFN status, mutual recognition and national treatment continued to be aimed at actions to induce trade integration. As global trade in knowledge technologies expanded and states became more reliant on IP to remain

³³ Yannai, A. *Op cit*, p. 2.

³⁴ Keohane, R. O. *Op cit*, p. 4.

competitive, expectations grew that similar standards could be applied to goods and services recognisable in agreements between one state and another. While national treatment does not oblige any one state to recognise another state's standards, trade agreements used the principle of equality, or equivalence as Yannai puts it, as the yardstick for bargaining which raises the question of how equivalence is weighed when the exporters of IPRs are the strongest states, having already acquired protection through IPRs for their knowledge technologies, while requiring developing countries to meet ever-increasing standards of "protection for information, technology and creative activity" before they can effectively engage in global trade.³⁵

While MFN, mutual recognition and national treatment overlap and have similar characteristics they also function exclusively. National treatment can operate as a means to establish equivalence through the fiction of a 'level playing field' facilitated by the exchange of goods and knowledge through bilateral state actions. Setting the conditions for determining markets using equivalence has precedence in obligations made by the international community to the US in the area of IP under the 19th century Paris and Berne Conventions, where technological inequality was balanced by granting rights of IP equal to those given to European IP-holders. This worked satisfactorily when the US was developing knowledge technologies and 'borrowing' ideas from its European counterparts. In the contemporary context, Drahos (2004) notes that national treatment is not a particularly suitable principle for states wishing to have their own domestic standards recognised in a foreign state:

Strong states such as the US have been able to take advantage of the principle of national treatment, but this is principally because the US has been able, in bilateral and regional treaty negotiations, to secure standards that match its domestic standards. Once states such as Jordan, Chile and Singapore agree to enact domestic intellectual property standards they are, in effect, [adopting] US domestic standards. The

³⁵ Maskus, K. E. and Reichman, J. H. (2004). 'The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods', *Journal of International Economic Law* 7 (2), p. 281.

principle of national treatment operates to give US intellectual property holders or goods of US origin the benefits of those standards.³⁶

While the benefits accruing to strong states may be internalised without financial penalty, the internal costs of IP for poorer states required to meet standards drains more heavily on their resources. As will be considered in subsequent chapters, the setting of common global standards for IP compromises the trading position of weak states and may also serve to preclude strong states from gaining any advantage from reciprocity as trade protectionism is instrumentally linked to competition. For now, and in terms of MFN status, equivalence is characterised by the distinction between unconditional and conditional reciprocity guiding the way trade operates.

(C) Unconditional and Conditional MFN

Unconditional MFN refers to non-discriminatory bargains where states are obligated to confer on foreign nationals mechanisms of protection where treatment is no less favourable than they themselves have achieved. Theoretically, unconditional MFN is a co-operative ideal for transferring technological innovations to assist in the expansion of liberal trade by using equivalence in strictly symmetrical terms.³⁷ Conditional MFN is also imbued with co-operative principles and may alter the balance of benefits and rewards toward a third or more parties. Contextual methods of application differ widely although, generally, it has been conditional MFN that developed as an instrument of trade promoted and practised by the US from the late 18th to the early 19th centuries when it was notably a trade 'free rider'. In accepting other countries' MFN conditional agreements in the area of copyright the US was not required to give anything in return or reciprocate in the area of IP, enabling it to build up a vast wealth in intangible knowledge resulting in the consolidation of significant stores of legal knowledge and information until 1922 when the

³⁶ Drahos, P. (2004). 'Toward and International Framework for the Protection of Traditional Group Knowledge and Practice', *Draft Paper, UNCTAD-Commonwealth Secretariat Workshop on elements of National Sui Generis systems for the Preservation, Protection and Promotion of Traditional knowledge, Innovations and Practices and Options for an International Framework*, p. 28.

³⁷ Keohane, R. O. *Op cit*, p. 7.

conditional MFN clause became unconditional. The emergence of the European Union (EU) in 1993 out of the European Community (EC) led to an increase in US tariffs around domestic industries and gave “the president the authority to impose duties on certain products when foreign governments were *reciprocally unjust or unreasonable*, in other words discriminated against American products”.³⁸

As the US accrued one-sided advantages over competitors many trading states found it increasingly difficult to negotiate commercial treaties on terms suitable to them. Keohane (1986) identifies two deficiencies of conditional MFN readily adopted by the US that effectively made it difficult for trade liberalisation to advance: “the difficulty of establishing equivalence and the temptation to erect barriers for bargaining purposes”.³⁹ The contemporary governance of IPRs affects MFN status, in part because TRIPS requires all WTO members to enact minimum standards aimed at creating harmony between domestic and international legal standards. This compares with earlier conventions that stood apart from trade rules under the World Intellectual Property Organisation (WIPO) prior to 1995. At that time there was more flexibility for domestic interests to function outside the strict retaliatory ‘tit-for-tat’ international trade practices that found support in trade laws. Additionally, because IP had not been part of the trading system, such knowledge had not acquired a scarcity use value for its economic application to the same extent that occurred after 1995.

Since the re-regulation of IP in 1995, challenges have arisen for reciprocity in the practice of mutual recognition and trade law. These are outlined mainly in chapters five and six. Once more ambiguity arises since, as has been argued, a reciprocal relationship generally involves obligations and rights balanced by a measure of equivalent return. In contrast, a mutual or bilateral relationship exists when two parties give to each other of their own free will without an implied

³⁸ Yanai, A. *Op. cit.*, p. 5. (Emphasis added).

³⁹ Keohane, R. O. *Op. cit.*, p. 17.

measure of balance.⁴⁰ A mutual relationship may also involve many parties and is characterised by the transfer of services and implementation of common standards of conduct that cut across sovereign boundaries which are then able to operate based on levels of trust, co-operation and collaboration. Knowledge and information may be shared without obligations to balance the exchange between participants. Intelligence gathering or public health considerations that have repercussions for populations may come under these categories. As this occurs reciprocity can be measured in terms of its indivisibility to public good goals of conduct that puts competition aside as a primary factor in order to enhance the social value of knowledge.

With TRIPS, reciprocity and the practice of mutual recognition are an accepted part of standard setting based on welfare outcomes as outlined in Article 7 Part 1. However, as Drahos (2004) points out, in his reading of a WIPO report on traditional knowledge and IP rewards, there are strong indications that equivalent benefits are often side-lined to commercial imperatives of profit and trade law. Any rights outside global IP standards frequently get ignored, or are accompanied by directives that states enact TRIPS-plus foreign domestic standards which have the effect of imposing costs on those states lacking the same national rules of IP protection.⁴¹ Mutual relationships, then, are limited to those situations where common levels of social, economic and political interests already exist allowing more readily for reciprocity and co-operation. The situation where reciprocity, bound by justice, has been challenged by trade rules has a precedent in neo-liberal interpretations of trade law. In practice the institutions and politics that encompass sovereign equality, mutual recognition and MFN have become increasingly indistinct, a process confirmed by the enactment of TRIPS aimed at standardisation and successive initiatives to strengthen trade laws. The historical connections and contemporary application of reciprocity to trade law are explored in this next section revealing tendencies

⁴⁰ Yanai, A. *Op cit*, p. 2.

⁴¹ Drahos, P. *Op cit*, p. 30.

for market competition and reciprocity to stand in conceptual and practical opposition to one another under certain circumstances.

III. Reciprocity and Trade Law

The connections between reciprocity and competitive trade began in the mid-eighteenth century with reciprocity featuring in dialogues associated with expanded rules covering international markets for goods, labour and services. By 1778 reciprocity was integral to trade legislation enacted through treaty provisions between France and the US to invoke fair commercial trade and equality of exchange.⁴² In the process of setting up new markets and securing the flow of ships and goods across the Atlantic European governments favoured reciprocity to support international integration, designed to leave mercantilism and protectionism in the wake of free trade.⁴³ Hiller (2002) notes that reciprocity featured in British parliamentary debates in 1850 following a Reciprocity Treaty negotiated between the British and the British North American colonies of New Foundland.⁴⁴ By the 19th century most European states had adopted the concept of reciprocity and applied it to IP agreements allowing for a balance of treatment in the protection of copyright. The link between reciprocity, the international gold standard, and trade tariffs over imported goods reached a critical turning point during the world economic depression of 1929-1932. The 1934 Reciprocal Trade Agreement Act in the US had the express purpose of restoring the path of national economic growth, following the Smoot-Hawley Tariff Act of 1930 which raised tariffs and weakened the economy by authorising the executive to use constitutional powers to sign and implement trade agreements with other countries.⁴⁵ A critical feature of reciprocity at this time reflected the desire of states, in particular the US, to create trade conditions that would also allow the

⁴² See Yanai for an extended discussion on the history of the principle of reciprocity in Europe and the use of tariffs in a variety of trade acts. Yanai, A. *Op cit*, p. 3.

⁴³ *Ibid*, p. 4.

⁴⁴ Hiller, J. K. (2002). 'Government and Politics Bibliography', retrieved 10 February, 2005: www.heritage.nf.ca/law/reciprocity.html, p. 1.

⁴⁵ The Smoot-Hawley Act was a critical moment in US economic history for altering the balance between different trading sectors. By favouring import-competing business interests it enhanced domestic protection as each tariff required a separate vote before it could be passed. Likewise, decisions moved against liberalisation. Nogues, J. J. *Op cit*, p. 3.

“world trading system to come out of recession”.⁴⁶ In Nogues’ (2003) view, it is evident that while restoring economic growth has been an important element in advancing reciprocity, the US has not approached free trade through reciprocity as a unilateral policy since the 1930s. Instead, US policy has been to establish market access through “concessions in bilateral, regional or multilateral trade negotiations”.⁴⁷ In trade deals with strong and weak states concessions have been based almost exclusively on national self-interest rather than reciprocity.

The GATT laid down obligations that states seek to achieve a balance in trade through reciprocity following the devastation to the European and Japanese economies during the war. The pursuit of trade liberalisation in the post-war era to revitalise economic wealth was based largely on the application of reciprocity in trade law. Determining the meaning of ‘reciprocity’ was not always easy for, as Nogues (2003) observes: “neither the 1934 US Reciprocal Trade Agreement Act, nor the GATT, defines the meaning of ‘reciprocity’ or of the ‘mutually advantageous’ concepts”.⁴⁸ Rather, the sets of rules formulated under the auspices of GATT tend to echo Keohane’s and Gouldner’s criticisms noted earlier that ambiguity and equivocation are discernable in the adoption of reciprocity in trade bargaining. This ambivalence persists despite reciprocity and non-discrimination continuing as the two normative pillars supporting and framing GATT (and later regulations). The gaps in reciprocity and non-discrimination apparent in Article XXIV of the GATT openly encourage the formation of competing trade blocs. This aspect of the regulatory framework of global governance is criticised by one World Bank economist as antithetical to the idea of non-discrimination because of the potential harm it does to those outside the membership bloc.⁴⁹ In addition, there is an incentive for states to join the WTO or be left out of global trading markets, thereby compromising their economic status and development. The disregard for non-discrimination, reciprocity and MFN status is evident in the US Trade Act of 1974 and in Section 301 of the

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*, p. 4.

⁴⁸ *Ibid.*

⁴⁹ Freund, C. *Op cit.*, p. 2.

legislation embodied in the 1988 Trade Act (discussed in chapters five and six), and in trade disputes between the US and China that intensified in the 1990s around issues of IP.

Challenged by competition to its global market share through piracy and keen for investment in China, the US resorted to aggressive bargaining tactics and trade retaliation measures under Section 301 to induce an update of Chinese IP rules.⁵⁰ The Chinese, along with many other states threatened by trade sanctions and compelled to enter into one-sided bilateral agreements, saw Section 301 as a violation of their sovereignty and strongly resisted US trade threats that were expected to result in economic sanctions calculated to cost China around \$1.1 billion per annum.⁵¹ With China's resistance to economic sanctions the US's unilateral position had relatively limited success in extracting IP concessions.⁵² China bargained hard for dispensations in other areas allowing the rising power to retain diplomatic dignity by "rejecting [US] attempts to ban nuclear weapons tests and publishing a report to coincide with a US/China copyright accord stating that it has no political or religious prisoners".⁵³

The United States Trade Representative Office (USTR) 'watchlist'⁵⁴ has a relatively limited impact on large and growing economies like China, but for small states the imposition of having domestic trade under surveillance by a significant power is irritating. Not only does it compromise trust, but is regarded by many as a tactic to induce compliance for all manner of trade and related regulatory demands. As the world's largest exporter of IP the US is determined

⁵⁰ Sell, S. K. (2003b). *Op cit*, p. 45.

⁵¹ Halbert, D. (2003). 'Weaving Webs of Ownership: Intellectual Property in an Information Age', [Ph.D]. *Chapter five: International Piracy, Technology and Intellectual Property*, retrieved 2 September, 2003: www.futures.hawaii.edu/dissertation/chapter5.html, p. 1.

⁵² Zeng, K. (2002). 'Trade Structure and the Effectiveness of America's "Aggressive Unilateral" Trade Policy', *International Studies Quarterly*, 46 (1), p. 94.

⁵³ Halbert, D. *Op cit*, p. 1.

⁵⁴ The US watchlist is an extensive list of states that breach US trade rules. These states face possible trade sanctions and other penalties if anti-competitive practices, non-compliance of IP and piracy persist. The political and economic aspects of the watchlist are well documented by Drahos with (sic) Braithwaite, (2002) in *Information Feudalism* where linkages are made between the USTR, the International Intellectual Property Alliance (IIPA), and the special 301 system of US trade law which permits the USTR to review the laws and economies of states as they relate to intellectual property infringements around the globe. See pp. 90, 95, 100-1, and 193-94, for informative discussions on the watchlist.

that its goods and services are able to gain entry to foreign markets since the US considers it has fairly bargained trade deals in goods and services based on reciprocity.⁵⁵ This point is considered in more detail in later chapters but, for now, serves to capture the operational value of knowledge at the institutional level in IPE, confirming Trebilcock and Howse's argument that "reciprocity is absolutely crucial to understanding the evolution of the institutional arrangements both domestic and supra-national that govern international trade".⁵⁶ For these reasons reciprocity is significant to any discussion about IP.

Trade integration, global co-operation, non-discrimination and reciprocity are central to Anglo-American state justifications for rapid economic liberalisation forged by advantages from harmonised standard-setting over IPRs. Reciprocity has developed and been upheld as a motivating system relying on mutual responses and "the ingenuity of reciprocally agreed upon liberalisation to transfer political power over domestic import restrictions to export interests" fuelled by globalised trade.⁵⁷ According to Nogues (2003), despite scant participation by the developing countries and considering levels of protectionism remained a feature of trade, the practice of reciprocity under the multilateral GATT framework appeared to be more balanced and transparent. By comparison, under the GATT/WTO framework trade protectionism is at higher levels than those preceding Bretton Woods and, further, multilateral bargaining has been replaced by bilateral agreements that have strengthened IP conditions as an integral element in claiming more extensive trade deals.⁵⁸ In the view of Maskus and Reichman (2004), there is a certain amount of irony in this situation given "that as tariffs, quotas and other formal barriers to trade are dismantled, there has been a strong push to re-regulate world technology markets" by strong states and powerful private interests determined to raise the bar upward toward higher global IP standards which effectively impedes the advance of developing

⁵⁵ Kuruk, P. *Op cit*, p. 434.

⁵⁶ Trebilcock, M. J. and Howse, R. (1995). *The Regulation of International Trade*, p. 8.

⁵⁷ Nogues, J. J. *Op cit*, p. 4.

⁵⁸ *Ibid*, p. 25.

states to compete for knowledge goods and services.⁵⁹ This represents a fundamental challenge to the normative impact of reciprocity with higher IP standards than were originally required by TRIPS gaining ground through trade law.

There are, accordingly, limitations to how far reciprocity can be practically advanced under the imposed realities of unequal inter-state and regional trade. In her research of 91 trade agreements negotiated after 1980 Freund (2003) found that, “while there was evidence of reciprocity in North-North and South-South free-trade Agreements there was little empirical support for reciprocity in North-South trade agreements”.⁶⁰ This research points to the selective use of reciprocity in regional agreements where developed regions are more likely to benefit from reciprocal exchange than less developed areas with low-income states where large trade concessions have to be made in order to get value from any agreement with a developed state. Freund’s study also reveals that, despite its neglect for many years, reciprocity is now of interest to economists, many of whom no longer consider that the social impact of unequal trade and IP should be excluded from economic analysis.

According to Kuruk (2004), experimental economists are systematically starting to review the structural arrangements between trade and reciprocity seeking to establish levels of obligation to fairness associated with trade preferences. For these reasons he contends that concerns about “fairness and reciprocity cannot be ignored”.⁶¹ Importantly, for Kuruk, reciprocity and fairness “ought not to be dismissed as being out of touch with reality or subject to refutation on the ground that they are not based on sound economics”.⁶² In analysing reciprocity, political, not just economic, concerns need to be investigated since the future of intellectual ideas under public jurisdiction is put at risk by concentrations of private ownership and control. The political implications surrounding

⁵⁹ Maskus, K. E. and Reichman, J. H. *Op cit*, p. 282.

⁶⁰ Freund, C. *Op cit*, p. 1.

⁶¹ Kuruk, P. *Op cit*, p. 430-431.

⁶² *Ibid.*

transformations to the public law foundations of IPRs are highlighted by efforts to commercialise traditional knowledge. This next section considers reciprocity in the context of traditional knowledge resources beginning with institutional developments.

IV. Reciprocity and Political Dimensions of Traditional Knowledge (TK)

Ways of achieving protection and enforcement measures for TK resources remain under debate in institutional forums. For Kuruk (2004), any reform to TRIPS and future decision-making needs to acknowledge reciprocity in terms of justice, equity and fairness. He notes that the African Proposal for traditional knowledge recognition and protection before the UN comes on the back of a long series of meetings calling for the “protection of genetic resources and traditional knowledge as a matter of equity... has strong overtones including the idea ‘that good be returned in proportion to good received’, and that ‘reparations for harm caused’ are integral to any further developments that might emerge” normatively and instrumentally.⁶³ While this seems relatively straightforward in its demands the on-going debate about the instrumental efficacy of TRIPS standards and post-TRIPS implementation strategies remains characterised by unresolved problems relating to issues of compatibility between TK and IP, differing perspectives on IP and sovereign rights and the economic significance of property rights within the present WTO regime.

The pressures of market-driven policies have advanced the direction of IP toward global institutional authorities where minimum standards of IP are a feature of trade rule-making. While national parliaments have degrees of flexibility to implement *sui generis* law to protect customs, traditions and local practices, harmonising standards and competitive demands to utilise traditional ideas and products in pursuit of commercial goals have implications for the way

⁶³ *Ibid*, pp. 441-442. As Kuruk notes the African Proposal had its origins in the WTO’s Third Ministerial Conference held at Seattle in 1999. It was elaborated on further in meetings for the Doha Round in 2001 and addressed again in 2003 through delegations to the TRIPS Council.

TK can be recognised and protected. Market-driven policies also impede efforts toward the clarification of categories of TK that need recognition and protection because interpretations between what is socially valued in one culture, varies from another. At the institutional level this can produce problems because as Sell (2003a) observes: “different international institutions having jurisdiction over IP do not share similar visions nor ... serve similar ‘publics’”.⁶⁴ Similarly, it should be remembered that property rights are formulated and prescribed on western notions of subjectivity based around each individual’s capacity to generate knowledge and profit from its application, which for many groups, is fundamentally at odds with the sense of collective guardianship that surrounds indigenous communities’ TK. In addition, it is important to arguments on the application of IPRs, and their significance for TK, to consider the extent to which IPRs are a monopoly favouring novelty over tradition, individuals over the collective, economic imperatives over social considerations and the grant of temporary rights in contrast to the long-standing nature of TK. Thus, to Kuruk, monopolisation is a highly political issue with the “general feasibility of linking the preservation and protection of traditional knowledge to IP in terms of originality, inventiveness, uniqueness and duration” problematic, and highly complicated.⁶⁵

National treatment which confers equal status on all nationals based on sovereign principles may also not serve indigenous populations seeking to protect their TK because nationals become part of a homogenous whole. Importantly, acknowledgments of diversity and respect for group differences can be compromised. In contrast to national treatment, reciprocity is relevant to indigenous groups through its normative value as a part of rituals and protocols associated with giving and receiving, and also for the socio-economic leverage it offers to groups in terms of justice and fairness. Explored in later chapters are the implications of monopoly formation whereby public good goals of fairness and

⁶⁴ Sell, S. K. (2003a). ‘Competing Knowledge Networks: The Quest for Global Governance in Intellectual Property’, *Issue Brief Prepared for SSRC Workshop, Intellectual Property, Markets, and Cultural Flows*, p. 1.

⁶⁵ Kuruk, P. *Op cit*, p. 429.

equity are suspended as markets consolidate around IPRs and impact upon the social structure of TK. The importance of reciprocity to trade characterised by obligations of fairness, equity and respect in relation to TK is outlined and developed further in chapters seven and eight. Instrumental and philosophical arguments exploring the social value of reciprocity remain relatively under-developed and over-looked in political debates on IP. This lack of attention to reciprocity within the debates on TK has major implications for indigenous populations in developed and developing states. In addition, as market economic policies are privileged over the social value of knowledge, antagonisms, rather than reciprocity, rises to the surface in political arenas.

(A) Distinguishing Market Competition and Reciprocity

The capacity to distinguish between market competition and reciprocity is central to this enquiry. These respective elements are set down in Table 1 below delineated by IPRs as a dividing line categorising the core features distinguishable between market competition and reciprocity. Listed under market competition are four core elements that situate and interrelate with IP in IPE defined by shared commitments to commercialisation and conceived as: first, strengthened regulation, second, economic rationalism, third, private power and fourth, trade integration. Listed under reciprocity, and interfacing with market competition, are virtue-specific moral orders that correspond to obligations of reciprocity and are consistent with social considerations including public good codes of conduct, and measures that constitute fair and equitable trade. This framework highlights the different political visions that informs and distinguishes the private goals of knowledge ownership and control from the social requirements of knowledge as a public good. The importance of political power to the re-regulation of IP, and the capacity for reciprocal exchange as provided under the provisions of GATT and adopted in TRIPS, and its significance to global governance, is analysed in the following table.

Table 1.0 Comparative Features of IP Governance

Market Competition	I N T E L L E C T U A L P R O P E R T Y R I G H T S	Reciprocity
Market ideology: Economic rationalism and law regulated by states and upheld by institutions		Virtue theory: Normative principles regulated by institutions and upheld by states
Private sector interests and corporate dominance		Public citizenship rights and democratic governance
Unilateral, bilateral, multilateral, private contract		Multilateral, bilateral
Global harmonisation: trade law and commercial imperatives		<i>Sui generis</i> law and recognition of diverse cultural and social practices
Re-regulation: IP <u>enclosure</u> and incentives to create strengthened TRIPS-plus standards		Regulation: IPR <u>disclosure</u> and incentives to create minimum standards of control for innovation to proliferate
Free Trade: Integration of trade and markets for knowledge and cultural goods through patents, trademarks, copyright and associated rights		Fair trade: Support for trade diversity. Transfers of technology, benefits and rewards through obligations to fairness and justice
Specific reciprocity: MFN individualised status		Diffuse reciprocity: group and collective status
User-pays and private ownership. Knowledge with-held until payment		Custodial and public protection. Knowledge transferred on reciprocal terms

The political motivations behind the minimum legal standards for rights in the TRIPS regime involved four prescriptions that impacted upon reciprocity: conformity, coercion, consensus, and compliance all of which are characterised by different levels of acceptance depending on the capacity of member-states to achieve their national trading interests within the Agreement. Responses to the Agreement, and by inference the above prescriptions, varied according to the position of particular states in relation to their economic interests and capacity to influence the powerful dialogues forming around IPRs. The bargaining power of

the strong states with the support of US and EU-based firms, particularly the influential chemical and pharmaceutical lobbies, led the developing states toward conformity (and the achievement of harmonised standards) through TRIPS using politically coercive methods employed in what Petersmann (2003) believes amounted to a vain attempt at consensus. In his view, “instead of a reciprocity principle there had been a consensus principle” packaging GATT to make way for the WTO and an expansion of private power.⁶⁶ Later chapters of this thesis argue that the consensus principle was misleading in that it was accompanied by the threat of aggressive unilateralism from the US and EU who made it clear that domestic trade laws would be employed against states to induce compliance if ‘co-operation’ amongst the parties bargaining for TRIPS was not reached on their terms.

The compliance that accompanied the mix of conformity, coercion, and consensus followed from the integration of TRIPS into a body of legal rules and the setting up of a dispute settlement system effective under the newly-created WTO. The Agreement had an appearance of consensus-making, predicated on the assumption that justice had been achieved at the level of global governance, but for many in the developing world it was seen as an imposed consensus that eschewed cooperation in its desire for conformity paying lip-service to democratic principles, and by association reciprocal norms. Many in the developing world viewed the re-regulation of IP under a trade framework and its emergence in the mid-1990s during a period of rapid advances in knowledge technologies as indicative not only of capital accumulation corresponding to economic rational policies, but also as an intensification of knowledge acquisition processes set in motion by the commercialisation of ideas to be realised through global governance.

⁶⁶ Petersmann, E. U. (2003). ‘From Negative to Positive Integration in the WTO: The TRIPS Agreement and the WTO Constitution’, in E. U. Petersmann and M. A. Pollack (eds), *Transatlantic Economic Disputes: The EU, US and the WTO*, p. 35.

The global governance of IP challenged long-standing traditions that states could refrain from being coerced into agreements by virtue of their independent sovereign status. IPRs became conditional on harmonised law representing a partial loss of political sovereignty affecting the way in which balanced exchanges operate and give rise to wider political implications for achieving reciprocity within the trading framework for IP. The organisational and structural framework necessary to fulfil and implement the different set of outcomes associated with reciprocity are outlined above in Table 1 in terms of trade and the competitive relationships of the exchange processes. The conceptualisation of reciprocity in this thesis argues that a virtue-theoretic response to the controlling authority of groups and institutions, whose values are privileged and whose power accords them capacity to make political judgements, must be arrested.⁶⁷ Achieving reciprocal outcomes based on fair exchange between competing states is integral to the public good standards outlined in Article 7, Part 1 of TRIPS noted at the outset of this chapter. Discrepancies between the highly proprietorial nature of free trade and reciprocal outcomes based on fair and just outcomes can, in Arup's (2000) view, be addressed under the proviso that certain knowledge resources remain in the public domain, and that clearly defined time limits on particular knowledge under the purview of IP can offer protection from private appropriation. However, Arup acknowledges that matters of legal interpretation remain and difficulties arise in "determining what constitutes a normal exploitation of the subject matter and which practices might then conflict unreasonably with it".⁶⁸

On the one hand, TRIPS standardises regulation through harmonisation while, on the other, each category of IP requires translation into national law with subsequent interpretations in courts of law meeting the satisfaction of national jurisdictions as well as WTO standards. The categories in Table 1 define aspects of the structure underlying the trade framework of IP and assist with this critical

⁶⁷ Scott, G. M. and Garrison, S. M. (1995). *The Political Science Student Writer's Manual*, p. 180.

⁶⁸ Arup, C. (2000) *The New World Trade Organization Agreements Globalising Law Through Services and Intellectual Property*, p. 207.

political analysis of knowledge commercialisation. Setting down the main distinctions between market competition and reciprocity contrasts with the many quantitative studies of economists and policy analysts whose methodologies utilise legal analyses, fiscal rationalisation and numerical assessments to identify the opportunities and threats represented by the TRIPS Agreement. The study steers a course between the disguised recipients who stand to gain from economic and political actions that privilege capital, ownership and control, and reciprocal forms of exchange based on the rejection of unequal trade practices and obligations of fairness.⁶⁹ Determining where public authority and legitimacy lies as markets for knowledge expand to accommodate growing private agencies with vested interests in IP is an integral part of this enquiry.

V. Methodology

This study examines trade-related IP rights in critiquing the governing order constituted in state and private power presuppositions that equity and fairness can best be delivered through free markets and open competition. This study challenges the underlying assumptions about competitive trade by highlighting the way competition enhances some relationships but not others, and serves to intensify monopoly ownership and control leaving scant room for knowledge to re-enter the public sector. For these reasons, this investigation addresses the way knowledge is governed and particular trade activities are rendered invisible for commercial purposes based on the assumption that IP law has moved rights in the direction of legal exactitude reflected in harmonisation procedures and the circumscribed rights of the individual as inalienable.

The conceptual framework developed for reciprocity challenges the capacity of market liberalisation to advance knowledge, particularly in relation to its fair and just distribution reached through trade bargains tied to the social and cultural significance of knowledge to human societies. Reciprocity has particular

⁶⁹ Emmett, R. A. (2001). 'Trading Knowledge: The Politics and Governance of Intellectual Property', Paper Presented at 5th Annual Student Research Conference Organised by Waikato Management School, The University of Waikato, and Centre for Continuing Education, The University of Waikato, Hamilton, 21 November, pp. 17-18.

significance for analysing the political demands made on knowledge as an economic imperative linked to property rights and monopoly ownership – the latter a development which it has been suggested increased significantly through the 1980s and 1990s – driven by intensified levels of privatisation. Becker’s construction of a virtue-theoretic argument is “not directly about obligations, rights duties, interests, preferences, values or social welfare. More directly, it is about excellence of character; it proposes part of a substantive theory of virtues”.⁷⁰ In contrast to critics who might say that reciprocity has limited application against omnipotent political power, it should be remembered what is socially possible to pre-empt or deliver a response to fragmentation and disorder.

Drawing on Becker’s moral examination of reciprocity, it is argued that although reciprocity is not the whole of virtue, the failure to reciprocate acts negatively on interactions between groups and may extinguish efforts aimed at fairness.⁷¹ Enunciating changes under which normative possibilities and limits can be reconciled with the politics of power, in particular, is critical to the necessary reciprocal conditions to address injustices. In terms of this study, reciprocity offers a route for interpreting what manifests as a politicisation of knowledge constituted by strengthened IP standards conditional on state and institutional efforts that, rhetorically at least, are aimed at dismantling trade barriers. By exploring the legal framework of IP and the power dynamics of competitive trade the political arguments for re-regulation can be mapped, and the political contest to foreclose on reciprocity demonstrated. Thus, throughout this thesis political contest is identified within the substantive political bargains made by states and other agents to establish property in knowledge through trade. Scott and Garrison’s (1995) approach to conducting political research is useful in exploring the political processes associated with the re-regulation of IPRs. Political processes include the operation of authority and control as well as the

⁷⁰ Becker, L. C. *Op cit*, p. 3

⁷¹ *Ibid*, pp. 90, 98.

legal, economic, social and cultural implications of political bargaining patterned by power relationships between groups.⁷²

At the beginning of any enquiry are acknowledgements of social reality. For Cox (1996) ontology locates and gives substance to social realities in terms of the relationships that govern the way we live. The ontological foundations of reciprocity arise from the social milieu of historical circumstances and transformations in political power mediated by social conditions and legitimised in governing structures.⁷³ History viewed through ontology adds immeasurably to a comprehension of scientific and technological transformations because to “some degree, institutions, organisations and even technologies are reifications of complex historically based constructions” driven by commercial imperatives that have a social foundation in knowledge achievements.⁷⁴ On the matter of patents, Warshovsky (1994), Drahos (1996) and Dutfield (2003) have each used historical analysis to reveal the connections between patent rights and private authority and illuminate competing structures of power by showing the interrelationships between managerial elites and capital accumulation. Today, as Dutfield (2003) observes:

Many of the [patent] structure’s gross features continue to reflect the remote historical circumstances in which they originated. These legacies from the past should not be ignored, nor should their problematic aspects in contemporary contexts be minimised.⁷⁵

Critical evaluations are made of the historical linkages between the exploitation of traditional forms of knowledge and the impact of IPRs as a marketplace concept. The implications of the exploitation of TK are wide-ranging and on-going. It is commonplace that identities are threatened and cultural practices objectified as individual rights associated with IP claims come up against

⁷² Scott, G. M. and Garrison, S. M. *Op cit*, p. 179.

⁷³ For several useful definitions of governance see (1995) ‘The Commission on Global Governance’, *Our Global Neighbourhood*, p. 2. R. J. B. Jones. (2000) *The World Turned Upside Down?* p. 176, and R. A. W. Rhodes, (1996). ‘The New Governance: Governing without Government’, *Political Studies*, (44), pp. 652-67.

⁷⁴ Comor, E. A. (1999). ‘Governance and the Nation-State in a Knowledge-Based Political Economy’, in M. Hewson, and T. J. Sinclair (eds), *Approaches to Global Governance Theory*, p. 119.

⁷⁵ Dutfield, G. (2003). *Intellectual Property Rights and the Life Science Industries: A Twentieth Century History*, p. 9.

collective notions of communal knowledge and authority. The commercial imperatives have long denied groups' self-determination but, more recently, the integrating forces of economic globalisation and the re-regulatory framework of property rights have seriously limited group attempts to protect identity and cultural practices embodied in long-standing traditions, customs and governance practices.⁷⁶

A significant body of rules relating to the exchange of indigenous group knowledge remains outside formal legal codes with many values informed by reciprocity mediated by group interactions and practices. A lack of integrity, understanding and acceptance of customary practices by outside researchers has assisted with the objectification of particular cultural values over history disrupting reciprocal relationships between groups. As Shaw (2003) notes: "many indigenous people were angered when they began to read what had been written about them, and to realise how it had been used to frame and justify particular social, cultural and political understandings of them".⁷⁷ For Stewart-Harawira (2005), too often observations about groups have resulted in indigenous peoples being seen as "interesting, if inferior, objects whose research has been applied to the benefit of all but those whom they researched".⁷⁸ These comments give substance to Becker's claim that "reciprocity contains the seeds of revolution as well as conformity".⁷⁹ Certainly, critical responses and escalating resistance from groups within developed and developing states to the exploitation of knowledge reveals the importance of exploring further the political implications of exchange within the parameters of trade.

The changing global order represented by TRIPS and WTO standard-setting requires investigation of the underlying social and cultural impact of political issues and events. The globalisation of IP through extensive re-regulation has

⁷⁶ Havemann, P. (2000). 'Enmeshed in the web? Indigenous Peoples' Rights in the Network Society', in R. Cohen, and S. M. Rai (eds), *Global Social Movements*, p. 23.

⁷⁷ Shaw, K. (2003). 'Whose Knowledge for What Politics?' *Review of International Studies*, 29 (December), p. 200.

⁷⁸ Stewart-Harawira, M. (2005). *The New Imperial Order: Indigenous Responses to Globalization*, p. 21.

⁷⁹ Becker, L. C. *Op cit*, p. 258.

placed a high priority on states to comply with harmonised trade rules, yet reciprocity remains elusive despite the sense of expectation and nod of strong state approval that harmonisation makes to notions of a convergence of interests. At the national level the commercialisation of multiple forms of knowledge from computer software to genes has been led by private demands for standardised international controls over technologies consolidated through IPRs, raising questions about where reciprocity fits in the context of on-going trade integration and monopolisation. In terms of the issues surrounding knowledge commercialisation, reciprocity, in the context put forward here, has not been widely investigated at the political level. Yet, the significance of reciprocity, particularly in social and cultural interactions in relation to the governance of IP, are integral to the bargaining and enforcement mechanisms taking place within the WTO, as will be outlined in chapters four and five. In essence, this study examines the political dimensions of reciprocity through empirical analyses, particularly in chapters seven and eight, and explores philosophical parameters at state and institutional levels within the political framework of IPE.

Three hypotheses have been derived from the conceptualisation of reciprocity presented in this chapter. These correspond to the questions set down in section two, chapter one, and are demonstrated in the distinctions outlined in table one on page forty-five.

- Hypothesis 1: Current trade mechanisms undermine national and global obligations towards benefit-sharing.
- Hypothesis 2: The uniformity imposed by TRIPS constitutes a politically-driven privileging of neo-liberal market economics.
- Hypothesis 3: The concept of reciprocity is central to ensuring the socio-cultural foundation and public good value of knowledge in global governance.

These hypotheses have been derived from the conceptualisation of reciprocity presented in this chapter, and are examined in terms of the distinctions outline in table 1.

VI. Research Design: Collecting and Analysing the Data

The TRIPS Agreement is a highly detailed complex legal document comprising seven parts and seventy-three articles. While these articles are important to the study, more critical to the overall arguments presented in this enquiry are the political implications and economic direction of IP that binds this potent form of knowledge to commerce and, in particular, to the regulatory objectives of trade liberalisation. The issue of ideas as the social embodiment of knowledge with a civilising role through reciprocal obligations is examined based on problems associated with the commercial aims of private and strong state power. Primary and secondary source material relating to IPRs and forms of proprietary knowledge has been gathered with a particular emphasis on explicating how reciprocity as a core normative principle demonstrates a commitment to trade benefits informed by equivalence in national and international conduct.

The initial phase of identifying critical published research on IP was built up from Dutfield's (2000) working draft literature survey on intellectual property rights and sustainable human development, commissioned by the United Kingdom Department for International Development. Other important documents that shaped the emerging research enquiry included government reports and policy documents from New Zealand/Aotearoa and overseas, including the 1993 Mataatua Declaration, United Kingdom House of Commons International Development Committee Reports, WTO reports, World Bank Policy documents, a preliminary draft United Nations Conference on Trade and Development (UNCTAD) discussion paper on capacity building, the International Centre for Trade and Sustainable Development (ICTSD), and a 2001 World Intellectual Property Organisation (WIPO) report on the needs and expectations of traditional knowledge holders arising from fact-finding missions

conducted in ten regions around the globe. Working papers gathered from the APEC Study Centre Economic Co-operation Studies Department, Institute of Developing Countries, and an implementation guide to the proclamation on the oral and intangible heritage of humanity set down by United Nations Educational Scientific and Cultural Organisation (UNESCO) were also used. Published and unpublished material by academics and journalists, particularly in relation to inquiries into intellectual property and indigenous peoples' issues, were sourced including web cite and newspaper articles, reports, journal articles, and data from non-governmental networks, periodicals and broadsheets. In addition to the published material it was important to seek the current perspectives and approaches of a range of people actively involved in one capacity or another with intellectual property and trade issues.

Discussions were designed to explore participant perspectives on IP and seek views on the commercial aspects of knowledge accumulation that could have implications for reciprocity within the trade-related aspects of the Agreement. Interviewees were selected on the basis of their interest and expertise in the area of IP and the range of views they could bring to discussions on the governance of TRIPS and trade. Each interviewee received a statement of the study's intent, reasons for the interest and the intention to record the interview under consent. A combination of formal interviews generated by consent and informal discussions at the end of most interviews proved invaluable for gaining further insights into participant perspectives. Field contacts were sourced from the initial literature review with recommendations of other contacts coming from a variety of people. Lived experiences around Maori communities provided anecdotal insights into peoples' concerns about the recognition and preservation of intangible knowledge. These informal communications are representative of the 'power sharing model' noted by Smith (1999) whereby the assistance of community voices provides meaning to "the development of the research enterprise".⁸⁰ Maori community voices are not numerous in this study, but those

⁸⁰ L.T. Smith, (1999). *Decolonizing Methodologies Research and Indigenous Peoples*, p. 177.

interviewed were chosen carefully for their knowledge and expertise in policy directions related to IP governance. In all interactions with interviewees efforts were made to build interview trust acknowledging Smith's (1999) important point that to take or steal "knowledge in a non-reciprocal and underhand way", compromises every facet of the research process.⁸¹ All the people contacted agreed to be interviewed with only one failing to arrive at the appointed time and place twice in a row. Respondents included leading academics in the fields of law, IPE, science, Maori politics and business development, government policy analysts in economic development, trade and foreign affairs and IP experts making up a significant cohort of interviewees. Interviews were conducted between November 2002 and December 2003 and took place in government departments, offices in institutions, at conference venues and in coffee houses when suggested by the interviewee. Fourteen one-to-one tape-recorded interviews, ranging in length from one hour to three hours, were held with respondents. As Tolich and Davidson (1999) say group interviews "are excellent for creating fresh ideas"⁸² and so it was that an invaluable source of information came from a round table session held and recorded with six government officials from the Ministry of Economic Development and Ministry of Foreign Affairs and Trade in Wellington who were working, in various capacities, on intellectual property issues.

Some nine more informal interviews, telephone discussions and e-mail exchanges were carried out with a variety of people on issues relating to knowledge and property between 2000 and 2004. Two of the respondents were interviewed for a second time in the span of a year to clarify points arising from the first meeting. The interviews were designed to draw out differing perceptions of IP, assess approaches to the literature, and evaluate schools of thought relating to how the various conventions functioned as forms of benefit-sharing and in terms of reciprocal outcomes. Departmental guidelines and University Ethics

⁸¹ *Ibid.*

⁸² Tolich, M. and Davidson, C. (1999). *Starting Fieldwork: An Introduction to Qualitative Research in New Zealand*, p. 123.

Committee regulations require that ethical assurances of anonymity and confidentiality are given prior to any interview. Several participants made it clear they were speaking from a personal perspective rather than expressing the views of their organisations or government on particular issues. The consent forms became the signed agreement pledge between interviewer and interviewee(s). Following each interview people were personally thanked followed up with an e-mail expressing gratitude for participation. Immediately following each interview mental impressions were noted and the main points highlighted in writing before transcribing took place. Each tape was given a code and the information catalogued into particular themes and interest areas.

With the interviews a two-step process was followed for organising the data. In the first instance, the interviews were indexed by subject and transcribed with the noted addition of turns in the conversation, topics raised and response levels to questions in general. The transcripts became both a source of information and data for critical analysis. Second, viewpoint, data irregularities and patterns of information cross-over were noted relating to the themes set down by in the research questions. New patterns and ideas emerged that required further investigation and, according to the different disciplinary definitions and perspectives, the research objectives were revised to establish linkages and cause-effect relationships. Through repeated readings and analysis of the interview data the various linkages between IPRs, commercial trade and governance could be established in terms of reciprocal outcomes. Table 1 offers a diagrammatical representation that shows the various linkages derived from the research and data gathering exercise, with much of the analysis of the interview data included in chapters seven and eight.

VII. Conclusion

There are numerous approaches that could be taken to explore knowledge commercialisation and its link to IP. Indeed, economists and lawyers have been adept at developing quantitative and interpretive arguments showing the

analytical interest these disciplines accord IP. This thesis adds another dimension to that broad body of literature by developing a political enquiry into reciprocity that explores the instrumental direction of knowledge commercialisation and the impact of rules and regulations governing IP. Given contemporary thinking about the controlling and ownership priorities of private power, the public protection of knowledge has become a crucial element in the debate on IPRs and commercialisation processes. To establish the framework for this research on the political dimensions of IP, core features of market competition have been contrasted with reciprocity and diagrammatically represented in Table 1. This Table serves as a base for analysing how economic rationalisation intersects with TRIPS and to identify how knowledge, including forms of traditional knowledge, is informed and altered by proprietary rights. The conceptualisation of reciprocity introduces to the literature on IP a political explanation of how knowledge is being increasingly commercialised through trade to the detriment of social and cultural considerations. Finally, the chapter detailed the political approach and analytical framework followed by the methodology and research design.

CHAPTER THREE

THE POLITICS OF KNOWLEDGE

This chapter addresses the interrelationships of knowledge and the political implications of these for reciprocity. Section I begins with a typology of knowledge which provides the context for examining the political limits and possibilities for reciprocity within a framework of knowledge. The typology ranges from social manifestations of knowledge to commercial features embodied in IP to demonstrate the various ways knowledge is practised and understood in this thesis. Sections II and III build on knowledge as a social construct shaped by historical, socio-legal, cultural, and economic factors that exert authority and control over trade. The link between politics and knowledge through trade contact was evident as early as 2500 BC when a commercial treaty between the kings of Egypt and Babylonia was signed to arbitrate reciprocal forms of exchange.¹ By the 17th century the notion that trade had a reciprocal value that could generate a harmony of interests between states and people was recognised in law. Indeed, the liberal international order was built on the Kantian ideal that the exchange of knowledge and goods shared a public good function with communal qualities of cohesion established around reciprocity.²

In sections IV to VI the implications for trade in knowledge are analysed in light of developments in scientific knowledge advanced by the political dynamics of colonial power. Here the political character of knowledge is closely related to its commercial use for, as Fuller (1992) explains, on the one hand, knowledge empowers people with its claim that it “is unbiased by nature, with no interests of its own, and hence potentially in the service of any interest” while, on the other hand, knowledge can be characterised by a capacity to sanction privilege, dominate and oppress.³ The

¹ Trebilcock, M. J. and Howse, R. (1995). *The Regulation of International Trade*, p. 17.

² McGrew, A. (2002). ‘From Global Governance to Good Governance: Theories and Prospects of Democratizing the Global Polity’, in M. Ougaard and R. Higgott (eds), *Towards a Global Polity*, p. 217.

³ Fuller, S. (1992). ‘Knowledge as Product and Property’, in N. Stehr and R. V. Ericson (eds), *The Culture and Power of Knowledge: Inquiries into Contemporary Societies*, p. 164.

political dimensions are evident in the many theoretical understandings and empirical application of knowledge related to the exercise of property rights and the use of law to maintain harmony amongst diverse groups with competing interests.

I. A Typology of Knowledge

Knowledge is defined in this thesis as the architecture of our minds; its products — ideas — are the furniture of our social settings.

Table 2.0 A TYPOLOGY OF KNOWLEDGE

KEY ATTRIBUTES

- **Knowledge as Praxis:** Social activity prescribes ways of knowing, structured through learning and a mindset of value to human relations. Cultural practices arise from the social milieu valued in traditions, customs and norms.
- **Empirical Knowledge:** Lived experiences provide the capacity to experiment, modify, innovate and discover. Guided by wisdom, truth and power.
- **Resource-based Information:** Open to opinion and imagination, assorted facts often dismissed as unimportant, but when classified and patterned become important to information societies as data fundamental to the building blocks of theoretical knowledge.
- **Theoretical Knowledge:** Requires a level of intellectual inquiry to fathom. Undergoes scientific investigation to remove doubt by being sorted, categorised and judged to become part of influential knowledge.
- **Intellectual Property Rights:** Embodies commercial elements invoked by original design, component modification, technological novelty and symbols of branding. Knowledge acquires an asset base tied to capital investment and becomes highly politicised in its governance arrangements from internal and external threats related to access and dissemination.

As illustrated above knowledge flows from ideas and the desire for social action counterbalanced by the human propensity to discover through experimentation and

innovate through improvement or modification.⁴ Knowledge empowers people with the capacity to think and act, making civic progress a reality through learning and application.⁵ Achieving knowledge and reciprocal ways of doing things can be planned or arise from serendipity. For Stehr (1994):

Knowledge is the capacity for action. It moves things. It is a model for reality. ... it is conduct in conjunction with control over things. It involves appropriation rather than mere consumption. It is not a reliable commodity. It tends to be fragile and demanding, and has built-in insecurities and uncertainties.⁶

The capacity and energy required to create knowledge lies at the heart of economic relations. The ways in which knowledge is developed and disseminated for economic and other purposes is highly political. D'Amato and Long (1997) use historical evidence in claiming that from the fourth century BC individuals received remuneration in the form of princely grants of land and money if the knowledge they brought back from other social systems could be utilised.⁷ For centuries political agents have structured institutions around economic arrangements aimed at knowledge appropriation ranging "from the medieval guilds through to the large companies of the early twentieth century; from the Cistercian abbeys to the royal academies of science".⁸ Some forms of knowledge and significant discoveries remained outside the framework of economic value. For instance, as a counterpoint to the commercialisation of knowledge, Plato advised against forms of reward for new discoveries on the basis that they could impede the public good and invite

⁴ For an informative discussion of the history of intellectual property through the creation of ideas that embody knowledge see Hesse, C. (2002). 'The Rise of Intellectual Property, 700 B.C.-A.D. 2000: An Idea in the Balance', *Daedalus*, 131 (2), retrieved 25 March, 2003: www.proquest.umi.com/pqdlink. p. 1.

⁵ David, P. and Foray, D. (2002). 'An Introduction to the Economy of the Knowledge Society', *International Social Science Journal*, 171, p. 12.

⁶ For a broader discussion on knowledge as action see N. Stehr, (2001). *The Fragility of Modern Societies: Knowledge and Risk in the Information Age*, p. 44.

⁷ Hippodamus of Miletus sought a reward scheme for the gathering of useful knowledge as just compensation by the city-state in return for such items. In this way, knowledge became linked to discovery and was seen as a virtuous and wise pursuit providing a utilitarian incentive for further creativity to emerge from social actions. See: D'Amato, A. and Long, D. E. (1997). *International Intellectual Property Law*, p. 27.

⁸ David, P. and Foray, D. *Op cit*, p. 9.

fraudulent claims to invention and innovation by individuals colluding with officials for personal gain.⁹

Clearly, many forms of knowledge have been at the core of political strategies used in the governance of knowledge as a commercial asset. As knowledge gradually merged with trade guided by scientific developments normative dimensions became evident in actions to advance public good goals. Religious ideas, mythological beliefs, nature and astronomy had a significant role in guiding individuals toward discoveries which, when put to good use, would be used to advance knowledge for social purposes.¹⁰ Philosophies of knowledge¹¹ evolved from a process of discovery where naming and patterning took place through language, giving meaning to innovation and offering stability to the polis.¹²

For the Greeks, language became “a form of communication in which the participants subjected themselves to the unforced force of a better argument with the aim of coming to an agreement about the validity of problematic claims” that served to structure ‘ways of knowing’ guided by praxis and cultural practices.¹³ The philosophical and social base of knowledge became a vehicle for reciprocity that served the social relations of people from diverse backgrounds and geographies engaged in commerce and war. These latter occupations often led to new discoveries and technical application providing a further momentum for reciprocal exchange. According to Oldroyd (1986), while philosophers searched for deeper understandings about the meaning of knowledge “science was having considerable

⁹ D’Amato, A. and Long, D. E. *Op cit*, p. 27.

¹⁰ Torfing, J. (1999). *New Theories of Discourse: Laclau, Mouffe and Zizek*, p. 60.

¹¹ Habermas, J. (1972). *Knowledge and Human Interest*, p. 3. From a philosophical perspective the word knowledge comes from the Platonic word *episteme* which literally translates into methods or theories to order reality. Habermas explains that epistemology, as the term for the theory of knowledge, was only coined in the 19th century. Moreover, science did not theorise knowledge, instead, science was only accorded a legitimate theoretical framework through the philosophy of knowledge.

¹² Maxwell, N. (1984). *From Knowledge to Wisdom A Revolution in the Aims and Methods of Science*, pp. 10-11.

¹³ McCarthy, T. (1978). *The Critical Theory of Jurgen Habermas*, p. 292.

success in this enterprise” by developing schemata.¹⁴ Separating logic from mere conjecture and divesting information based on opinion from the more serious pursuit of seeking the ‘truth’ through schemata provided science with a method to advance knowledge.

By the 18th century scientific method was crucial to the development of markets in knowledge and regarded as integral to industrial and imperial practices. Forms of reciprocal exchange grew up around knowledge based on claims to truth developed by scientifically proven methods. The impact of science and economics modelled on the idea of reciprocal exchange through commercial behaviour is of central concern to this thesis: in chapters six and seven its contemporary manifestations are linked to industrial capital and the expanding demands of trade for goods and services. In terms of the correlation between economic well-being and civic improvement it is argued that the public good value of knowledge was by no means all about reciprocal causes as, at the other end of the continuum, the spectre of domination and oppression gave rise to conflict as assertions of power over knowledge developed through Occidental efforts to establish political and economic control over commercial trading routes. The next three sections explore the factors that pushed the development of knowledge toward particular practices that had wide-ranging implications for reciprocity.

(A) Knowledge and the Occident

In the ancient world nature largely constrained practical action and geographical movement. As travel increased and routes were mapped, knowledge grew and economic exchange took place between people based on forms of reciprocal exchange. Whether at home, or abroad, conflict was never far from the surface of

¹⁴ Oldroyd (pp. 128-133) provides an excellent discussion on schemata (numbers) and categories (quantity) that use Kant’s principles of critical understanding. Schema is a phenomenon or concept where an object is in agreement with the category in which it has been placed. Propositions follow that ought, according to scientific methods of testing, stand up to critical scrutiny. Oldroyd, D. (1986). *The Arch of Knowledge*, p. 120.

daily life and for these reasons the Greeks distinguished knowledge that could be utilised for the public good separate from private use.¹⁵ In line with this thinking decision-making was based on wise judgments settled in the polis about what forms of knowledge best served the interests of the city-state. When Aristotle spoke of wisdom and knowledge he had in mind a human quality that rulers ought to possess. Wisdom, he says in the *Metaphysics*, is a science of first principles. “Wisdom is different from knowledge. Knowledge in all its forms is supposed to follow rather than precede wisdom, or at best, be created by wisdom”.¹⁶ Both philosophically and pragmatically, wisdom acted as a guide for the conduct of reciprocal relations between the city-state political leadership and the civic culture.

Wisdom also had a role in reducing the hubris of technology and city-state power.¹⁷ Because epistemology was underpinned by wisdom, any new knowledge from which the civil society would benefit became conditional upon an overall public good measured by utility and wise application. Riggs (2003) describes wisdom as the “highest epistemic good for humans” attained by intellectual responsibility and integrity, intellectual creativity, and open-mindedness and inquisitiveness tempered by self-reflection.¹⁸ Maxwell (1984) makes the Greek correlation between knowledge and wisdom clear:

Whereas for the philosophy of knowledge the fundamental kind of rational learning is acquiring knowledge, for the philosophy of wisdom, the fundamental kind of rational learning is to learn how to live, learn how to see, to experience, to participate in, and create what is of value in existence.¹⁹

Unlike the Greeks, for whom wisdom provided a foundation for knowledge, and technical developments were only slowly introduced, the Romans used technology

¹⁵ Aristotle, (1959). *Politics: The Athenian Constitution*, pp. 34-35.

¹⁶ May, K. M. (1993). *Nietzsche on the Struggle between Knowledge and Wisdom*, p. 104.

¹⁷ Ellul, J. (1964). *The Technological Society*, p. 29. According to Ellul, this connection between knowledge and wisdom meant that openly contested methods of enquiry were practised along with reflection before any new discovery could be advanced.

¹⁸ Riggs, W. D. (2003). ‘Understanding Virtue and the Virtue of Understanding’, in M. DePaul and L. Zagzebski (eds), *Intellectual Virtue: Perspectives from Ethics and Epistemology*, p. 215.

¹⁹ Maxwell, *Op cit*, p. 66.

to conquer and govern by combining strength and military power with technique. According to Ellul (1964), the Greeks had little interest in applying “scientific thought technically, because scientific thought corresponded to a conception of life, to wisdom”. The Romans, by contrast, made the connection between power and technology strong.²⁰ For Rey (in Ellul), at some point in their level of civic development the Greeks failed to bridge the gap between “know-how and know-why” going in search of Eastern techniques in the hope of gaining knowledge and inspiration for new ideas.²¹ Greek efforts to establish and uphold connections between knowledge and wisdom were disrupted by political disintegration providing the momentum for Roman imperialism²² where the skill of power, rather than the skill of wisdom with all its attendant public good qualities, was pursued.²³

This was not before a legacy of treatises based on reciprocal arrangements of knowledge and wisdom through education, law and science had been consolidated. In contrast to Ellul and Rey who applaud Roman technological prowess, Van Doren (1991) claims Roman science lagged behind Greek scientific development because of its imperial focus. In his view, Roman contributions to educational ideas and administrative practices derived from their Greek teachers rather than any original scientific and technological expansion.²⁴ Certainly the significance of power to Roman rule would, in later centuries, provide Machiavelli and others with a basis to form realist assumptions stemming from the idea that power needed knowledge and knowledge was power. This means/ends approach to knowledge eventually acquired sufficient force to define power relationships in the context of international relations.²⁵

²⁰ Ellul, *Op cit*, p. 29.

²¹ Ellul, *Ibid*, p. 28.

²² The term imperialism used here is borrowed from Edward Said’s definition of the term as the “practice, the theory and the attitudes of a dominating metropolitan centre that rules a distant territory”. See Said, E. (1993). *Culture and Imperialism*, p. 1.

²³ Ellul, *Op cit*, p. 29.

²⁴ Van Doren, C. L. (1991). *A History of Knowledge: Past, Present and Future*, pp. 84-85.

(B) Imperial Practices

Imperial practices are rooted in Greco-Roman governing structures where the idea of lordship over others, land and resources made way for extensive controlling and proprietary relations. The innate belief in a superior right to conquer and govern others by imposing one's own knowledge systems and cultural norms was justified by powerful administrative procedures informed by the application of governing rules. The practice of separating cultures into Hellenes and barbarians followed the "epic conflict between the Hellenes and Persians" giving birth to the Hellenic idea of a threatening cultural 'other' that stood outside the Greco-Roman mind-set in need of control.²⁶ These Greco-Roman presuppositions involving 'others' advanced Euro-centrist self-assurances that appropriation would be followed by governing conditions giving the vanquished and conquerors reciprocal advantages.

Implicit in the European conviction that, with time, all the peoples of the world would become – and, indeed, *had* to become – Europeans was the claim that the peoples of the non-European world had an obligation to surrender a portion of their livelihood, and in most cases their political autonomy, in exchange for inestimable goods which their conquerors had brought them.²⁷

Pagden defines the development of Euro-centrism as a cultural conviction explicit for its hierarchical and superior disposition: "To all other races, which are countless in number, and have no relation in blood or language to one another, we give the single name 'barbarian'; then because of this single name they think it a single species".²⁸ The notion of 'other' which pervaded the Occidental mindset intensified from Roman times in resurgent imperialism. According to Hodgson (1993) the historical junctures that gave rise to later imperial practices were:

Predicated upon the deeply rooted sense of moral as well as cultural superiority of Western Europe to the rest of humanity ... this has cemented

²⁵ Youngs, G. (1999). *International Relations in a Global Age: A Conceptual Challenge*, p. 23.

²⁶ Clarke, J. J. (1997). *Oriental Enlightenment: The Encounter between Asian and Western Thought*, p. 4.

²⁷ Pagden, A. (1998). 'The Genesis of Governance and Enlightenment Conceptions of the Cosmopolitan World Order', *International Social Sciences Journal*, 155, p. 8. (Emphasis in original).

²⁸ *Ibid.*

in place deep divisions Thus, we get the history of the West as freedom and rationality, and the history of the East (pick an East, any East) as the story of despotism and cultural stasis.²⁹

A characteristic feature of the extensive territorial rule that followed the Roman invasion of much of Europe and served to cement the division between East and West intensified around the practice of slavery or lordship over others. Slavery became part of the obligations placed on conquered peoples, whose duty it was to appease appropriators by entering into trade contracts, relinquishing their land in return for labour working in mines and fields. This labour produced the commodities the Romans required for the consolidation of Empire.³⁰ Before Rome's fall in AD 476, slavery and forced labour had been based on the ontological assumptions outlined above and sanctioned by hierarchical arrangements and reciprocal internal structures of governing power. Yet one cannot tie slavery to a single epoch, or attest to its social construction as a form of knowledge or property in the same way in all cultures across the terrain of historical experience.³¹ Instead, servitude took many forms in the conduct of human relations mediated by the social and cultural practices of geographically diverse societies.

As Ghosh (1992) notes, the inter-continental trade in people between North Africa and East Asia from ancient to medieval times was different again to the slave trade that followed later between Africa and the Americas. The former bore a closer resemblance to a client-patron arrangement rather than slave and master. In his view:

If this seems curious, it is largely because the medieval idea of slavery tends to confound contemporary conceptions both of servitude and of its mirrored counter-image individual freedom. During the Middle Age institutions of

²⁹ Hodgson, M. G. S. (1993). *Rethinking World History Essays on Europe, Islam, and World History*, p xv. This statement is followed up by a conclusion that the “dead-hand of tradition attached to pre-literate and pre-technological societies is a distortion” which should not be over-looked in analyses on the impact of early imperialism, p. 94. See also Said (1978) for a like-minded discussion.

³⁰ Pagden, *Loc cit*.

³¹ Ellul, *Op cit*, p. 70.

servitude took many forms, and they all differed from 'slavery' as it came to be practised after the European colonial expansion of the sixteenth century.³²

European cultural stereotypes pervaded the Middle East, South and East Asia encompassing much of the Islamic world described by Said (1978) as a mindset for furthering particular interests in relation to power. Almost exclusively, the relationship between the Occident and Orient is about power, forms of domination and varying degrees of hegemonic rule.³³

(C) Trade, the Orient and Imperialism

Clarke (1997) rearranges Said's view of the Orient to a more dynamic, though no less imperial-based relationship, where trade and the search for knowledge and ideas to exchange were conducted through a more open, creative and reciprocal set of arrangements. In his view the ideologies of imperialist rule require further qualification and clarification particularly in relation to 'the other' and its reactive position:

European hegemony over Asia represents a necessary but not a sufficient reason for Orientalism. Power has been wielded over the Orient by superior guns and commercial muscle as well as the classifying schemes which place the East within a western intellectual structure [of other]. Orientalism also represents a counter-movement, a subversive entelechy, albeit not a unified or consciously organized one, which in various ways has often tended to subvert rather than to confirm the discursive structures of imperial power.³⁴

The imperial governing structures that led to the consolidation of unequal trading practices in many parts of the globe, not only those between East and West, are integral to explanations about the politicisation of knowledge as will be explored in this section through analysis of the internationalisation of trade which has ancient and deep political roots.

³² Ghosh, A. (1992). *In An Antique Land*, p. 259.

³³ Said, E. (1978). *Orientalism*, p. 5.

³⁴ Clarke, *Op cit*, p. 9.

By AD 732 Islamic traders already regarded Asia as a centre of ideas and cosmopolitan mercantilism. Christian, Islamic, and Confucian beliefs converged along the trade routes creating a unique social milieu of cultural influences that, while not always peaceful, had some order and structure bound by norms of reciprocal conduct. A cosmopolitan axis in the East allowed “Greeks, Hebrews, Persians, Indo-Aryans, and Chinese” to exchange knowledge, botanical items and consumer items and services.³⁵ Prices were established for goods, profits taken and taxes imposed as goods moved between largely ill-defined territories.³⁶ While trade was important to the Orient, there was a striking absence of ownership over ideas and any notion that knowledge could have a proprietary value was largely held in contempt. For example, because knowledge, like wisdom, was considered a virtue the reflective, secular views of Confucian and later Buddhist thought called for an epistemology infused with co-operative conduct through reciprocity.

As Hesse (2002) observes, for Confucius the measure of a Chinese scholar’s greatness was not to be found in an innovative mind, but in how faithfully and wisely knowledge could be relayed and used to achieve public good goals.³⁷ This did not mean that commerce or technology was unimportant in the Orient. On the contrary, in contrast to the boundaries formed around Greco-Roman technological development, China gave full technical application and bureaucratic support to scientific discovery. Military inventions such as gunpowder and innovations including printing and engineering made the Orient far more technically advanced than its Occidental counterpart at a comparative time in history.

A key influence on China’s technological development was its cultural and linguistic homogeneity that gave greater depth to forms of reciprocity. Under the Tang dynasty Chinese trade expanded and technological expertise and Confucian political

³⁵ Hodgson, *Op cit*, pp. 20-21.

³⁶ Blainey, G. (2000). *A Short History of the World*, pp. 160-164.

³⁷ Hesse, *Op cit*, p. 1.

thought flowed out to the Occident. Innovative methods including the “refining of silver and gold, glassmaking, the tempering of weapons, pottery and ship construction; all these techniques came to Rome from the East It was the East that possessed the concrete, inventive mind that grasped the truth and exploited it”.³⁸ The Byzantium Empire turned to the East, as had the Greco-Romans at an earlier period, in an attempt to renew their knowledge systems. Invasions and dynastic divisions eventually constrained China’s economic progress as political power shifted from one ruling elite to the next. Surrounding centres of Asian power stemmed the flow of Chinese innovation as mercantile trade was abrogated to military technology for defensive purposes.³⁹

By the 15th century Western imperial processes had consolidated control over significant land and sea trading routes determining the flow of resources from East to West. The largely peaceful trade in goods and cross-cultural knowledge was disrupted in 1498 by Portuguese demands that the unarmed Muslim traders be expelled from the Indian Ocean trade route. Unable to compete commercially with the Muslim mercantilists, the Portuguese sought to control the lucrative spice and precious metals trade by violent means. According to Ghosh (1992):

In all the centuries in which it had flourished and grown, no state or king or ruling power had ever before tried to gain control of the Indian trade route by force of arms As far as the Portuguese were concerned, they had declared a proprietorial right over the Indian Ocean: since none of the peoples who lived around it had thought to claim ownership of it before their arrival, they could not expect the right of free passage to it now.⁴⁰

Ghosh’s explanation of this first wave of imperialism highlights a defining moment for property rights offering a critical insight into how reciprocal commercial relations were ruptured by aggressive actions from appropriators aimed at owning and controlling resources. Rather than the purely economic elements of imperialism,

³⁸ Ellul, *Op cit*, p. 33.

³⁹ Blainey, *Op cit*, p. 129.

⁴⁰ Ghosh, *Op cit*, pp. 287-288.

Said (1993) points to the considerable social dislocations that occurred with shifts in power showing how forms of resistance were challenged that were to have far-reaching repercussions on the way trade and knowledge was exchanged.⁴¹ As Kiernan (1982) explains “the purpose of historical reflection is to highlight the persistence and continuity of the past in the present. Of all the reasons for taking an interest in the [imperial wars] is the realisation that they are still going on, openly or disguised”.⁴²

The appropriation of knowledge and goods for commercial purposes has historically been driven by political and economic imperatives, which have been linked to market demands and competitive instincts arising from imperialism, whether imposed by administrative procedures or through subjugation and domination. Over the course of history, jurisdictions governing trade have been reordered, monitored and have had enforcement mechanisms imposed upon them by self-regulating city-states, ecclesiastical authorities, oligarchies and various feudal barons. Political and religious doctrines have informed the governance of knowledge casting a net of powerful rules and regulations to control imperial routes and cultures through trade.

II. Political Aspects of Religion: Knowledge and Cultural Imperatives

Imperial trade practices and religious knowledge have deep historical roots tied to political power. Kaye (1995) puts it in this form; imperialist practices “wore a [monotheistic] religious cloak” codified by centres of European power.⁴³ Clearly throughout Occidental, Oriental, Hindu and Islamic philosophy, various gods, kings and deities informed (and still inform) social structures based around religious presuppositions about creative ideas and forms of knowledge relating to cultural

⁴¹ Said, E. (1993). *Culture and Imperialism*, p. 35.

⁴² Kiernan, V. G. (1982). ‘European Empires from Conquest to Collapse: 1815-1960’, cited in H. J. Kaye (ed), *Imperialism and its Contradictions*, p. 52.

⁴³ Kaye, H. J. (ed), (1995). *Imperialism and its Contradictions*, p. 101.

practices. Confucian philosophy paralleled Greek philosophy with the idea of an individual ruler and god becoming one in a total self-belief knowledge system. The fusion of the soul and body with the spirit of a variety of gods formed powerful cultural and social norms that spilled over into political life and became part of the dialogue on property. For example, Plato draws a homogeneous analogy between the shepherd and magistrate in *The Republic* with the inference that the shepherd shares out property and other public goods, while the law apportions who gets what, and who will benefit from knowledge.⁴⁴

Around AD 30 Christians made the God-Shepherd dichotomy a measure of reciprocal worth. God gives, or promises, *his* flock property in the form of land which became a metaphor for groups to wander in search of new pastures, while the shepherd keeps watch, gathers, and guides the flock toward spiritual light during which time there will be a search for lost souls.⁴⁵ Inherent in this religious cosmology, knowledge became not only imbued with charity and morality but became integral to a complex set of conventions and rules pertaining to rights, duties, obedience and devotedness. Saint Augustine's analogy between the individual living and educating himself over a long period, and the existence of a human society with institutional practices bound by moral rules, is a particularly powerful notion and aspect of religious governance. Identifying the individual as standing outside society (with self-knowledge and a soul to be saved), yet abiding by society's rules, is a very Judeo-Christian construct rooted in early religious practices.⁴⁶ Not only did spiritual knowledge invoke obedience, but guilt was inculcated with sin and denial. For example, going without certain food or material

⁴⁴ According to Popper these constructs of law and shepherd are no less centres of power and were considered necessary for the return to a mythical golden age: a Millennium where the ideal state would be arrested from all change and freed from the evils inherent in the general law of decay where moral and political degeneration occurs. See Popper, K. R. (1966). *The Open Society and its Enemies*, pp. 20-21.

⁴⁵ Foucault, M. (1979). 'Politics and Reason', in L. D. Kritzman (ed), *Michel Foucault: Politics, Philosophy Culture, Interviews and Other Writings 1977-1984*, p. 61.

⁴⁶ Nisbet, R. (1980). *History of the Idea of Progress*, p. 61. For Judaism, Christianity and Islam the gulf between the spirit of god and people was bridged by emphasising the collective dwelling of god in our souls. Spiritual

goods intimated obedience to a god, or gods, and showed a capacity to feel, or be moved by monotheistic or polytheistic expressions. This powerful process of mortification was later extended through Catholicism to include the confessional or purging of the soul before god's shepherd.⁴⁷

Islam, like Christianity, is monotheistic with its faith in Allah as the single creator.⁴⁸ According to Said and Sharify-Funk (2003) the monotheistic religious and cultural roots that Christianity and Islam share is often forgotten, rendered irrelevant by historical perceptions of power inequalities when in reality Islam, as a civilising force and religious tradition, is interconnected with European and Eastern philosophies and knowledge beliefs.⁴⁹ Tariq Ali (2002) agrees, stating:

It is not common knowledge that after the demise of the classical civilization, the Islamic Renaissance of the early Middle Ages preserved and refined the thought of the ancient Greeks, producing work in the arts and practical sciences, which a few centuries later, served as an intellectual bridge to the European Renaissance and ideas that would come to dominate the modern West.⁵⁰

The teachings of the prophet Muhammad through the Qur'an conveyed to Muslims an all-encompassing knowledge of life and its source. Religious identity was fixed by pilgrimage and firmly structured in social forms of reciprocity whereby the scholarly guardians of the Qur'an taught the script to followers through oral recitations from mosques and other holy places.⁵¹ "The Islamic belief that recitation, rather than written transcription, best preserved the word of god across the generations meant that the technology of print was very slow to penetrate Islamic

knowledge and the soul of each individual became internalised in a relentless pastoral pursuit based around faith in god that eschewed the individual as a stand-alone subject.

⁴⁷ Foucault, *Op cit*, pp. 69-70.

⁴⁸ Nyang Sulayman. (2003). 'Continuities and Discontinuities in Islamic Perspectives on Cultural Diversity', in A. A. Said and M. Sharify-Funk (eds), *Cultural Diversity and Islam*, p. 48.

⁴⁹ Said, A. A. and Sharify-Funk, M. (2003). 'A Summary of Papers', in A. A. Said and M. Sharify-Funk (eds), *Cultural Diversity and Islam*, p. 2.

⁵⁰ Ali, T. (2002). *The Clash of Fundamentalisms: Crusades, Jihads and Modernity*, p. 38. A similar discussion is found in Z. Sardar and Z. A. Malik, (2001). *Introducing Islam*, p. 123.

⁵¹ Sardar, Z. and Malik, Z. A. (2001). *Introducing Islam*, pp. 48-58.

societies".⁵² By the 16th century the rapid flow of knowledge from Islam to Europe and the social cohesion of the religious order that had been a feature of earlier times had become fragmented in large measure because Islam was centralised by religion rather than specific territorial control.

The classical Islamic historian Ibn Kaldun (d. 1406) had earlier examined closely the cause and effect of the social fragmentation in terms of the place of god in the changing dynamics of history and society, explaining how Roman law came to dominate and leave its mark on Europe rather than Shariah or Islamic rules and principles of governance.⁵³ For Sardar and Malik (2001), around this time "the achievements of Muslim scholars and scientists were frequently plagiarised, deliberately and systematically downgraded, undermined and brushed aside" as an emphasis on 'things western' consolidated around the European Renaissance.⁵⁴ Cultural identification was a defining feature of the social and religious rise of the West with modernity cementing further the divisions between Roman and Shariah law. In Calhoun's (1994) view, cultural identity played a significant role in institutionalising particular forms of knowledge demonstrated by differences in religious faiths and the distinct nature of social groupings forged by particular ethnicities as noted by Castells (1997): "We know of no people without names, no languages or cultures in which some manner of distinctions between self and other, we and they, are not made".⁵⁵

For Wadad al-Qadi (2003), this meant that the Islamic form of government could not pre-empt or prevent a European identity from emerging because Muslim rulers failed to grasp a role beyond the spiritual that could attend to political or secular matters. The question of whether it could have done so had it wished is conditional

⁵² Hesse, *Op cit*, p. 1. While not seeking here to compare the mass production of the bible and the establishment of the Gutenberg Press with the Qur'an, it is notable that printing assisted colonisers and missionaries in the 18th century to spread Christianity and teach literacy as well.

⁵³ For this discussion see Akbar, A. S. (2003). *Islam Under Siege*, pp. 74-90.

⁵⁴ Sardar, Z. and Malik, Z. A. *Op cit*, p. 123.

upon the power of mercantile expansion and imperial authority firmly established in governing articles through European practices. As a consequence, the rights and duties of Muslims were reciprocated through solemn obedience alone which, in the words of Wadad al-Qadi, resulted in a situation whereby a political canon for a constitutional foundation for the powers of Islam that could delineate the rights and the duties of the citizens of the Islamic commonwealth did not develop.⁵⁶ In the view of Nyang Sulayman (2003), because no political code was devised for Islam the Europeans were “inspired to create the world in their own image, to smash the mirrors of other cultures so that from now on they would not, and could no longer see themselves in their own terms”.⁵⁷ Western knowledge and religious precepts led to the formation of trade laws based on Roman law as the foundation for reciprocal forms of justice. Sharia law and the lore of Islam through religious practice maintained viability in commercial trade, however, the Western hegemonic legal rules and regulations in the secular world of European states came to predominate. The way in which the law and knowledge were complemented by truth, and actions directed at establishing the truth to uphold rules, is examined in the following section.

(A) Truth, Knowledge and Law

Reciprocity was a feature of rule-based laws developed in response to the complex knowledge demands of emerging secular societies. Civil appeals to truth in court judgments were adopted as a way of upholding reciprocal rights and obligations. In common law courts violations by assault, property trespass or theft, accrued penalties based on knowledge to obtain ‘the truth, the whole truth and nothing but the truth’.⁵⁸ As Heidegger points out, in seeking jurisdictions humanity became “so

⁵⁵ Castells, M. (1997). *The Power of Identity*, p. 6.

⁵⁶ Wadad al-Qadi. (2003). ‘The Conceptual Foundation of Cultural Diversity in Pre-Modern Islamic Civilization’, in A. A. Said and M. Sharify-Funk (eds), *Cultural Diversity and Islam*, p. 91.

⁵⁷ Nyang Sulayman, *Op cit*, p. 44.

⁵⁸ Moser, P. K. Mulder, D. H. and Trout, J. D. *Op cit*, p. 185.

essentially embedded, implicated, [and] in-folded in the essence of truth that neither man, nor truth, could be without or outside this legal relation".⁵⁹ The moral foundation of such ideas informed reciprocal relations between the state and civil society reinforcing ideals of truth through governing structures upheld by the armed forces, police and a growing judiciary that had roots in prior Roman legal precepts.⁶⁰

While Bentham adopted the view in his civil code that "Western law was the most illustrious triumph of humanity over it-self",⁶¹ he was quick to observe a 'sinister interest' inherent in law brought about by arbitrary rulings made under the pretence of common law that turned courts into shops for the sale of justice, often in defence of privilege rather than impartial judgement. As Foucault (1988) was to note much later, the law, assisted by judicial mechanisms, distinguishes truth by differentiating between one kind of behaviour and another but, in a paradoxical fashion, by posing as a legitimate form of knowledge the 'truth' also administers illegalities: "some it makes possible or invents as the privilege of the dominating class; others it tolerates as compensation for the dominated class; others again it forbids, isolates and takes as both its object and its means of domination".⁶²

Knowledge, masquerading as truth, has long been used to defend the art of deceit in the service of both god and the city-state. Machiavelli's advice to rulers on the

⁵⁹ Versenyi, L.(1965). *Heidegger: Being and Truth*, p. 157.

⁶⁰ Neilsen. K. (1990). 'State, Authority and Legitimation', in P. Harris (ed), *On Political Obligation*, p. 224. In the course of societal development levels of complexity grew around forms of exchange concurrent with the use of capital to further industrial production. This resulted in the law becoming increasingly abstract to retain its flexibility and interpretive strength which assisted the growing number of economic processes, and varieties of decision-making associated with the contingencies of trade including treaties and other forms of agreement.

⁶¹Jackson, D. (1990). 'The Importance of Bentham's Psychological Epistemology in his Theorization of Representative Democracy' *NZPSA Conference*, Otago University, Dunedin New Zealand, p. 24. See also O. Kircheimer, (1961). *Political Justice: The Use of Legal Procedure for Political Ends*, for a discussion on the role of the judiciary and the politically appointed judges who sit in courts to effect societal goals on behalf of the state. Accomplishing the submission of subjects is a characteristic part of the court's role. Those instrumental in employing submission - the judge and jury - seek to strengthen their own position and weaken that of their foes. Kircheimer elaborates on features of political justice and explains how these have been applied in Western societies with the following observation: "Justice is subject to dispute; while might is easily recognised and is not disputable. The upshot is that we cannot give might to justice, because might has gain-said justice, and declared that it is she herself who is just. And thus, unable to make what is just strong, we have made what is strong just". p. 419.

⁶² Deleuze, G. (1988). *Foucault*, p. 29.

retention and maintenance of power had significant implications for the direction and purpose of governance characterised by the symbiotic link and highly political ties between knowledge, power and the art of governance.⁶³ The connections between the art of governance and methods by which government retains power and knowledge is encapsulated by Saul's (1993), observations of Richelieu's advice to rulers, based on Machiavellian principles, that individuals should strive to attain:

Knowledge before others receive it; knowledge intercepted without the sender or the receiver knowing; knowledge held back, perhaps for ever, perhaps for future use; knowledge used opportunely to defeat others or to convince the king; false knowledge such as invented facts or manufactured quotes or slander or self-serving good news spread in order to aid his cause.⁶⁴

For some, this realist view of knowledge and shrewd governance remains relevant having as much to do with maintaining power today as it did in the 15th century. And while monotheistic religious knowledge and mythology continued (as it still does today for many) to provide communities with solace whether through god, mysticism, superstition or miracles, in the context of the Judeo-Christian tradition, God's help was still needed, albeit in a different way, as commerce expanded across Europe.⁶⁵ For instance, for the first time in history, merchants dedicated their commercial ledgers not only to God but also to profits.⁶⁶ No longer was profit divorced from corporate speculation but seen as a trade advantage to enhance competition between competing states. National companies rose and fell on risky trading and, as Bakan (2004) notes, "in 1696 the commissioners of trade for England

⁶³ Machiavelli, N. (1961). *The Prince*. Machiavelli's notions of nationalism were developed through a revision of Roman law that reinforced the assumption that somewhere in the community, whether in the 'Prince' or the people, a supreme will existed that would finally alter laws to meet the changing governing needs of society. Machiavelli's contribution in *The Prince* was to declare that any state wanting to prosper had to periodically go back and renew the knowledge principles on which it was founded. Through his understanding of Greek philosophy, and complemented by his realist view of human nature, Machiavelli set down distinctly anti-Christian governing principles for a ruling Prince to follow.

⁶⁴ Saul, J. R. (1993). *Voltaire's Bastards: The Dictatorship of Reason in the West*, p. 282. Saul also draws attention Bacon's presuppositions of an ideal society set out in a novella: *The New Atlantis*. Saul comments that Bacon appears more Machiavellian than Machiavelli by privileging a society of technocrats whose power, when combined with knowledge and truth, amounted to a dictatorship that cast a pall over citizens' access to all manner of information through control. This discussion is found in Saul, p. 48.

⁶⁵ Stehr, N. (2001). *The Fragility of Modern Societies: Knowledge and Risk in the Information Age*, p. 17.

⁶⁶ Barzun, J. (2000). *From Dawn to Decadence*, p. 24.

reported that the corporate form had been ‘wholly perverted’ by the sale of company stock” resulting in companies presuming to be corporate bodies being banned by the English parliament from 1720 until 1825 when incorporation gained legal status again.⁶⁷ However, by this time mercantilism had declared its capitalist intentions making way for further secularisation in light of new scientific methods and transformed by technological application that again put a strain on reciprocal exchange increasingly dominated by competitive power relations characterised by the ascendancy and decline of Empires.⁶⁸

III. Scientific Knowledge and Enlightenment Ideals

Mercantile trade assisted the separation of religion from science in the name of the state transforming the meaning of trust and faith, albeit by a slow process of corporate accumulation. Nisbet (1980) uses French social historian Jean Gimpel’s arguments in *The Medieval Machine: Industrial Revolution of the Middle Ages* as proof that “the period running from the tenth to the start of the fourteenth century was one of the great inventive eras of mankind”.⁶⁹ What was unique about the technological transformations that accompanied positivism was social acceptance of ideas about civil progress. Philosophers recognised that individuals, rather than god, had a hand in creating science. This belief shifted the individual consciousness further away from subjective to seemingly objective truths, displacing knowledge based on myth and religion as “ignorance, superstition, and the sign of an inferior civilisation”.⁷⁰ The accompaniment of moral lore with scientific laws enabled individuals to innovate and ‘know’ in a structured way by pursuing significant scientific truths based on rationality and technical expertise. Indeed, thought guided

⁶⁷ Bakan, J. (2004). *The Corporation: The Pathological Pursuit of Profit and Power*, p. 6.

⁶⁸ From the middle ages circa 10th-14th centuries, mercantilists’ groups across Germany, France and the Netherlands saw capital as a necessary method of exchange in trade transactions. Money lending with interest charged was also common amongst medieval abbots and banking institutions which thrived in Italy under Medici rule. While the protestant reformers Luther and Calvin remonstrated against the materialistic age, commercial and trading entities laid claims to property ownership over new technological knowledge with vigour.

⁶⁹ Nisbet, R. *Op cit*, p. 79.

⁷⁰ Seidman, S. (1994). *Contested Knowledge*, p. 206.

by reason, rather than belief in an omnipresent being or nature, guided action and understandings of knowledge.

Through the use of reason the European individual became the arbiter of nature, the controller, instituting rules of scientific control that placed an “excessive emphasis on the individual as a *solitary* knower”.⁷¹

People began to believe that knowledge came from the human mind working upon the senses rather than through divine revelation assisted by the study of ancient texts. From here it became possible to imagine humans as creators, and hence owners of new ideas rather than as mere transmitters of eternal verities.⁷²

New technological innovations and the reciprocal exchange of scientific knowledge amongst European centres of power made life easier for growing numbers of people assisted throughout the 16th and 17th centuries by epistemologies based on reason and rationality. Western scientists believed in the superiority of their discoveries dismissing other cultures’ knowledge forms and technological expertise.⁷³ Nisbet (1980) explains how Bacon was preoccupied with forms of positivism that demonstrated the “sterility and falsity of all inherited knowledge leading to his abandonment of past errors in an effort to adopt ‘true’ scientific inquiry” which effectively consolidated the domination of the western scientific method with a rejection of ancient sea-faring cultures and their scientific discoveries.⁷⁴ Nisbet (1980) and Hodgson (1993) argue that these Western-centric connections of science, when laced with bureaucratic power, easily rejected Islamic institutions and the highly

⁷¹ Moser, P. K. Mulder, D. H. and Trout, J. D. *Op cit*, p. 5. (Emphasis in original).

⁷² Hesse, C. *Op cit*, p. 1.

⁷³ Hodgson, M. G. S. *Op cit*, pp. 52, 90, 94. By the 16th Century the Ottoman, Safai, and Timuri Empires had weakened politically and economically, but not before the European monarchies had adopted many of the organisational features that were representative of centuries-earlier Muslim administrative structures. Hodgson notes how innovations modelled on processes of technical specialisation, which had been well established under Chinese dynasties such as the use of gun powder and printing, also found their way to Europe. Interestingly, the social reconstruction and the build up of administrative practices including methods of technical precision for the storage of files that printing allowed, as well as efficient development in social control and public services, adopted by the French after the revolution, had precedence in Ottoman Empire and Chinese discoveries and practices. Such changes meant that by the 18th century the Occident had amassed significant power and wealth surpassing that of the East.

developed legal and institutional structures, and extensive trade connections that were part of that commonwealth and still expanding well into the 15th century.⁷⁵ For Gudeman (1996) this superior attitude made colonisation an imperative given that “for the first time culture and the innovations made by other cultures could become the product and property of a group”.⁷⁶

Imperial practices were bound by rules of control closely connected to power, nationalism, trade and territorial expansion. Western knowledge informed and confirmed these practices more powerfully than grand narratives of individual freedom and rationality. Schmidt (2000) draws upon Horkheimer and Adorno’s (1972) arguments that the fatal flaws in Western scientific thinking relate to the reliance on instrumental forms of rationality to the exclusion of other forms of reason.⁷⁷ Feenberg (1999) agrees that these authors “provide a useful antidote to positivist faith in inevitable progress” by critiquing technology and arguing that instrumentality itself developed into a form of domination by virtue of its rational application.⁷⁸ While Schmidt (2000) agrees that the Enlightenment tells us a lot about the scientific need to enclose technological innovation in a cloak of legitimacy and control, there are other considerations over and above rational forms of instrumentality related to thought in the eighteenth century.⁷⁹ It is important to note that 17th century cultural values, religious responsibilities and deference to the

⁷⁴ Nisbet, R. (1980). *History of the Idea of Progress*, pp.112-113.

⁷⁵ Hodgson, M. G. S. *Op cit*, p. 98.

⁷⁶ Gudeman, S. (1996). ‘Sketches, Qualms and other Thoughts on Intellectual Property Rights’, in S. B. Brush and D. Stabinsky (eds), *Indigenous People and Intellectual Property Rights*, pp. 102-121. For quote and further discussion see McLeod, K. (2001). *Owning Culture: Authorship, Ownership, and Intellectual Property Law*, p. 159.

⁷⁷ Schmidt, J. (2000). ‘What Enlightenment Project?’ *Political Theory: An International Journal of Political Philosophy*, 28 (6), p. 757.

⁷⁸ Feenberg, A. (1999). *Questioning Technology*, p. 151. Feenberg provides analysis on the positions taken by Horkheimer, Adorno, Marcuse, Heidegger and Ellul in terms of a critical reflection on technology and modernity, pp. 151-180.

⁷⁹ Schmidt, J. *Op cit*, p. 753.

nobility, still played a critical role in the social context, “against a more radical vision of the Enlightenment threatening to overthrow all that had been achieved”.⁸⁰

It was becoming increasingly important to expand historical mindsets to recognise overlapping patterns of reciprocal cultural and social development. These mindsets could no longer be based solely on multiple presuppositions about the superiority of Western science. For these reasons, the Enlightenment should not be understood as a single unitary project reduced to arguments about individual rights and reason-backed, contract-centred liberal thought. Instead, the Enlightenment had deeply conservative roots and rather than a liberating project, Haakonssen (1995) argues that:

The modern idea of the individual, subjective rights and, more generally, liberal individualism are not central to Enlightenment philosophy. In its moral aspect, that philosophy is dominated by ideas of duty derived from a basic natural or moral law. It is a philosophy that is much closer to a traditionalist, hierarchal social ethic than it is to the individualistic rights-based liberalism that is said to characterize modernity.⁸¹

By seeing a duty to control nature through science, European societies came to believe in progress and in their “power to act, to do good, and to transform the human condition immeasurably for the better”.⁸² According to Feenberg (1999):

For some, it is Christian or masculinist values that have given us the impression that we can ‘conquer’ nature, a belief that shows up in ecologically unsound technical designs; for others, it is capitalist values that have turned technology into an instrument of domination of labour and exploitation of nature.⁸³

Certainly imperialism and the search for and extraction of raw materials and the acquisition of land supported the reduced boundary lines between Islam and Empires like Britain, the Netherlands, France and Germany which were reinforcing

⁸⁰ Schmidt, J. *Ibid*, 743.

⁸¹ Schmidt, J. *Ibid*, 735.

⁸² Maxwell, N. *Op cit*, p. 11.

⁸³ Feenberg, A. *Op cit*, p. 152.

north-west European biases about their capacity to control resources.⁸⁴ Islamic mercantilism faltered in comparison to Western imperial trade as the stratified social and geographical mobility provided by shipping on which Muslim traders had earlier been able to capitalise broke down. Networks of local corporations and dispersed Islamic administrative bureaucracies (adapted from Chinese and Ottoman examples) failed to compete with the rapid rise of North West Europe's industrial and technological power developed from the application of robust science communities.

By the early 17th century Islamic societies were being subjected to imperial practices providing rich resources for European economies to realise the commercial trading potential of their knowledge systems.⁸⁵ In short, modernity⁸⁶ consolidated the symbiotic relationship between knowledge and power not only through scientific progress, but defined by the nature of imperial practices and the expansion of commercial trade that opened up avenues for new forms of internationalisation.

IV. Power and Commercial Assumptions

North-Western Europe's relative political stability led to its economic rise from the 17th century onward, and a trusted, if not arrogant, belief "that every age of the world had increased ... the real wealth, the happiness, the knowledge and perhaps the virtue, of the human race".⁸⁷ Yet, as Hodgson argues, it was not so much the acquisition of knowledge that put power into European hands but rising nationalism.⁸⁸ Nationalism made possible by technological developments drove the monopolisation of other cultures through war and imperialist trade practices.

⁸⁴ Hodgson, M. G. S. *Op cit*, p. 94.

⁸⁵ *Ibid*, pp. 51-52.

⁸⁶ A characteristic feature of modernity, according to Baudrillard, was the development of a variety of knowledge disciplines such as branches of medicine that emerged from science and philosophy and developed an economic base and professional status. Simultaneously, differentiations between the knowledge held by traders, artisans and professionals, once bound by cultural and class distinctions, began to alter as greater integration broke down barriers. Seidman, S. *Op cit*, p. 211.

⁸⁷ Porter, R. (2000). *Enlightenment: Britain and the Creation of the Modern World*, pp. 426-427.

⁸⁸ Hodgson, M. G. S. *Op cit*, p. 90.

European nationalism became a potent force for denying the existence of an authentic comparative past in other cultures. By conquering and overlaying traditional societies with Christian beliefs, replete with puritanical righteousness, European imperialists consolidated their sense of superiority. European imperialism, like Roman imperialism before it, dominated and controlled whole populations and in Asia and the Pacific these values became inseparable from western “ideas about race, sex, hygiene, civilisation, identity, property, European superiority and non-European inferiority”.⁸⁹

The overwhelming political power that the West accrued between the mid 1600s and 1800 was buttressed by waves of territorial state expansion accompanied by human migrations to the Americas and beyond.⁹⁰ In many instances migrants were in search of better social and economic conditions than home countries could provide.⁹¹ New nationalisms arose out of the concept of statecraft embodied in the idea of sovereignty. Sovereignty fused western law, the state and property with technological imperatives building up power through knowledge. Although state sovereignty was at times contestable through power challenges, as Pushukanis (1920, cited in Marks, 2003) observes, “each state could ‘freely’ dispose of its own property ... and only gain access to another state’s property by means of a contract on the basis of compensation”.⁹² State sovereignty was pivotal to economic

⁸⁹ Marks adopts the scholarly usage of imperialism as the practice of ruling other parts of the world from a metropolitan centre that corresponds with Said’s definition used in the footnote on page 8. In contrast to imperialism, colonialism refers to the practice of founding settlements outside the metropolitan land and sea borders. By 1965 Kwame Nkrumah had coined the phrase neo-colonialism to explain the forms of control which continued to be exercised by metropolitan powers and other powerful states over erstwhile colonies. Marks, S. (2003). ‘Empire’s Law’, *Indiana Journal of Global legal Studies*, (10), p. 452.

⁹⁰ The migration of populations and whole industries to newly acquired territory occurred on a scale large enough to make the search and extraction of raw materials economically viable for Empires and large states, secured by interdependence sufficient to create both individual and national wealth. Governments of men assisted this process advancing policies that would be most beneficial to generators of wealth — an entrepreneurial class — who were largely the owners of property and capital in society.

⁹¹ Said discusses the ‘rise of the West’ during this period characterised by imperial practices, and explains how the 19th century eclipsed this early power through the expansion of territory. “In 1800, Western powers claimed fifty-five per cent, but actually held thirty-five per cent, of the earth’s surface. However, by 1878, the proportion was sixty-seven per cent in Western hands, which is a rate of increase of 83,000 square miles per year. By 1914, the annual rate by which the Western empires acquired territory had risen to an astonishing 247,000 square miles per year. Eighty-five per cent of the earth was held by Europe as colonies”. Said, (1993). *Op cit.*, p. 1.

⁹² Marks, S. *Op cit.*, p. 456.

sovereignty defined by reciprocal trade mediations between competing states and mercantile groups. Generally devoid of the same heightened level of dispute that characterised military action, trade was seen as a panacea for the horrors of war. Indeed, military threats could be restrained by the formation of government-led institutions as intermediaries regulating trade. Trade relations, upheld by reciprocity based on the Kantian notion of harmony through shared interests, offered a peaceful means and co-operative solution to the more omnipotent problems of revolution and imperialism that erupted and spilled over into intra and inter-state violence.

As discussed in chapter two the concept of trade reciprocity became a key enabling condition for the growth of European economic power and a stabilising force for the impunity of imperial actions. International trade was balanced by the “decisive rise in the level of social power” as new knowledge technologies facilitated transportation and communication.⁹³ The innovating individual in the industrialised countries became part nationalist, part economist. “Private persons became public persons, and private acts were replaced by public ones in an attempt to strengthen the protection of life, liberty and property”.⁹⁴ For example, civic participation and a political culture of social cohesion upheld by legal means and constitutions protected both people and property. Having enclosed large tracts of land through colonial practices and instituted property rights over nature’s resources, societies, once dependent largely on agriculture, made way for greater scientific knowledge and methods to assist with the application of new technologies through the generation of ideas. Deliberate attempts by Western powers to accumulate capital, expand markets through commerce, and institute large-scale bureaucratic structures, gave rise to the idea of a common heritage replete with reciprocal obligations of trade.

⁹³ Hodgson, M. G. S. *Op cit*, p. 45.

⁹⁴ Porter, R. *Op cit*, p. 186.

(A) Common Heritage Notions and Reciprocity

Kant's concept of individuals and knowledge coming together in the interests of progress, and a common human identity "prompted states to consider certain objects as belonging to humanity as a whole, the concept of a common heritage".⁹⁵ The printed word became a universal and collective vehicle for expanding knowledge and spreading ideas that promoted enlightened thinking. In Britain, newspapers like *The Tatler* (1709) and *Guardian* (1821) gave impetus to the influential spread of ideas to an increasingly literate population where, according to Porter (2000, quoting the early editors): "Knowledge instead of being bound up in Books and kept in Libraries and retirement, is thus obtruded upon the Publick; where it is canvassed in every assembly and exposed upon every Table".⁹⁶

Classical theorists like Kant argued in nationalistic tones that for liberal ideas to take hold, "only an independent self-reliant individual not tied to guild rules, tribal loyalties or communal religious conventions, could innovate with the freedom required to cultivate the ever new specialties demanded by technical efficiency".⁹⁷ The idea of reciprocal exchanges of knowledge and goods between sovereign states found its locus in trade expounded by Grotius in *Mare Liberum* (1609), where he

⁹⁵ Common heritage ideals emerged with 17th century Enlightenment theorists' efforts to connect progress to liberal beliefs in individual freedom and equality incumbent upon civil rights and obligations. The ideals have a long and varied history led by the philosophies of Kant, Locke, Bentham and Hume. Over time, appeals to the common heritage doctrine (CHD) have been used as a political mechanism to protect cultural property, and given a normative role as a custodial device to guard the oral and intangible traditions of humanity. Frid, A. (1998). 'The Common Heritage Doctrine and the Treatment of Cultural Property: History, Theory, and Practice', retrieved 27 August, 2002: www.urop.uci.edu/journal98/AlexFrid/Body1.html. pp. 1-10. For a contemporary discussion on the application of the doctrine the 1982 United Nations Convention on the Law of the Sea is instructive. This law set a precedent for common heritage ideals in international public law. Again, in 1997 UNESCO reached agreement on a Universal Declaration on the Human Genome and Human Rights, which symbolically alludes in Article 1 to the human genome as the 'heritage of humanity'. Graham has called for an extension of the principle to be applied to all aspects of the Human Genome Project to protect against exploitative commercial efforts to control the human body. See Graham, G. (1999). 'The Human Genome as Common Heritage of Mankind', Centre for International Development at Harvard University, retrieved 27 August, 2002: www.cid.harvard.edu/cidbiotech/comments. A valuable discussion on the heritage of humanity, genetic patents and the genome project is to be found in Sulston, J. (2002). 'Heritage of Humanity', *Le Monde diplomatique*, retrieved 7 February, 2003: www.MondeDiplo.com/2002/12/15genome. The CHD has both attracted both proponents and opponents as to the value of its use, particularly in a political context and its application with respect to traditional knowledge, which receives comment in chapters seven and eight.

⁹⁶ Porter, R. *Op cit*, p. 194. For a history of *Guardian*, which began in Manchester, see Ayerst, D. (1971). *Guardian Biography of a Newspaper*.

⁹⁷ Hodgson, M. G. S. *Op cit*, pp. 64-65.

declared: “Every nation is free to travel to every other nation and to trade with it”.⁹⁸ While government could create a legal community at the national level to secure civil protection and protect trade, the only possible means of establishing order at the international level was to structure a body of property right laws embodying rules acceptable to a number of states. This meant transforming international relations from its highly competitive putative power base, to one based on reciprocity where equivalence and mutual co-operation would allow a relatively peaceful transfer of commercial goods and services.

In *Perpetual Peace* (1795) Kant seeks to reconcile political authority with normative values, offering practical advice on commercial exchange guided by the notion that law and lore are not mutually exclusive. Indeed, political governance requires persons with the ability to mediate the ground between legal and the normative values. To those in power he said: “Be ye wise as serpents and guileless as doves”.⁹⁹ Kant demonstrated how *Ius gentium*, or the Roman law governing nations, had faltered in its codification of imperial practices that had subjugated the way of life of others to the detriment of international trade and peace. For civil refinement *Ius gentium* needed replacing with *Ius cosmopolitanum* which would “deliver what Kant, in common with all previous natural-law theorists required, namely, a theory of human agency which would be true to all actual and to all possible people and cultures”.¹⁰⁰

This new paradigm of international co-operation set boundaries around trade necessary because “human beings have multiple loyalties to a variety of political authorities, which are sometimes entirely compatible, in conflict or are mutually

⁹⁸ Salter, J. (2001). ‘Hugo Grotius: Property and Consent’, *Political Theory: An International Journal of Political Philosophy*, 29 (4), p. 539.

⁹⁹ Kant, I. (1957). *Perpetual Peace*, p. 35.

¹⁰⁰ Pagden, A. *Op cit*, p. 9.

exclusive".¹⁰¹ A trading community engaging in reciprocal exchange that recognised cultural identity and was socially cohesive was necessary to protect what Kant, in common with other eighteenth century theorists, saw as a common right to trade for commercial purposes without impediment.

All nations stand originally in a community of land, though not of rightful community of possession (*communio*) and so of use of it, or of property in it; instead they stand in a community of possible physical interaction (*commercium*), that is in a thoroughgoing relation of each to all others of offering to engage in commerce with any other; and each has a right to make this attempt.¹⁰²

Common heritage notions, Kant claimed, would prevent commerce from becoming a game of profit and power. To achieve trade in cosmopolitan terms, pre-cursors were necessary to maintain this common heritage belief in the collective value of trade. Trade needed regulation. Regulation, before its legal interpretation as rule based, was imbued with the psycho-political ideals of hospitality and reciprocity, the foundation of which was laid out in chapter two. The notion of giving what you have more of and peacefully exchanging what you required for your needs formed the original base for international trade obligations laying the framework for what was to become comparative advantage. In addition, establishing hospitable conditions involved a universal consent process based on mutual trust where the violation of trading rights in one part of the world was seen as a disservice to the universal notion of reciprocity elsewhere.

Those states that did not join the cosmopolitan civil federation through trade would, by implication, either fall by the way-side or remain in an uncivilised and unsociable form. Pagden (1998) concludes that while Kant attempts to depart from Hobbes' final cause argument of nature and life as nasty, short and brutish, to a notion of equality and reciprocity, he, like the Romans, failed to take into account the

¹⁰¹ Ferguson, Y. H. and Mansbach, R. W. (1999). 'History's Revenge and Future Shock: The Remapping of Global Politics', in M. Hewson and T. J. Sinclair (eds), *Approaches to Global Governance Theory*, p. 197.

¹⁰² Pagden, A. *Op cit*, pp. 11-12.

characteristics of non-competitive social systems. Thus, “for wholly happy Tahitians, not driven by their competitive instincts to enter society”¹⁰³ in Western terms of individual property and wealth gains, the dilemma of remaining outside the cosmopolitan trade federation of states was problematic. Not only did it mean that those who were relatively economically self-sufficient had to contest the political image of non-competitiveness, but that they risked being relegated them to the bottom of an international hierarchy, by virtue of their non-participation.

Drawing non-competitors into international trade commitments was accomplished by imperialism and consolidated in colonial practices¹⁰⁴ (as discussed in section five, page 90 and elaborated on in chapter four). For now, not only was the pursuit of commercial imperatives advanced by legal objectives responsible for forcing many to inhumanely trade with Western Europe, but ironically, universal notions of commerce established on European-based civil associations sanctioned commerce as the arbiter of international security, prosperity and harmony. In this context, the reciprocal foundations of international trade gained salience and governance practices developed inspired by notions of reciprocity and equal participation, albeit based on state self-interest:

Within the nature of governing, everyone looks after his own happiness and everyone has the freedom to enter into commerce with everyone else for that reason. It is not the task of the government to take this problem away from private people, but only to create harmony between them ... according to the rule of equality.¹⁰⁵

The idea that equality and reciprocity shared a symbiotic relationship under classical liberalism, demonstrated in this discussion in terms of the universalising imperatives of trade, has, in turn, been severely tested by the political influence of neo-liberal economic rules and regulations. The issues relating to how these rules

¹⁰³ *Ibid*, p. 11.

¹⁰⁴ While the process to end colonisation began tentatively after 1914 and gathered momentum in the mid-20th century under the guise of self-determination, imperialism has lingered on in what Said sees as cultural patterns of subjugation and specific political, ideological, economic and social practices. Said, E. (1993), *Op cit*, p. 1.

and regulations, particularly with reference to property and intellectual property, impede competition, and indeed trade, are discussed in chapters four and five. The inherent contradictions that emerge with neo-liberalism, coming as it did out of a long process beginning with classical liberalism's aims of establishing equitable governing structures at the international level, are commented on with some irony by Pagden, who note the single-minded material purpose which accompanied Western efforts to bring about the global governance of trade:

Even if we were to strip Kant's language of its teleological baggage global governance would indeed be the final realization of Nature's secret plan to bring forth a perfectly constituted state as the only condition in which the natural capacities of mankind can be developed completely.¹⁰⁶

As has been outlined, the nature of knowledge appropriation and the power dynamics informing trade and its governance has a long history. The merging of imperial power with colonisation (the latter distinctive for land occupation) codified by property ownership gave rise to class conflict and economic dominance seen in advancing industrialisation with its impetus toward a greater specialisation of the labour force.

The exponential growth of cities and factories specialising in manufactured goods spread across Britain, Europe, Africa, Asia and the Americas hastening the division of labour and giving rise to mass societies capable of product consumption. The commercial interests of 18th and early 19th century colonisers were synonymous with heightened military confrontation and the application of technology to control vast resources. Hoebel (1964) observes:

Precisely as a society acquires a more complex culture and moves into civilizations, opposite conditions come into play Common interests shrink in relation to special interests.¹⁰⁷

¹⁰⁵ *Ibid*, p. 14.

¹⁰⁶ *Ibid*.

According to Marx and Engel's, whose collaboration in *The Communist Manifesto* (1848) highlighted the class system, social arrangements were far from reciprocal amounting to plundering under the protection of the law. Indeed, the bourgeoisie had laid aside religious pretensions and in a calculated and egotistical manner for the sake of profit and 'free trade'. It had:

... resolved personal worth into exchange value, and in place of the numberless indefensible chartered freedoms, had set up that single, unconscionable freedom — Free Trade. In one word, for exploitation, veiled by religious and political illusions, it had substituted naked, shameless, direct, brutal exploitation.¹⁰⁸

Tension between classes was epitomised in the material conditions of economic exploitation. These were led by individual self-interest and profit, while capital and labour not only constrained, but defined, one's membership in society. The special interests of industrial capital created not only a division of labour made up of an educated elite, and working and peasant class respectively, but further divided these classes through capital inequalities. Marx argued that organised manual work, where the division of labour was politically and ideologically structured by power arrangements in society, and essential to efficiency and added value, was alienating the labourer from work while diminishing their capabilities. Thus, economic, social and political conditions shaped the nature of self and the nature of work mediated by capital and class. Contrary to Marxist arguments that capital and the means of production were enslaving people, classic *laissez faire* capitalists and neo-classical economists such as Ricardo, generally reckoned that new techniques and technological innovations would be the turning point to free people from the drudgery of industrial work and impoverished social conditions. However, as many found, the rate and exchange of industrial knowledge and European colonisation, the latter driving the industrial processes, did not generally lead to less work, but to

¹⁰⁷ Hoebel quoted in Schmookler, A. B. (1995). *The Parable of the Tribes: The Problem of Power in Social Evolution*, p. 90.

¹⁰⁸ Marx, K. and Engels, F. [1848] (1967). *The Communist Manifesto*, p. 82.

a radical shift in the nature of work, and changes in capital investment tying knowledge and state trading interests more tightly to industrial and military expansion. In Illich's (1978) view, knowledge and trade had a corollary in commercialisation legitimised through market relations and linked directly to industrial capital and the expertise of an elite group of technocrats.¹⁰⁹ In the context of this chapter, while common heritage arguments lent support to the notions of reciprocity through trade seen in the build-up to industrialisation, important also, is the duplicitous nature of nationalisms and class boundaries that intersect trade. Additionally, colonial expansion, integral to the expansionary and integrative proposals of the dominant militarised European states, drove the controlling influences of private monopolisation in a quest for capital investment in knowledge and property ownership.

V. Colonisation and Traditional Knowledge

Indigenous and Islamic knowledge structures were challenged by the legal authority and proprietary interests of European colonial administrations bent on increasing trade to invoke "cultural and political reconciliation between nations".¹¹⁰ Schmookler (1995) documents how political arrangements, economic systems, demographic structures, and customary laws, in the case of America, Africa, Australia, Aotearoa/New Zealand and India, were re-ordered to meet the conquerors' value systems thereby treating the vanquished as possessions, and invariably inferior partners in trade relationships between colonisers and colonised.¹¹¹ The violation of others' knowledge forms fuelled by violence and misappropriation was not lost on Goethe who warned of on-going conflict from European expansion, declaring cultural suppression and the exploitation of nature's resources for scientific and commercial purposes abhorrent.

¹⁰⁹ Illich, I. (1978). *Toward a History of Needs*, p. 13.

¹¹⁰ Clarke, J. J. *Op cit*, p. 119.

¹¹¹ Schmookler, A. B. *Op cit*, p. 48.

As a counterpoint to the excesses of consumption and appropriation, Goethe sought a new form and direction for modern science, one that pointed to a holistic and reciprocal relationship between knowledge and nature, which:

Would not tackle nature by merely dissecting and particularizing, but show her at work and alive, manifesting herself in her wholeness in every single part of her being In the face of this alternative, modern science stands accused of ... thriving on vivisection that is at its very heart; and it has also, historically speaking, been energized by the idea that man rightfully exercises dominion over nature.¹¹²

Despite philosophical appeals for reciprocal rather than controlling creeds, the drive to extract knowledge and invade territory continued, as was demonstrated in the common practice of observing, gathering, and geologically defining people and places using scientific analysis. Equally importantly is the point that the knowledge indigenous people accrued through centuries of experience was becoming as significant as failures to recognise that indigenous cultures had named and codified their knowledge of local plants and other resources with methods that should rightly be called scientific.¹¹³ Property rights did little to ameliorate such practices with European centres of learning becoming repositories of vast collections of indigenous knowledge and artefacts consisting of plants, animals, human remains and cultural icons assembled in museums, libraries and universities for cataloguing and 'safe-keeping'.

Reciprocity showed signs of losing its virtue to patrimony. For ecologist and scientist Vandana Shiva (1997, 2001), colonial practices not only set out to control populations, land and resources but capture natural resources in practices that eschewed reciprocal values. Indeed, with the processes of colonisation inextricably

¹¹² Lal, V. (2002). *Empire of Knowledge Culture and Plurality in the Global Economy*, p. 58.

¹¹³Emett, R. A. (2001). 'Resuscitating the Common Heritage: Indigenous Peoples' Knowledge and Globalisation', Paper Prepared for the 7th Joint Conference, Preservation of Ancient Cultures and the Globalisation Scenario, School of Māori and Pacific Development, University of Waikato, Hamilton, and the International Centre for Cultural Studies (ICCS), Nagpur, India, University of Waikato, 22-24 November, Hamilton, p. 8.

linked to large scale industrialisation and development agendas, transformations became inevitable:

Nature was transformed in the European mind from a self-organizing, living system to a mere raw material for human exploitation, needing management and control ... so that ... natural resources became inputs for industrial commodity production and colonial trade ... while ... the violence against nature, and the disruption of its delicate interconnections, was a necessary part of denying its self-organizing capacity. And this violence against nature, in turn, translated into violence in society.¹¹⁴

For many indigenous and non-indigenous populations, property rights and legal mechanisms of control went hand-in-hand with displacement and exploitation rather than modernisation through development. Modernisation and its impacts on people have a long history tied to political order built up by negative perceptions of the developing world grounded in binary and stereotypical images. As Kurian (2000) notes, “modernization theory has long been criticized for ethno-centrism; the assumption that Third World countries are backward, primitive, and in need of development is paralleled by a belief that the West is progressive and modern”.¹¹⁵ The impact on traditional practices and property from colonisation is examined further in chapters seven and eight where the discussion turns to knowledge systems and intellectual property. In the context of historical arguments, while Goethe repudiated the positivist scientific approach, Rousseau called for respect toward knowledge systems based on traditional practices in relation to the preservation and recognition of innovative ideas belonging to forest and tribes-people. Rousseau condemned the rich for denying non-Western others the resources that were rightfully theirs. He placed the ownership of property at the centre of the slave trade, poverty and famine.

¹¹⁴ Shiva, V. (1997). *Biopiracy: The Plunder of Nature and Knowledge*, p.104.

¹¹⁵ Kurian, P. A. (2000). *Engendering the Environment? Gender in the World Bank's Environmental Policies*, p. 68. This comment builds on Amin's 1974 work and Frank's critique of development theories to move gender debates away from viewing women's development as automatically secured by modernization attempts while treating them as homogeneous compliant pawns in a process of 'betterment'. Kurian cites Mohanty's analysis

In addition, Rousseau was critical that a basic tenet of property providing some right of communal access was negated once property became tied to private ownership and, by implication, acquisition. His recommendation to tribes in relation to the appropriation and fencing off of their property by wealthy owners of industry and capital was for them to say: “if you won’t make this useful tool unless we accord you property in it, we will do without it”.¹¹⁶ Rousseau demanded answers from the rich on behalf of the forest people:

What right have you to demand payment of us for doing what we never asked you to do? Do you know that numbers of your fellow creatures are starving, for want of what you have too much of? You ought to have had the express and universal consent of mankind, before appropriating more of the common subsistence than you needed for your own maintenance.¹¹⁷

Rousseau’s warning that super-imposing one culture over another through division and rule is most iniquitous when carried out through strategies of military and/or economic power, extermination, assimilation or social exploitation is striking for its derision of colonial practices. In contrast to Rousseau, Edmund Burke (1729-97), a strong advocate of commercial trade, and trenchant believer in national customs and practices through law, saw European accumulation, legal authority and control over people, territory and resources in universalising terms:

Now the Great Map of Mankind is unroll’d at once, and there is no state or Gradation of barbarism, and no mode of refinement which we have not at the same instant under our View. The very different civility of Europe and China, [and] the barbarism of Persia and Abyssinia [is controlled]. The errattick manners of Tartary, and of Arabia, [and] the savage state of North America, and of New Zealand [are dominated].¹¹⁸

critiquing Western assumptions that Third World women had no social or cultural human conditions that were worth preserving prior to modernisation.

¹¹⁶ Harris, J. W. (1996). *Property and Justice*, p. 291.

¹¹⁷ *Ibid.*

¹¹⁸ Ballantyne, T. (2002). ‘Empire, Knowledge and Culture: From Proto-Globalization to Modern Globalization’, in A. G. Hopkins (ed), *Globalization in World History*, p. 121. Correspondence between Edmund Burke and William Robertson, 9 June 1777, quoted from G. H. Guttridge (ed), (1961). ‘The Correspondence of Edmund Burke’, Volume 111: July, 1774-1778, p. 351.

This view expresses admiration for the kind of social and cultural control that went hand-in-hand with religion, military authority and law, and where the objective was to gain “control over land, control over knowledge, and control over the past, present and future”.¹¹⁹ Indeed, the bedrock of colonisation lay in the *form* of relationship and the practices it imparted which were unequivocally exploitative.

However, as Brush (1996) observes in a timely and pertinent warning, care needs to be taken when using group binary oppositions structured by imperial power, and religious and spiritual processes because they may have the effect of “blurring the actual fluidity and permeability of knowledge and cultural boundaries ... by setting boundaries that become rigid and impermeable, imperilling the movement of ideas, and threatening cultural evolution and survival”.¹²⁰ As a consequence, while the above oppositions between indigenous and dominant cultures are notable, it is also important to explain that cultural ideas and knowledge, while innate (something we all possess), are not static, and evolve and change over time carried along by legal and other knowledge forms that meet the changing attitudes of groups and societal norms.

Indeed, what colonisation exploited and over-ran with burdens and restrictive practices was often countered by cultural and traditional knowledge systems made resilient by pre-existing frameworks of reciprocal understandings between people, groups and societies. In many instances, these were sustained and survived because they had been nurtured on longstanding pre-existing normative forms of economic exchange that had been built up amongst groups for centuries.

The reciprocal social arrangements of indigenous and other groups in many states foreshadowed new trade contracts. Loring and Ashini (2000) observe that:

¹¹⁹ Smith, C. and Ward, G. K. (2000). (eds), *Indigenous Cultures in an Interconnected World*, p. 3.

¹²⁰ Brush, S. B. (1996). ‘Whose Knowledge, Whose Genes, Whose Rights’, in S. B. Brush and D. Stabinsky (eds), *Valuing Local Knowledge Indigenous People and Intellectual Property Rights*, p. 6.

Indigenous peoples were not insular and isolated ‘pristine cultures’, unsullied by, and therefore needing to be protected from, contact with a wider world For example, Aboriginal groups maintained generations of contact with Eastern Indonesian and Papuan peoples, contacts that influenced their social networks through art and trade.¹²¹

As has been shown in the preceding discussion, knowledge systems and traditions remained intact, were altered and crossed borders through the expansion of trade. Against trends toward interdependence through social and cultural integration there has also been national and international dependencies created by power relations between groups characterised by markets for goods contingent on circumstances of trade. At the same time that societies and groups have engaged in traditional methods of exchange demonstrated by gifting, spiritual ceremony, or barter, political technologies of power have been employed to cut across cultural and social boundaries disrupting the reciprocal value of exchange and the knowledge resources that sustain groups.

Recognition that distinctions exist between traditional communities’ forms of knowledge is explored further in chapters seven and eight. These distinctions relate to a sharing of language, culture and religion, and the exploitative colonial practices characterised by unequal commercial exchange, property and treaties to control land and resources. For now, the nature of these intensely complex affiliations is made clear by Bourdieu’s (1992) observation that state and capitalist power form a “meta-capital capable of exerting power over others, and particularly over the rate of exchange between them”.¹²² Colonisation heightened the process toward capital accumulation around social forms of knowledge leading to cultural conflict as imperial practices had in earlier centuries. In sum, the high price paid through social and economic inequality where advancements in the area of knowledge relied too

¹²¹ Loring, S. and Ashini, D. (2000). ‘Past and Future Pathways: Indigenous Cultural Heritage in the Twenty-first Century’, in C. Smith and G. K. Ward (eds), *Indigenous Cultures in an Interconnected World*, p. 8. The colonisation of indigenous peoples’ knowledge strengthened the economic wealth base of key European states as raw materials from the newly settled territories fuelled profits consolidating the industrial revolutions that had swept much of Europe by 1848.

heavily on regulatory demands at the expense of reciprocity precludes fair exchange. For this reason it is a potential and real source of human impoverishment.

VI. Conclusion

This chapter has offered an historical framework for constructing social understandings of knowledge. It began with the proposition that interpretations of knowledge hinge on philosophical patterns of social and cultural development. These developments gained traction through political actions and the economic imperatives of trade. The political dimensions of trade have been explored by examining aspects of Occidental and Oriental thought and practices connected to the concepts of truth, law, religion and scientific method. These constructs have been set alongside the normative significance of trade reciprocity to groups and societies. Regulatory law and the normative considerations of reciprocity have been detailed in knowledge arguments put forward in this chapter as unique to particular cultural and social influences. Such considerations are tied to key developments related to ownership and the controlling power of identifiable groups operating in city-states using state-legal, scientific and imperial practices to inform their authority and sanction property for proprietary purposes. The recognition of a deep sensitivity between the function of public law and reciprocal trade has been explained in terms of the expansive private nature of economic power. Affiliations forged between science and trade are linked to the meteoric rise of industrial capitalism (and prior to that Enlightenment views about the value of knowledge and liberal attempts to advance societies), and forms of exchange capable of utilising labour, raw materials and capital for the production of technologies arising from knowledge.

The paradoxical character of knowledge observed, on the one hand, in practices and techniques used to dominate and suppress and, on the other, as significant to the

¹²² Cited in Supiot, A. (2002). 'Ontologies of Law', *New Left Review*, 13 (January/ February), p. 121.

public good advancement of human societies, lies at the heart of the politicisation of knowledge. This chapter has established that there are profound implications for knowledge grounded in historical factors based on Kant's plea for an international society which recognised that the exchange of knowledge and goods shared a public good function with communal qualities of cohesion through reciprocity. Goethe's critique of the direction of modern science was directed at dissecting and particularising culture to gain control of resources and knowledge. Rousseau's condemnation of property as lying at the heart of misappropriation also implies that the law acts as a political tool for privileging certain actions. These are premised on legal techniques conditioned by authoritative mechanisms of governance to induce 'truth' and make judgements in the interests of the powerful. The mobilisation of power has been shown in many instances to have displaced long-standing self-organisation and self-determining strategies of knowledge that in the process have eschewed reciprocity.

As the analysis shows, using knowledge as a tool of power has produced deleterious results for large numbers of people, and in particular, indigenous groups. Nevertheless, indigenous peoples have not just been passive observers in processes of knowledge commercialisation. Indigenous groups have demonstrated (in actions against imperial and colonial practices) the importance of cultural and social boundaries related to the maintenance of identity. At the same time that political authorities have been challenged many groups have made sovereignty work in their interest as will be discussed in chapters seven and eight. For these reasons, while cultural, religious and colonial practices may arguably have led to cultural and social suppression for many, in the midst of turmoil a powerful backlash against knowledge as property has taken place. Ameliorating the political control and ownership that surrounds trade and governance is a necessary part of reciprocity. Expanding understandings of knowledge jurisdictions through reciprocity requires that politics and the political economy of trade must be explored in association with

the powerful controlling and authority structures that are part of the material values that underscore the legality of governance for economic purposes. Having set down the political issues that challenge reciprocity and the public good value of knowledge in this chapter, the emphasis in the next chapter is on exploring the cumulative material conditions that structure economic relations and legitimise the authority of property.

CHAPTER FOUR

THEORIES OF PROPERTY

Theories of property are examined in this chapter to identify tensions between reciprocity and property rights involving state and non-state entities. While sovereign power in a democracy guarantees protection for private property under the rule of law,¹ the pressure on states to meet the competitive trade demands of private contractual arrangements raise issues about the public good direction of knowledge. Tension between commercial imperatives and reciprocity reinforce arguments that reciprocity is about communal values offering strong practical guidance on how to build a sense of community, whereas trade invokes instrumental tactics to achieve profitable outcomes. Rifkin (2001) reflects on the uneasy contemporary juxtaposition between trade competition widened by the instrumental strategies and market values of commercial exchange and the social characteristics of reciprocity with its traditional obligations to community:

If there is an Achilles heel to the new age, it probably lies in the misguided belief that commercially directed relationships and electronically mediated networks can substitute for traditional relationships and community. Traditional relationships are born of such things as kinship, ethnicity, geography, and shared spiritual visions. They are glued together by notions of reciprocal obligations and visions of common destinies Commodified relationships, on the other hand, are instrumental in nature. The only glue that holds them together is the agreed-upon transaction price.²

Understanding the historical transitions, in this instance by showing the connections between property and the development of institutional structures, at the start of this chapter helps place reciprocity in context as an essential value in our social, political and economic interactions. This is followed in section two by a thematic discussion of social contract theorists' views on property revealing that reciprocity has a long history as a concept and in practice. Sections three and four examine the links between property rights and markets, demonstrating how

¹ Dyson, K. H. F. (1980). *The State Tradition in Western Europe*, p. 52.

² Rifkin, J. (2000). *The Age of Access: The New Culture of Hypercapitalism, Where all of Life is a Paid-for Experience*, p. 241.

the legal requirements of the state and capital intersect with trade and affect reciprocal understandings of knowledge as property. Section five explores the tensions between rights and property and group concepts of rights while section six draws the central theme of property rights, knowledge and reciprocity together.

I. Concepts of Property and Institutional Structures

The idea of property ownership for nomadic hunter-gatherers was based on the possessions in one's keeping at any point in time before then extending from what individuals had in their immediate possession to the 'things' contained in their simple dwellings.³ The concept of first possession, or occupancy, which had its origins in the hunting stage, was later developed in Roman legal precepts. As Drahos (1996) observes, property became:

A relation between persons in respect of an object rather than a relation between person and an object ... the dominant feature of property [was] the right to exclude others ... *dominium* over things [was] also *imperium* over fellow human beings.⁴

Possessing material property was linked to human existence since life was associated with social considerations and moral values associated with the right to own and exclude. Plato described the social attributes of property as an achievement of morality guided by 'the good life' or fully human life which meant that one ought to have access to consumable items (a home, food and clothing).⁵ Property gained legitimacy in rule-based conventions aimed at keeping possessions safe and away from any corrupt influences that might challenge its enjoyment.⁶

Plato believed rulers were particularly susceptible to corruption by over-extending their acquisition in all forms of property⁷ and in *The Republic* theorised

³ See Smith, A. (1978). *Lectures on Jurisprudence*, in A. Reeve, (1986) *Property*, pp. 58-59.

⁴ Drahos, P. (1996). *A Philosophy of Intellectual Property*, p. 147. Emphasis in original.

⁵ Macpherson, C. B. (ed), (1978). *Property: Mainstream and Critical Positions*, p. 12.

⁶ Carter, A. (1989). *The Philosophical Foundations of Property Rights*, pp. 102-103. In these pages Carter provides a useful discussion on the moral and social considerations of property.

⁷ Rather than individual property the Greeks attributed property to family where everything belonged to kin. Individual ownership rights were not considered useful outside familial ties. Philosophically, property

about the kind of civil-state that could countenance the worst features of private ownership and prevent quarrels from occurring in propertied relations. The guardian class, by virtue of their philosopher-king status, were pre-selected for their knowledge of the public good and the wisdom they possessed which justified their suitability to make rulings about property on behalf of society. Any disagreements over property found settlement through mediation based on public good notions of justice.⁸ Preventing property from being concentrated in private hands led Plato to declare that “the best run state is one in which as many people as possible use the words ‘mine’ and ‘not mine’ in the same sense for the same things”.⁹ Carter (1989) refers to this metaphysical reasoning as Plato’s ‘communism’ and tells how Aristotle repudiated Plato’s critique of private property based on relative levels of productivity and wealth. Aristotle believed having property in private hands was a virtue for society. First, individuals should all be busy with their own human endeavours so that productivity is guaranteed. Second, if government abolished private property it would take away any incentive to generate wealth or engage in creative endeavours.¹⁰

Theories of private property in the Occident evolved and found definition in benefits to individuals and society from acquisition secured by political rulings and supported by institutions. The institutional arrangements justifying individual ownership in private property were not straightforward. Establishing public institutions to govern private property required political conciliation between *a priori* kin-based, clerical, and absolutist rulers attempting, over a long period, to keep property in a few hands. For property to work in the best interests of civil society it was necessary to legitimise certain rights for holding property through regulatory measures. Throughout history, as Macpherson (1978) observes, contradictions pervade private property and its features face

remained problematic for Plato who thought that the only way to modify its worst features, notably corrupting influences, was to make the powerful property-less and the propertied powerless. This meant looking to a government of law, not of men, to moderate property relations. Ryan, A. (1987). *Property*, p. 10.

⁸ Ziff, B. (2000). *Principles of Property Law*, p. 9.

⁹ Plato, (1974). *The Republic*, (Trans., and intro., H. D. P. Lee), p. 219.

¹⁰ Carter, A. B. *Op cit*, p. 103.

both derision and admiration in terms of its civic achievement and value. Thus it has been:

Attacked by Plato as incompatible with the good life for the ruling class; defended by Aristotle as essential for the full use of human faculties and as making for a more efficient use of resources; denigrated by earliest Christianity; defended by St Augustine as a punishment and partial remedy for original sin; attacked by some heretical movements in Reformation Europe; justified by St Thomas Aquinas as in accordance with natural law, and held by later mediaeval and Reformation writers to be part of the doctrine of stewardship.¹¹

(A) Individual and Societal Considerations

Stewardship was helpful in moderating any corrupt influences and the debasement of property by individuals or groups laying false claim to ownership. The Greco-Romans found some commonality between private and collective property in a mixed system whereby “land was common but produce was private, and where produce was common, but land was private”.¹² This reciprocal arrangement linked stewardship to ideas about common property that became part of the Kantian common heritage arguments noted in the previous chapter. Public areas known as commons were designated community gathering spaces in recognition of the human need to gather together socially and exchange views, goods, and take part in civic and economic activities. While it was private property that for some made property *per se* a quarrelsome issue, it was not the maintenance of that private property, but the manner in which individuals exercised their freedom over that property that became the problematic moral issue.¹³

¹¹Macpherson, C. B. *Op cit*, p. 9. Reeve also makes the point that Macpherson contributes to explanations of how property can be made compatible with commerce from Plato’s time until the 17th century. For comments on this see also Reeve, A. (1986). *Property*, p. 46.

¹²Macpherson, C. B. *Ibid*.

¹³ For example, Camus points to the despotism of Caligula who declared himself the most free man in the world because no material good or property was denied him. This ‘model of freedom’ by an individual ruler had dire consequences for the Roman Empire attracting the attention of the Roman Tribunal (which preceded contract law). As well as the need to repress violence and uphold lawfulness and order, an individual’s exercise of freedom over material objects was problematic. See Hughes, J. (1997). ‘Philosophy of Intellectual Property’, in A. D. Moore (ed), *Intellectual Property Moral, Legal and International Dilemmas*, p. 143. For a similar discussion see Macpherson, *Op cit*, p. 77.

Whereas the public domain extended rights in common the private sphere gave license for individuals to merge material goods with economic incentives to create wealth. Indeed, private property provided independence and the power to have sway over others, or deny them sway over you. As Arendt (1961) observes “man could liberate himself from necessity only through power over other men, and he could be free only if he owned a place, a home in the world”.¹⁴ The explicit reciprocal relationships between persons and their property lay in the material base of tangible items that offered economic security necessary to pursue wider public obligations and social responsibilities. For these reasons, it was not the attempts to control ideas or physical property by land enclosure following the feudal period which provided a basis for the historical emergence of property rights, but the varying economic circumstances of tangible objects around commercial trade that strengthened arguments for a rules-based construction of property.¹⁵ For Thomas (1973) and North (1981), the commercial strength of England and the Netherlands in the 16th and 17th centuries acted as a catalyst to advance robust state legislation complemented by strengthening rights over property. However, in the view of Sined (1997), this strengthening of rights that Thomas and North refer to, should not overlook the early constitutional precedents of legal political documents like the *Magna Carta* which allowed property interests to be heard in the first place and, arguably, offered a principled basis for claims to property that challenged dominant power by allowing trade and property to form a more expeditious relationship in the interests of expanding commerce.¹⁶

The evolution of property rights, then, ought not to be seen as “a smooth progression from less to more efficient institutions”;¹⁷ rather, the preoccupation with private property rights and the creation of institutions required to govern property were complex and tied to transaction costs and forms of market

¹⁴ Arendt, H. (1961). *Between Past and Future*, p. 148. This aspect of ownership is also discussed in A. Reeve, *Op cit*, p. 81.

¹⁵ May, C. (2000). *A Global Political Economy of Intellectual Property: The New Enclosures?* p. 16.

¹⁶ Sined, I. (1997). *The Political Institution of Private Property*, p. 123.

¹⁷ *Ibid*, p. 122.

exchange connected to strict trading standards and profit objectives. For example, private rights were distinguished from collective rights and determined and acted upon instrumentally to allay any confusion about who controlled and owned property.¹⁸ This point has implications for achieving reciprocity under imperial trade and later colonial practices as will be discussed in subsequent chapters where political justifications for property and intellectual property are explored. In this next section, the discussion turns to the way some of the foremost social contract theorists, Hobbes, Locke and Rousseau, viewed the relationship between state interests, institutions and property in terms of private individuals and their rights and obligations under sovereign rule to secure possession on their behalf. As an evolutionary watershed, Enlightenment thought brought fresh ideas about the intrinsic value of social contracts and, in particular, the engagement of property with rights and how a defence of propertied mechanisms could be expanded upon and sustained.

II. Social Contract Theorists and Property

The social contract theorists sought to navigate a normative path between individual autonomy and the protection of property. They brought common understandings to the theoretical debates on liberty and property although different starting points and boundaries are drawn around the respective arguments concerning how to establish and maintain rules that secure propertied relations.

(A) Property and Security

Working from realist conclusions about the human condition in ‘the state of nature’,¹⁹ Hobbes argues in *Leviathan* that the moment a social covenant is agreed

¹⁸ Waldron, J. (1994). ‘The Advantages and Difficulties of the Humean Theory of Property’, in E. Frankel Paul, F. D. Miller, Jr, J. Paul (eds), *Property Rights*, p. 85.

¹⁹ In the state of nature individuals are at liberty to do as they please with few restraints on their behaviour. First and foremost this means that each person is sovereign unto themselves, and therefore no-one can make a claim against another for any action or failure to act in any circumstance. In the Hobbesian state of nature, prior to civil covenants, life was nasty, short and brutish. See Becker, L. C. (1977). *Property Rights Philosophic Foundations*, pp. 59, 77, 79.

upon, a sovereign political authority is set up to exercise power over property.²⁰ His main concern was to develop a theory based around how each person could attain some measure of security in a world hostile to human interest where each preyed on everyone else.²¹ Government was required to prevent individuals from harming one another and provide limitations on power. As Oakeshott (1975) explains, for Hobbes, government and a stable civil society would only come about when rulers and people adhered to a higher order of sovereign power and authority, where law was based on reason and revelation.²² Being sovereign, the law provides a mechanism for formalising public or common property as well as securing the state and civil society and providing the instrument necessary to adjudicate and make mandatory the degree to which decisions of inclusion and exclusion could be applied to property.

According to Reeve (1986), Hobbes' definition of property was broad, and valued primarily for ensuring personal stability and civil security:

Of things held in propriety, those that are dearest to man are his own life and limbs; and in the next degree, in most men, those that concern conjugal affection; and after them, riches and the means of living.²³

A government could enforce rights of exclusion over property through law which would allow people a forum to seek justice, a provision deemed necessary to provide security for property and enable individuals to lead productive lives.²⁴ Private property rights derived not only from an individual's isolation, but also from a reciprocal desire, and social need, to seek some form of collective security compatible with private betterment and public order in a civil society.

²⁰ Oakeshott, M. (1975). *Hobbes on Civil Association*, p. 40.

²¹ Carter, A. B. *Op cit*, p. 127.

²² Oakeshott, M. *Op cit*, pp. 115-116.

²³ Reeve, A. *Op cit*, p. 120.

²⁴ Hobbes acknowledges that there is no material equality in 'the state of nature' although a case can be made that the weak can overcome the strong by stealth, through deceit and by misappropriating goods they can hide things from enemies which may provide a measure of reciprocal justice through equality. Morally, this conduct raises questions about when, and in what circumstance, this propensity for underhand dealings may be sanctioned. Although this is a very interesting argument it is one that is only given cursory note in this study. See Becker, L. *Op cit*, p. 78. See also, *Wine and War* by Don and Petie Kladstrup (2001) that offers a good example of how, during World War Two, the French used avoidance tactics to prevent the Germans from pillaging their vintage champagne and wines surreptitiously stemming the flow of huge stocks destined for Hitler's cellars and that of his political cronies.

(B) Individual Will and Enjoyment

Locke's ideas on property and liberty developed from Hobbes' and became not only the most comprehensive and insightful of Enlightenment thinking in terms of how civil unity could be achieved, but also was optimistic about propertied relationships between individuals and civil society.²⁵ In his *First Treatise of Government* (1690), Locke scrutinises the reciprocal foundation of association in the state of nature where property was held in common to one where the ownership of land and goods came to be placed in private hands through the capacity of individual will and despite the absence of universal agreement.²⁶ Individual will became his starting point and threshold for establishing a natural right or dominion over property premised upon the notion that people ought to have the freedom to enjoy those goods that the state of nature provided. Here a reciprocal relationship was desirable because the individual could convert the fruits of the earth and other goods into private property by exerting labour upon them.²⁷ Moral fiats were an inherent part of the reciprocal codes restricting ownership to the fruits of one's labour in order to preserve the earth's finite resources and uphold the prime consideration that there must be 'enough and as good left for others'.²⁸ This proviso not only built up a sense of community but generated ideas about fairness based on equity.

Locke sought to negotiate a normative path for labour between liberty as negative freedom, allowing for the unconstrained expression of individual will and positive liberty, and the principle that no man can have power over the life of another, nor harm another's life, liberty or possessions. Locke was sceptical about whether the state should be involved in offering rewards and benefits since these are already linked to public sector notions of ownership and should not

²⁵ Locke makes it clear that the labour of a person's body and the work of his/her hands are individually owned. Thus, "Whatsoever, then, he removes out of the state that nature hath provided and left it in, he hath mixed with his labour, and joined to it something which is his own, and thereby makes it his property". *Second Treatise of Government*, Chapter V, p. 27.

²⁶Ziff, B. *Op cit*, p. 29.

²⁷ Hughes, J. *Op cit*, p. 114.

²⁸ This places a natural condition on the limited capacity of humans to appropriate in excess of what is required for their liberty. J. W. Child, (1997). 'The Moral Foundations of Intangible Property', in A. D. Moore (ed), *Intellectual Property Moral, Legal and International Dilemmas*, pp. 58-60.

compromise the rights of private individuals to expand property interests in order to create wealth. To reconcile violations of liberty and property Locke turned to broader rational-choice arguments creating a justification for labour and reward based on the idea of desert.²⁹ Harris (1996) finds basic flaws in Locke's labour-desert model arguing that there can be no natural right to physical property grounded in desert. In the absence of a convention or trespass, awarding property is in all respects "particularly problematic because of its distributional implications" because "allocating property to some will limit the wealth available to others. Likewise, property, as a reward for meritorious labour, competes with other justice claims",³⁰ and clashes with reciprocity and interpretations of what can be construed as meritorious labour.

In contrast to Harris, Becker (1977) sides with Locke by suggesting that if no person is wronged in the process of creating wealth through private property then ownership is well deserved and individuals benefit overall; "people ought to be free to acquire and keep whatever and as much as they want".³¹ Munzer (1990) also approves of the Lockean arguments since if the "natural world is both knowable and exploitable then those who possess or use their ingenuity and hard work to transform nature into artifice and commodity ought to reap the rewards of their labour".³² In sum, Locke's political thought has had a profound influence on the nature and scope of propertied arguments both in terms of normative frameworks upon which to base constitutional rights and by offering an implicit foundation for vast tracts of land to be appropriated as a right, even an imperative, under natural law.³³ Locke's normative argument is rooted in the principle of 'no harm' and is reciprocal. Any inherent contradiction between natural law arguments and constitutional rights finds settlement in the idea that appropriation is a transgression when it is harmful to large numbers, or gives rise to conflict by interfering with the public good and the notion of 'fair use'. The

²⁹ Waldron, J. *Op cit*, pp. 90-91. Also Ryan, A. (1994). 'Self-Ownership, Autonomy, and Property Rights', in E. Frankel Paul, F. D. Miller, Jr. and J. Paul (eds), *Property Rights*, pp. 254-255.

³⁰ Ziff, B. *Op cit*, p. 33.

³¹ Becker, L. C. *Op cit*, p. 2.

³² Rifkin, J. *Op cit*, p. 189.

³³ Ziff, B. *Op cit*, p. 31.

parameters of intellectual labour are discussed in the next chapter where Locke's views of 'fair use' are determined by the notion that creative expression is deserving of property rights as long as the public good is not prejudiced.

(C) Political Power and Moral Fiat

Rousseau's contribution to the property debate revolved around reconciling divisions between the rights of the individual to freedom, and obligations to obey the sovereign political authority. Under sovereignty, propertied relations are protected by the overarching political power that government control provides. Tensions emerge, as Drahos (1996) and Sell (2003) point out, because sovereignty is a public law concept while property was developing as private law.³⁴ The implications of these tensions are returned to in chapter nine in arguments about law and the nature of public, private power. For now, Rousseau's ideas of property were guided by the idea of a moral fiat grounded in a voluntary agreement between the individual and sovereign. Rousseau's social contract was premised on preventing subjects from making claims against the power vested in the sovereign because the sovereign ideally worked in the interests of the community.³⁵ On tangible property, scholars disagree over when the transformation from rights vested in the sovereign to the notion of individual rights emerged. Tuck (1979) claims that as early as the 14th century, "the process had begun whereby all of a man's rights, of whatever kind, had come to be seen as his property".³⁶ This followed from earlier ideas that property was established to imitate nature. Property, as an institution only comes about at the last stage of the state of nature. Referred to as "occupation, this sense of ownership is most appropriately applied to those things which had in former times been held in common".³⁷

³⁴ Drahos, P. *Op cit*, p. 147. Similar comments are found in Sell, S. (2003), *Private Power Public Law: The Globalization of Intellectual Property Rights*.

³⁵ This idea put the law in a very powerful position *vis a vis* civil/state conduct as a way to obtain order and maintain security. See Carter, A. *Op cit*, p. 87.

³⁶ Tuck cited in Reeve, A. *Op cit*, p. 48.

³⁷ See Grotius, H. *Mare Liberum* (1608), (R. Van Deman Magoffin, Translation 1916), p. 25 cited in P. Drahos, *Op cit*, p. 38.

Land enclosure in Britain altered the social structure of propertied relations represented in significant political and economic change. The shift from feudal holdings to commercial agriculture advanced mercantilist trade and gave impetus to capitalist demands for greater ownership rights over land that effectively suppressed the public commons.³⁸ In his *Discourse on the Origin and Foundation of Inequality among Men* Rousseau reflected on the pernicious influence of property in combination with political power and economic ownership. He drew on Locke's axiom that "where there is no property there is no injury" in expressing scepticism of property:³⁹

The first man who, having enclosed a piece of ground, bethought himself of saying 'This is mine', and found people simple enough to believe him ... From how many crimes, wars and murders, from how many horrors and misfortunes might not any one have saved mankind, by pulling up the stakes, or filling in the ditch, and crying to his fellows: 'Beware of listening to this impostor; you are undone if you once forget that the fruits of the earth belong to us all, and the earth itself to nobody'.⁴⁰

The entitlement to exclude others is the foremost characteristic of private property rights underpinning Western norms of property ownership. Classical liberalism advanced the expansion of private property rights, assisted by economic arguments that trade led to development and civil stability. As the surplus expenditure from royal estates and noble holdings was freed up by more liberal interpretations of property, the trade in luxury goods increased making way for vassals and burghers to prosper through expanded markets.⁴¹ For

³⁸ For most common property experts, enclosure was a process of destroying a well-regulated commons system. Boyle contends that the social harm caused by enclosure is difficult to quantify although clearly disruption occurred characterised by displaced patterns of life and geographical dislocation. Social upheaval saw migrations occur driven by scarcity and pestilence as individuals and groups sought new places to settle. Material circumstances aside, it is the critical structural change in the notion of property that continues to inform the contemporary debate on ownership and control and, as revealed above, because the roots are deeply historical and political, the enclosure movement and its relationship to property deserves to be noted. See Boyle, J. (2003). 'The Second Enclosure Movement and the Construction of the Public Domain. Duke University School of Law', retrieved 19 November, 2003: www.law.duke.edu.ezproxy.waikato.ac.nz2048/journals/66LCPBoyle, p. 2.

³⁹ Rousseau, J. J. (1992). 'The Second Discourse', in R. D. Masters and C. Kelly (eds), *Jean-Jacques Rousseau Discourse on the Origins of Inequality (Second Discourse) Polemics and Political Economy: The Collected Writings of Rousseau*, p. 48.

⁴⁰ Rousseau, J. J. (1913). 'The Social Contract and Discourses', in E. Rhys (ed), *The Social Contract and Discourses by Jean Jacques Rousseau*, p. 192.

⁴¹ Many commentators, including Keynes, identify the Elizabethan Age in Britain as a time of economic chaos and political instability when the English crown transferred to private hands at low prices the bulk of the agrarian property it had acquired from the monasteries. The landed gentry became the main beneficiary in the transfer of enormous tracts of property and wealth. A full and interesting discussion on this transformation

middle class owners of property in Britain, capitalist expansion reduced property inequalities and generated forms of exchange based on reciprocal understandings that were less class-based and more egalitarian, easing the way for transfers of both land and resources through trade.⁴² Broader ownership claims were made over property as European middle-class interests also consolidated through the expansion of trade.⁴³

The concept of rights off-set by the idea of bestowal on individuals ensured that rights theories gained in moral authority over class privileges and aristocratic immunities. Without guardianship for individual rights, vested in an institution, authority or government, an inherently violent state would prove an impediment to life and civil society itself. This change in emphasis from right to rights resulted in a significant amendment to the concept of property, highlighting the rights themselves, rather than property. Understanding the concept of rights in terms of reciprocal benefits to be gained from exchange based on justifications for capitalist activity and market transactions are the focus of the next section.

III. Markets and Property

This section lays the groundwork for a rights discussion in chapter five and an introduction to the idea of knowledge as property developed in chapter six. It also extends the institutional framework of public property to include the way mercantilist policies and corporate expansion gained traction through corporate power arising from capital accumulation and monopoly trade. Monopoly trade has implications for reciprocity as greater levels of monopoly protection appear to limit reciprocal forms of exchange indicating that as a valued norm the principle is confronted with implementation difficulties.

and the implications for European economies from a new era of commercialisation and trade is provided by Arrighi, G. (1994). *The Long Twentieth Century Money Power and the Origins of our Times*, pp. 27-36, 96-109.

⁴² Reeve, A. *Op cit*, p. 60.

⁴³ Harris, J. W. (1996). *Property and Justice*, p. 291. See also Hughes, J. who qualifies this point quoting from Edmund Burke, that the British Parliament was opened up to a proper mix of talented commoners and propertied Lords to rule. 'Philosophy of Intellectual Property', in A. D. Moore (ed), *Op cit*, p. 109.

(A) Mercantilism and the Rise of Capitalism

Mercantilist policies, based on internal and external competition, were followed by governments seeking national prosperity from trade.⁴⁴ Mercantilism and the earliest forms of corporation, originating from ecclesiastical and monarchical roots, served the industrial and trading interests of states in making way for capital investment secured by propertied relations. Estes (1996) explains how the corporation was conceived as: “an agency of government, endowed with public attributes, exclusive privileges, and political power designed to serve a social function for the state”.⁴⁵ Corporations were privately chartered and established as stand-alone entities, yet functioned in a highly political relationship with government, other business organisations and the public in the interests of achieving greater levels of national wealth and development. The social and economic operation of English corporations was short-lived when bogus companies sold shares to speculators who gambled on corporate stock and capital. By 1696 the commissioners of trade for the United Kingdom “reported that the corporate form had been ‘wholly perverted’ by the sale of company stock” leading in 1720 to the banning of companies that exhibited a corporate form.⁴⁶

⁴⁴ A major challenge (not lost in Greek and Roman perceptions of property) was the economic importance of mercantilism for promoting national wealth. Cutler (2003) adopts Clough and Cole’s 1946 definition of mercantilism as practices and processes to achieve ‘economic state-building’ and unity through secure control over domestic commercial relations. For the purposes of the present study mercantilism and territory are linked to the creation of the civil/state system that combined to form a powerful structure of property accumulation enabling states to make claims on intangible resources outside of their own territorial boundaries. Paradoxically, this legal allowance was encapsulated in the concept of state sovereignty that upheld the protection of territory from uninvited outsiders. Mercantilism ensured that taxes could be collected that both expanded and protected property internally and externally. The collection of taxes from merchant trading converged with the build-up of the armed forces to protect business interests domestically and internationally. Money, as the initial form of private property (that defies spoiling), fed into mercantile transaction processes, and provided the labour-desert arguments offered by Locke and other Enlightenment theorists merging commercial self interest and property rights into a powerfully cohesive system of personal privacy, security and freedom from arbitrary intervention by the state and other competitors. For an informative discussion on mercantilism, see Cutler, A. C. (2003). *Private Power and Global Authority Transnational Merchant Law in the Global Political Economy*, pp. 144-161.

⁴⁵ Estes, R. (1996). *Tyranny of the Bottom Line: Why Corporations Make Good People Do Bad Things*, p. 25.

⁴⁶ Bakan, J. (2004). *The Corporation: The Pathological Pursuit of Profit and Power*, p. 6. In 1720 corporations were banned in England for fifty years. Adam Smith offered dire warnings about the nature of corporate power in *The Wealth of Nations* (1776). His concerns focused on a raft of corrupt practices including negligence toward assets, and a profusion of scandals involving managers (the modern equivalent of chief executive officers), who were diverting other peoples’ money.

The ban on corporations was relatively brief as rising European and American industrial strength, assisted by technological application, produced such enormous wealth that governments were induced by the wealthy owners of property and capital to make political changes to the law to protect and secure private assets from risk. Regulations, particularly trade law, became the tools of commerce to protect and secure private assets, including property, from risk. Bentham's (1748-1832) observation that "property and law are born together and die together"⁴⁷ has relevance here in that prior to laws being made, property did not exist; take away law, and property ceases to be.⁴⁸ As May (2000) notes: "property is not protected by the state's legislative apparatus because it is property rules did not protect property, but they called that property to which they accorded protection".⁴⁹ As material consumption and the liberal belief in progress through the expansion and integration of trade widened, corporations, international exchange processes and trade law found a locus in economic life, along with utilitarian ideas about the value of property. Indeed, the modern era lent support to the formation of corporations and the expansion of trade through state obligations to protect property. To Saul (1992), modernity "repackaged the disparate forces already at play" important for displacing the absolute monarch and producing the technocrat as the servant of the people ideally freed from self-interest and irrational ambitions who would defend propertied interests.⁵⁰ The utilitarian approach based on the greatest good for the greatest number became the basis for defending entitlements to property.

⁴⁷ Drahos, P. *Op cit*, p. 202.

⁴⁸ Bentham, J. (1802, 1904). *Theory of Legislation*, p. 113. in C. B. Macpherson (ed), *Property: Mainstream and Critical Positions*, *Op cit*, pp. 40-58, provides an overall discussion of Bentham's concepts of property, including the idea that there is no such thing as natural property, rather, property is wholly constructed within law. Property is nothing other than an expectation that certain advantages can be accrued from possessing something predicated on the standing relationship we have with that object.

⁴⁹ May highlights this very important point made by Professor Walter Hamilton in the 1930s and quoted in: Cribbet, J. E. (1986). 'Concepts in Transition: The Search for a New Definition of Property', *University of Illinois Law Review*, 1, pp. 1-42. This statement spelt out clearly the idea that "property is not protected by the state's legislative apparatus because it is property but vice versa", in May, C. *Op cit*, p. 16.

⁵⁰ Saul, J. R. (1992). *Voltaire's Bastards*, pp. 38-77.

(B) Utilitarian Appeals to Markets

Market justifications for property rights and the political will supporting legal mechanisms for institutional application had foundation in the utilitarian theories of Hume, Bentham and J. S. Mill.⁵¹ Utilitarian arguments were grounded in the traditions of moral reason and bound by legal rules aimed at promoting happiness for the greatest number of individuals in society.⁵² Advocates of property found utilitarian approval in the idea of rights as a deliberate societal construction shunning any remaining pleas for natural rights arguments reflected in religious traditions.⁵³ In the process, legal justifications for private property rights became firmly associated with rationality, utility and efficiency arguments.⁵⁴ The idea of property found a complementary base in instrumental power that consolidated social conventions while at the same time retaining a key aspect of natural rights doctrine that trespassing upon another's property was prohibited.⁵⁵

By eschewing the religious dimensions assigned to property Hume offered a defence of liberal justifications for private ownership giving prominence to a market approach based on economic exchange. To make property 'just' Hume drew on legal conventions, rules and titles underpinned by cultural understandings that social production would provide reciprocal benefits for those engaged in exchange. The civil content of cultural and social values and their instruction in law were sufficient to call property just. Arguably, Hume was not concerned with the fairness of the original distribution of property, since justifying who did what to whom, and who gained from property, had no theoretical consequence. Rather, as Waldron (1994) points out, Hume's position

⁵¹ Becker, L. C. *Op cit*, p. 102.

⁵² Reich, C. A. (1978). 'The New Property', in C. B. Macpherson (ed), *Op cit*, p. 181.

⁵³ Natural right arguments move the original state of nature idea from an asocial to a social foundation where liberty of action and equality of treatment is derived from self-sufficiency and independence. The inference here is that God's concern for peoples' happiness in the state of nature is heightened by natural rights including the right to use and appropriate resulting from a prior right to life and supplemented with the proviso that property is not a natural right in life but a social construction from which one receives rewards and benefits if one applies one's labour to attain it.

⁵⁴ Ryan, A. *Op cit*, p. 53.

⁵⁵ Conventions are social constructions, solid and reliable rules and/or laws of justice that gain their legitimacy by virtue of their basis in reality concerning how people actually live. Hume eschews the normative controversy that arises with distributive justice and adapts conventions to replace trespass with abstinence which secures stability of possession. Harris, J. W. *Op cit*, p. 317.

was made tenable in the idea that “almost *no* energy is put into the original appropriation ... what matters most, is the stability of possessions and the market transactions that make that possible”.⁵⁶

To maintain stability and ensure the on-going reciprocal exchange of property and goods Hume makes it clear that, in the end, all persons (predators included) are likely to be better off observing conventions that have rules pertaining to justice as the ultimate outcome.⁵⁷ Even prior to a sense of justice, obligations remain to restore peace quickly and establish equity in the interests of the marketplace and the people. Answering the political question of whether one should retain a belief in justice when justice is not seen to be done is the most controversial and difficult aspect of Humean theory. Waldron (1994) defends Hume's principles of action related to economic security on the basis of attaining state/civil stability. Hence, property rights are rational when they are not enforced, but based on reciprocal agreements or conventions that move the majority of individuals towards the more productive benefits promised by an orderly and equal exchange of goods.⁵⁸ The basis for reciprocity is that there is protection guaranteed by a secure and fair economic system, an important consideration in maintaining the public good function of knowledge as property.

Hume offers no theoretical framework for distributional justice or any instruction on how far the economic model may be taken before it can be called unjust, but he does set out how justice and property, taken together, allow for the conventions of non-interference in the possessions of others in order to benefit society. To Bentham, the pain of labour and the pleasure of security would naturally promote the material well-being of society and the happiness for large numbers of individuals. As Reeve (1996) explains, “private property is the reward for, and incentive to labour and it requires exclusion and therefore security, so government action must not frustrate expectations of the enjoyment

⁵⁶ Waldron, J. *Op cit*, p. 94. Emphasis in original.

⁵⁷ Buchanan, J. (1975). *The Limits of Liberty: Between Anarchy and Leviathan*, discusses the inter-relationship between markets, justice and property. Refer to chapters, 1-4.

⁵⁸ Waldron, J. *Op cit*, p. 86. See also Hume, *Treatise*, Bk. 3, Part 2, Section 2, p. 490.

of property".⁵⁹ As long as the marketplace for labour, products and ideas is fair, and knowledge in its multiple forms remains open to all, then justice can generally said to be done, or at least be considered available and accessible to large numbers.

While the rule-based arguments of Hume and Bentham promote the 'greatest happiness' principle there is evidence that utilitarianism can result in significant hardship and can just as easily be used in arguments against private property as well as in its favour. Certainly, "for those who value freedom from government interference ... property is an ideal individualistic tool to escape regulatory capture. Private property rights keep the prying eye of the state away and allow privacy to be enjoyed".⁶⁰ By the same token, the emphasis on the rational demands of markets and pleas for privacy can militate against collective public good outcomes. In short, utilitarian arguments are the least persuasive for justifying individual rights in private property because property rights can be enabling as well as disabling. For Ziff (2000) utilitarianism confers on people the ability to control their lives and to pursue a good life in the Platonic sense through liberty of expression. However, the omnipresence of cartels and monopolisation can prevent individuals and groups from having access to, or taking part in, propertied relations. The normative utilitarian value of the 'greatest happiness for the greatest number' is threatened then by conflict and insecurity that may arise from outside that grouping and impact upon it.⁶¹

The normative elements within Mill's theorising refine Bentham's quantitative analyses of happiness and pain to distinguish between notions of right and good. Mill's radical liberalism contends individuals need not act for the good, instead, being legally and morally free to pursue life as we see fit is a right that ensures the good. In his view, the only instances when we should be concerned with morality are in those aspects of life that require sanctions to deter conduct that

⁵⁹ Reeve, A. *Op cit*, p. 120.

⁶⁰ Ziff, B. *Op cit*, p. 21. Ziff's analysis is consistent with Reich's analysis of negative freedom. A very helpful discussion is undertaken by Ziff to explain utilitarianism in these terms.

⁶¹ *Ibid.*

interferes with the promotion of the greatest happiness. Mill's utilitarian ideas are Lockean seen in the link between material incentives and the mobilisation of labour through the reward of property ownership and material wealth arising out of the productive process.⁶² Social contracts come about not through government seeking to protect individual interests and property *per se*, but government, through its use of utilitarian ethics, sanctions the protection of "property and other individual rights because protecting such rights helps them obtain the political and economic support that is necessary for the maintenance of their governments".⁶³ Sened (1997) considers it erroneous to view Mill as a close ally of Bentham and his utilitarian values in terms of an overarching liberal view of labour whereby production and market security provide for the greatest possible happiness for people in society. Instead, like Berlin (1958), Sened places Mill in a category of his own, defending the individual against the oppression of the state through certain demarcations: "Mill's contribution to the debate on property and other individual rights is to introduce the autonomy of individuals as a constraint on what government *should not do*, in their role as guardians of law and order".⁶⁴ Sened's criticism of "Mill, and generations of scholars after him, stems from a failure to advance a comprehensive liberal theory of government that can meet these constraints".⁶⁵ While Mill did address the social question of wealth dispersal, which he rated as highly as the political question of how equality could be achieved, he focused much of his attention on the foundations of the international political economy and its impact on the lives and liberty of individuals within the context of Empire-building and colonial appropriation. The unequal outcomes of international commerce and the relation between profits, wages and manual labour drove his political philosophy. His defence of representative government was tempered by pessimism as property

⁶² Drahos, P. *Op cit*, p. 201. Fundamentally, individuals have to be driven to labour, making property rights a requirement to reduce the natural aversion of the populace to labour. Likewise, if individuals are subject only to pain through their labour and denied pleasure in the form of reward, there would be no incentive or motivation to work.

⁶³ Sened, I. *Op cit*, p. 29.

⁶⁴ *Ibid*, pp. 28-29. Emphasis in original.

⁶⁵ *Ibid*, p. 29. Sened seeks to amend this political deficit by proposing bargaining strategies useful for mediating proposals as they arise in claims for individual property rights.

fell into fewer hands and the expansion of Empires brought conflict, and commercial objectives eschewed the original good intentions of reciprocal trade.

(C) Liberty and the Marketplace

To Adam Smith an unreserved emphasis on wealth and power is detrimental to the public good and morally reprehensible. Like Mill, Smith's main concerns pointed to a lack of virtue in the propertied class that put the pursuit of profits above all other trade considerations. Smith's arguments on liberty and property derive from the deleterious consequences of market exchange under competitive practices and monopolisation that is injurious to a labour force brutalised by mindless work, a lack of education and poverty. In contrast, the gentry and skilled artisan class, by virtue of education, have become industrious, frugal and literate. The 'invisible hand' of the market left to its own devices might unshackle the poor workers but would leave them largely uneducated because the pursuit of profit is first and foremost a priority.⁶⁶ The economic contribution individuals make to the organisation of property by exerting their labour through the productive process does not exist in a social vacuum. Law must be activated alongside normative considerations to ameliorate the worst effects of property since it cannot be presupposed that individual effort is reflected in adequate or even just remuneration, making utilitarian arguments less than reciprocal.

Phillipson (1983) observes an undercurrent of support for the normative position in Smith's writings in the premise that the: "pursuit of propriety had become an alternative to the pursuit of virtue, and the voluntary society and the coffee-house had emerged as an alternative to the *polis*".⁶⁷ Unlike Plato where labour is ignored and property is seen in a static relationship with the state, Smith praises the undisputed capacity of labour and laces that with the virtue of participation on moral grounds. The virtue of labour and the success of property transactions ideally demand perfect competition in the latter and practical education in the

⁶⁶ In Smith, A. (1976) *The Theory of Moral Sentiments*, in D. D. Raphael and A. L. Macfie (eds), pp. 184-185.

⁶⁷ Munzer, S. R. (1990). *A Theory of Property*, p. 134.

former to allow individuals to be largely sympathetic to one another in pursuit of commercial ends.⁶⁸ Smith's concept of an 'invisible hand', represented as the market, also finds empathy in obligations of respect between the market and the populace offering a powerful economic explanation about how property and commercial transactions can work to create social rewards when combined with innovative opportunities based on private self-interest that recognises fairness and equity.⁶⁹ While Smith's theory of property gives fundamental social expression to the economic concept of perfect competition, a central flaw in his traditional liberal argument is found in a basic misconception about the role of government and the place of rights in society.⁷⁰ For example, while the interaction between trade and reciprocity requires clearly defined property rights, more than tacit recognition needs to be given to the way in which comparative advantage works to hinder or assist balanced rights, obligations and rewards and, thereby, establish equivalence which is the basis of fairness and equity. To extend these arguments on the position of the individual, and expand the concept of property through state and capital relations, an analysis of rights is undertaken in the next section distinguished by the principle of reciprocity.

IV. Extension of Rights in Property: Individuals, State and Capital

The centrality of property becomes evident in rights defined by the nature and scope of individual creativity and the social value of protecting ideas. The objective in this section is to look at the institutional development of rights formed around moral as well as legal considerations.

(A) The Individual

A right (as in copyright) was developed as a legal mechanism to protect the individual's quintessential personality and was introduced into a range of social institutions as part of bundles of rights. The institutions that protect property

⁶⁸ *Ibid.*, p. 157.

⁶⁹ Commercial transactions are based on five key assumptions relating to buying, selling, pricing, profit, production, information and fairness. In turn, the subjective demands of consumers are matched with the supply of services and goods offered by traders and regulated by open markets. Drahos, P. *Op cit*, p. 120.

⁷⁰ *Ibid.* p. 139.

through bundles of rights must be distinguished from the rights themselves; they are interconnected, but are not one and the same.⁷¹ Kant based a right on claims of possession and entitlement whereby the “private use of a thing of which I am in possession excludes others from possession”.⁷² For Hofeld (1919), a right-holder is represented by the claims, liberties, powers and immunities that constitute rules with claimants placed in bilateral positions to others who are constrained not to infringe these rules.⁷³ From this standpoint, a right is an “interest of sufficient importance to the person who has it, to serve as an exclusionary reason guiding the action of others”.⁷⁴ A right is balanced by duty and obligation.⁷⁵ This normative symmetry between rights, duties and obligations elicited a growing interest by legal scholars in pluralistic moral theories, applied ethics and bundles of rights whereby property regimes could be examined in a variety of distinct but overlapping ways.⁷⁶ In particular, bundles of rights were suited to disaggregating and reconstituting the way in which privileges and duties relating to property could be made compatible with interests and obligations of equality.⁷⁷

Theories of right are characterised by reciprocal obligations and duties of protection that allow decisions about legal solutions to problems of property and liberty to be enacted. For example, duties form part of a reciprocal ‘rights dialogue’ and are set out to provide protection, although there is no guarantee that these obligations will be met. Further, while all rights have at base reciprocal duties and responsibilities, an individual’s insight into what denotes a right

⁷¹ Sened, I. *Op cit*, p. 3.

⁷² Kant, I. (1974). (ed), *The Philosophy of Law An Exposition of the Fundamental Principles of Jurisprudence as the Science of Right*, p. 86.

⁷³ Hofeld explains that a right *in rem* is loosely a right in respect of a thing that can be legally held against others. See Steiner, H. (1994). *An Essay on Rights*, p. 59. Steiner also discusses rights justified in moral terms as a thing one is entitled to, but also part of what may be described as right or wrong. The notion of a right can be understood through ontological considerations associated with self-identity or the right to exist.

⁷⁴ Penner, J. E. (1997). *The Idea of Property in Law*, p. 14.

⁷⁵ Scholars such as Cohen (1978) and Carter (1989) support Hofeld's view of property as a relationship not between an owner and a thing, but between the owner and other individuals in reference to things. A right in this context is always assessed against one or more individuals. Carter, A. *Op cit*, pp. 130-131. See also Cohen, M. ‘Law and the Social Order’, reprinted in part as ‘Property and Sovereignty’, in Macpherson, C. B. (ed), *Op cit*, p. 159.

⁷⁶ Becker, L. C. (1992). ‘Too Much Property’, *Philosophy and Public Affairs*, 21 (2), p. 197.

⁷⁷ Levy, M. B. (1992). ‘Illiberal Liberalism: The New Property as Strategy’, in E. Mensch and A. Freeman (eds), *Property Law and Legislation*, p. 576.

comes through a series of stages built up in the human consciousness. As Penner (1997) explains, only when the will to right forms part of an individual's consciousness is a full realisation of the meaning of that right attained. Each cognitive stage produces a corresponding conceptualisation of right in the consciousness until the 'idea of right' becomes a necessary part of the conduct of individuals in human society. Penner argues that cognitive realisation is found fully in the right of freedom and security reciprocated in relations between family, civil society and constitutional states.⁷⁸ Like Hofeld, Honore supports the justifications for security through private property protected by bundles of rights. In Reeve's (1986) view, both Honore (1961) and Harris (1979) take an instrumental view in arguing against individualising normative principles by constructing *sui generis* laws, because normative values arise from social relations, not from a legal basis.⁷⁹ The value of *sui generis* laws is discussed further in chapters seven and eight where the discussion on laws that might accommodate and protect traditional knowledge practices are explored in more detail. At this point, the instrumentality of rights is linked to state objectives to secure propertied relations.

(B) Instrumentality and the State

By his own admission, Honore (1987) is seeking to make laws binding and that means rights must be able to be vindicated as part of the legal process. As members of a society:

We can test the existence of a *legal* right by inquiring about the attitude of legal and political institutions (constitutions, legislatures, courts ministries). The existence of a *moral* right is fairly easily tested when the right asserted depends on reasonably uniform social conventions ... that someone who has entertained another to a meal is entitled to have the hospitality reciprocated It is more difficult to say whether a right – a *political* right – exists when the right asserted depends not on social

⁷⁸ Penner, J. E. *Op cit*, pp. 169-171. Three stages are conditional on the 'will to consciousness' necessary for understanding the concept of right. The first relates to the notion of abstract right, the second to morality and the third to ethics. The abstract right is an 'action' agent of the personality giving one the capacity to choose how to respond in given situations. Morality is inculcated with the subject where self-determination and societal goals are forged as one in the pursuit of 'the good' from which 'right' evolves characterised by what ought to be seen as morally right. The ethical life allows for the personal and societal responsibilities to come together harmoniously resulting in a concept of what is 'right' becoming reality.

⁷⁹ Reeve, A. *Op cit*, p. 15.

practice but on a political theory which is alleged to prevail in the community in question. For example, a person may claim to be justified, under the political doctrines accepted in a society, in asserting a right to a minimum standard of living even though this right is not embedded in law or convention.⁸⁰

Thus, in the process of developing laws we may discover that very few laws are normative in a straightforward way which, by Penner's reckoning, could have the effect of prejudicing the justice that law strives after.⁸¹ There is a correlation with this statement and the normative value of reciprocity and its moral-based principle that can be compared to the rule-based practice of law-making. While both arise from social foundations, for Honore the distinctions between normative conventions and law demonstrate the complexity of dealing with liberal ideas about property and ownership. For example, distinguishing between categories of things owned by all in some legal systems, compared to others where greater and lesser degrees of ownership are evident, depends primarily on the standards each society adopts and the manner in which fair and just outcomes are arbitrated.⁸² As Reeve notes, some societies do not recognise private property in the means of production. Similarly, in terms of other areas of property ownership the "constitution of a state does not often reveal who actually has power in it".⁸³ In relation to the ownership of intangible property this important proviso needs consideration in attempts to make compatible the commercial relationship between property, trade and markets for knowledge.

In *The Philosophy of Right* Hegel offers critical insights based on empirical evidence that people, property and organisations require reciprocal grounds for rights to be effective. He links people and property to a system of rights sanctioned by organisations that are egalitarian to the extent that institutions allow for as many as possible to express their individuality by possessing external objects using their own free will.⁸⁴ The concept of possession over

⁸⁰ Honore, T. (1987). *Making Law Bind Essays Legal and Philosophical*, pp. 243-244. Emphasis in original

⁸¹ Penner, J. E. *Op cit*, pp. 44-45.

⁸² Honore, T. *Op cit*, pp. 244-245.

⁸³ Reeve, A. *Op cit*, pp. 14-15.

⁸⁴ For a rights discussion in general see Hegel, G. W. F. (1952). *Philosophy of Right*.

external objects enables each person to put energy and ideas into forming a reciprocal attachment to those things that enhance personal psychological development. For Becker (1992) these Hegelian ideals are not expected to “yield an account of what species of private ownership there should be, or to settle arguments about who owns what, rather we should expect these ideals to provide an understanding of the importance of private property as a human good”.⁸⁵ In sum, understanding what constitutes the public good is guided by the normative underpinnings of reciprocity based on a community of shared interests that is strongly practical and only requires law to the extent that protection guarantees the social foundation of agreed upon rights. Capital accumulation and trade can be both a positive and negative force for achieving reciprocity and respecting rights as the next section explains.

(C) Capital and Trade

For Hegel, alienation surfaced as a key disrupting element in the reciprocal relationship between individuals, their labour, capital and property. This is demonstrated in the way capital is mixed with an individual’s labour providing an economic conduit for alienation through trade. The commercialisation of all goods and services implicates labour, both in the formation of monopolies and in effectively separating the worker from the productive process. In short, for Hegel, Marx and Engels, the dilemma of those who must labour is characterised by the nature of political power represented by “the organised power of one class for oppressing another”.⁸⁶ The collusion between capitalist investment and state power means that “the worker's labour is robbed of its self-developmental potential for the individual (no act of creation produces a finished article reflecting Hegel's ‘self’ controlled by its creator)”.⁸⁷ Indeed, the vulnerabilities to the worker from proprietary relations based on law suggests that an exchange system based on reciprocity offers a measure of psychological stability not present under class or monopoly conditions. Reciprocity, then, demonstrates its

⁸⁵ Becker, L.C. *Op cit*, p. 202.

⁸⁶ Marx, K. and Engels, F. (1967). *The Communist Manifesto*, p. 105.

⁸⁷ May, C. *Op cit*, p. 27.

emancipatory qualities (as outlined in chapter two), and capacity as a desirable principle to ameliorate the worst features of labour, capital relations by enhancing social, political and economic interactions.

Marx's condemnation of the inevitable injustice associated with the labour-capital dichotomy where wealth is concentrated in few hands and class divisions arise from inequalities led him to eschew Hume's and Smith's commercial justifications for property ownership. Marx shifted his dialectic to how private property and the modern European state maintained and fortified conditions that led to despotic rule over ordinary citizens. Despotism arose, in his view, from governments made up of the "executive committee of the bourgeoisie ... [implying a] union between the political, law-making power, and the economic [class] of management, in which despotism manifests itself".⁸⁸ In his critique of government, Marx draws a thread between the power of property and an inevitable inequality inherent in capitalist relations characterised by alienation where persons become separated from nature, their labour and one another.⁸⁹ In the capitalist system Marx observed that not only the worker was alienated, but the capitalist also suffered alienation albeit in different ways as monopolisation created risk to investment by placing capital into fewer hands to control.⁹⁰

Given corporate responses to property the question becomes under what circumstances states and institutions are obligated to behave with due respect to reciprocity. If reciprocity were to be used as the starting point to resist monopolies forming around knowledge assigned through property law by reductions to IP timeframes, then the distribution of rights and equivalent returns would ameliorate some of the inequalities in the current system. However, the question of economic feasibility remains in terms of this proposition as well as a legal rebuttal of the existing system. For Munzer (1990),

⁸⁸ Minogue, K. R. (1992). 'The Concept of Property and its Contemporary Significance', in E. Mensch and A. Freeman (eds), *Property Law*, p. 23.

⁸⁹ Munzer, S. R. *Op cit*, p. 157.

⁹⁰ Munzer, S. R. (1994). 'Property Rights in Body Parts', in E. Frankel Paul, F. D. Miller, Jr, and J. Paul (eds), *Property Rights*, p. 277.

one way to address social inequalities that deflect reciprocal public good benefits away from equivalence is to redistribute wealth via income flows rather than property rights vested in market policies. Yet the complex hold that corporations have on power, coupled with futile attempts to construct a system of property rights within the present economic system to assist disadvantaged groups, reveals something of the difficulty of discussing relations of property as if a full range of logical possibilities were available.⁹¹ As we shall see in this next section, and in later chapters, the structural dimensions of property impede reciprocity making it difficult to implement under competitive trade in advanced capitalist states without the political will to bring about changes in both law and the 'logic' of economic scarcity that underscores propertied relations.

(D) Summarising Relations between Individuals, State and Capital

Efforts to mediate power in propertied relations by appealing to public good conduct where the implicit values are reciprocal are not new. According to Kymlicka (1990), Nozick's (1974) entitlement theory of justice does two things: first, it intuitively draws out the attractive features of the free exercise of property rights — the protection of life and liberty — and, second, it sets out a philosophical argument which "attempts to derive property-rights from the premise of self-ownership".⁹² Entitlement theory measures justice in terms of how people obtain their property and whether they are entitled to it, not on the needs or merits of the individual.⁹³ The idea of self-ownership is voluntary and minimal state intervention means entitlement overrides need and desert with the legitimising features of property supplied "by principles of justice in transfer and justice in acquisition".⁹⁴ The problem of entitlement becomes acute under a capitalist system characterised by monopoly ownership, the mobility of capital and protectionist trade policies. To that end, as Wolff contends "libertarian property rights remain substantially undefended".⁹⁵

⁹¹ Munzer, S. R. (1990). *Op cit*, p. 88.

⁹² Kymlicka, W. (1990). *Contemporary Political Philosophy: An Introduction*, p. 98.

⁹³ Wolff, J. (1991). *Robert Nozick: Property, Justice and the Minimal State*, p. 9.

⁹⁴ *Ibid*, p.10.

⁹⁵ *Ibid*, p.117.

When monopoly rights usurp individual rights a political dilemma arises for both the state and the individual. Certainly, the freedom of the individual to be protected by the state is compromised by the state's protection for private authority (as will be discussed in chapter nine). But there is a broader structural dimension to the issue of individual freedom and private authority which is usefully analysed from an Hegelian perspective at this point premised on the notion that the political problem arises from the uneasy juxtaposition of each person's symbiotic relationship to material circumstances in capitalist societies and the difficulty of making individual free will a reality under conditions of economic competition rather than reciprocal exchange. The material dimensions of capitalist accumulation within the commercial mode of production and consumption undermines the public good attributes of property rights formed initially around being a moral person or entity, and upholding justice deliberations based on respect for equal rights.⁹⁶

Once this relationship between capital, property and the individual is understood, the idea of personhood linked to individual rights becomes clearer. The normative dimensions of reciprocity, that harming another person's property or right to property is indefensible, are found in Radin's distinctions between fungible and personal property. For example, stocks, bonds, geological sites and crops are fungible; personhood, personal possessions, and animals are not. Personhood indicates that an individual's personality ought to be protected by law from becoming a commercial item. However, as Hughes (1997) argues, fungible and personal property have both become strong channels for expressions of self-interest and individual promotion in societies enamoured with status, and for de-stabilising convention; thus, we are at a loss for explanations when a person is willing to "sell their grandmother"⁹⁷ motivated by self-interest and profit. Accumulation tied to the material value of capital, property and knowledge have thus become a potent form of commercialisation

⁹⁶ Munzer, S. R. (1990). *Op cit*, p. 68.

⁹⁷ Hughes, J. *Op cit*, p. 147.

intensified by scarcity, which challenges property, not only for individuals and institutions, but also in terms of recognising and protecting traditional value systems as people's preferences for fungible property come into conflict with contested ideas of personhood. While markets are a place for satisfying certain commercial aims they are also a place in which social values and preferences about personhood and identity are formed and reinforced and, in this way, reciprocity is sustained and arguably upheld, by institutions that make it indivisible from the public good. The extent to which that goal is able to be realised is examined in the next section on collective notions of property and elaborated on in greater detail in chapters seven and eight.

V. Property Rights and Group Concepts

Clinton (1990) illustrates the tensions involving individual and group rights and the relationship between Western visions of legal rights and the social perspectives of non-Western values succinctly:

Many non-westerners often have a very different view of the nature of their rights and legal relationships. Deriving their legal vision from their tribal associations, tribal traditions, and the natural ecology with which they often seem more familiar than many western political philosophers, native peoples see humans as inherently social beings. As social beings, people never exist isolated from others in some mythic, disorganized [individualistic] state of nature. Rather, human beings are born into a closely linked and integrated network of family, kinship, social and political relations. One's clan, kinship and family identities are part of one's personal rights and one's rights and responsibilities exist only *within* the framework of such familial, social and tribal networks. Non-western thinkers, therefore, naturally think of their rights as part of a group. Certain rights exist within each social group and other rights and responsibilities are attendant to their relations with members of other groups within the web of associations that forms the tribe or the state.⁹⁸

Where cultural boundaries define group actions based on linguistic and geographical identity, amongst other factors, the concept of individual property and long term planning beyond the allowances of nature appears meaningless. Where individuality in terms of personality is recognised within the groups, then

⁹⁸ Clinton, R. N. (1990). 'The Rights of Indigenous Peoples as Collective Group Rights', *Arizona Law Review*, 32 (4), p. 742. Emphasis in original.

Baechler (1992) refers to these groups as polycentric democracies, in that “power rests with autonomous centres of decision-making who are proprietors ... constructed around deliberative unanimity or collective will”. Any divisions occurring within the group would see individuals often forming another band and keeping the peace through a ‘no-man's land’.⁹⁹ Segmented groups create hierarchical structures around smaller clusters or re-form into larger entities using reciprocal agreements and borders to mark out territory.

A major assault on property and customary rights came with the commercial enclosure of resources in specific areas for trading purposes and the occupation of large tracts of land by outsiders. Using Demsetz’s (1967) observations of how customary notions of resource and land management amongst Canadian Indians were transformed following the commercial hunting of beaver by foreign companies, Jacobsen (2001) explains that, in order to preserve their land and resource from over-exploitation, tribes established an exclusive property rights principle to allay future loss and protect the stock from depletion.¹⁰⁰ Assuming, as Child (1997) does, that custom can be linked to rights, the British and continental European enclosure movement of the 13th and 14th centuries made an economic scarcity and commercial imperative of custom and property “constituting a wrongful — as well as zero-sum — taking” of common land.¹⁰¹ Enclosure was a violation of the right to common pool land and resources and furthered the transfer of property to a powerful class of landowners in a manner that provided an on-going basis for group inequality. Indigenous societies generally view property as a collective good and reciprocity as a guiding principle to build strong and viable communities. Themes and issues of property, ideas about common heritage and intellectual property are discussed in chapters seven and eight. Suffice to say here that the social connections between property

⁹⁹ Baechler, J. (1992). ‘Liberty, Property and Equality’, in E. Mensch and A. Freeman (eds), *Property Law*, p. 220.

¹⁰⁰ Jacobsen, V. (2001). ‘Plants, People and Property’. *Paper Presented at the Annual Conference of the New Zealand Association of Economists*, 27-29 June, Christchurch, New Zealand. p 2.

¹⁰¹ Child, J. W. *Op cit*, p. 63. Customary peasant rights were upheld in the Lord’s Courts but gave way to legal title embodying the ‘fee simple’ when the huge demand for wool and the profit that could be realised led to the Lords enclosing the common land and running their own sheep in the process overriding peasant customary rights.

and reciprocity are based on different world views of knowledge positioned by historical understandings of the value of collective traditions and practices.

(A) Different World Views

Manek and Lettington (2001) trace the differences between European culture and the cultural world-views of indigenous communities to 15th century divisions between technological production and nature. Descartes' rationalist thought developed the idea that technology could overcome nature, placing a premium on activities that increased the distance between humankind and nature.¹⁰² Science, and the application of technology on an industrial scale, polarised traditional group knowledge from the formal codes of knowledge rooted in instrumental values and imperial practices. As Brush (1996) observed:

Indigenous knowledge continued to remain in the informal sector, usually unwritten and preserved in oral tradition rather than text. In contrast formal knowledge became situated in formal written texts, legal codes and canonical knowledge. Indigenous knowledge is culture specific, whereas formal knowledge is de-cultured.¹⁰³

Armed with constitutional and canonical knowledge 16th century European trading states extended Kant's 'right of hospitality', referred to in chapter three, and used the social attributes of reciprocity to engage in commerce with indigenous populations as a natural right, justifying their right to defend their trade and take what they wanted with impunity if and when the local inhabitants denied them hospitality or reciprocity.¹⁰⁴ Ostensibly, the aims of reciprocity (and where reciprocity failed, theft) was the belief that "if distant peoples can establish with one another peaceful relations that will eventually become matters of public law, then the human race can gradually be brought closer and closer in a cosmopolitan constitution".¹⁰⁵

¹⁰² Manek, M. and Lettington, R. (2001). 'Indigenous Knowledge Rights: Recognizing Alternative Worldview', in *Cultural Survival Quarterly*, 25 (4), p. 8.

¹⁰³ Brush, S. B. (1996). 'Whose Knowledge, Whose Genes, Whose Rights'?' in S. B. Brush and D. Stabinsky (eds), *Valuing Local Knowledge*, p. 4. Knowledge and natural resources were one and the same, an integral part of the relationship people had with the land, and their human existence from its resources.

¹⁰⁴ Tully, J. (1994). 'Aboriginal Property and Western Theory', in E. Frankel Paul, F. D. Miller, Jr. J. Paul (eds), *Property Rights*, p. 167.

¹⁰⁵ *Ibid.*

As explained in chapter three, governing relationships under colonial power became ones where “European constitutional rules of law and representative government were seen as superior to aboriginal forms of government”.¹⁰⁶ The consolidation of European power in America led Adam Smith to reflect on the far-reaching impact of Western property rights on groups which, while they possessed their own forms of rights and property structures, had these usurped by commercial values:

The polished and civilized commercialist gave the implantation of European civilization in America the impression of historical inevitability ... the conceptions of Modernity were defined in contrast to, and in super-secession of, the aboriginal peoples. [Imperialism] displaced in practice — the property — less and economic values of hunter-gatherers, the vicious savages, and the rude and primitive Indians respectively.¹⁰⁷

Commercial expansion set the parameters for indigenous property to be integrated into the structure of European legal codes. To Tully (1994) there are assumptions that are morally justifiable based on principles which can be successfully defended in terms of private goods best protected through propertied relations among people.¹⁰⁸ However, theories of property are largely incapable of fully addressing demands for restitution and reconciliation for past injustices. Self-determination strategies by contrast involve an emancipatory project and have resulted in political solutions albeit with variable outcomes where some have been granted justice in terms of having land returned and compensation paid for appropriated property. Whether reciprocity, as discussed in chapter two and built on here, is able to be recognised fully in legal regulations as intrinsic to benefit-sharing given the way markets reward entrepreneurs and self-interested entities who use capital solely for profit ahead of guaranteeing benevolence and equality, is a moot point. Whether there is scope for the normative value of reciprocity to be reclaimed, off-setting the social and cultural injustices arising from the commercial demands made on property by private power, is considered in this next section demonstrated by tensions between property and group concepts of rights.

¹⁰⁶ *Ibid*, p. 166.

¹⁰⁷ *Ibid*,

¹⁰⁸ *Ibid*, p. 153.

VI. Reciprocity in Property Rights: Analysing the Social and Economic Justifications for Property

Regarding property rights, Moore (1994) explains that:

Property rights encourage the search for, the discovery of, and the performance of 'socially' efficient activities. Private property rights greatly increase people's incentives to engage in cost-efficient conservation, exploration, extraction, invention, entrepreneurial alertness, and the development of personal and extra-personal resources suitable for all these activities These rights engender a vast increase in human-made items, the value and usefulness of which tend, on the whole, more and more to exceed the value and usefulness of the natural materials employed in their production.¹⁰⁹

Calculated on these admissions, Moore believes the system of property appropriation delivers a conundrum which "will [always], make someone worse off".¹¹⁰ As a consequence, debates on the social value of property will always be contentious and attract political attention demonstrated in concentrations of private property, and economic inequalities characterised by competing states and firms attempting to wrestle ownership and control to extract profit. While the social implications are manifest, Harris (1996) remains convinced that private property does not militate against a sense of common citizenship. In his view, rather than private property causing dissention, problems appear within communities generated not so much by private property as by state inequalities that cause splits based on "offensive discrimination on grounds of ethnicity, gender, physical or mental disability. Societies may also be torn apart by nationalist or tribal hatred with debilitating results. Property [only] comes to the fore directly when labour-desert claims are invoked on a comparative basis".¹¹¹ Harris argues that in designing property institutions there are no overarching reasons why wealth and property would impede a common citizenry.¹¹² This depends on how social systems weigh assets versus income and hold business to strict anti-trust legal rulings, and does not mean that Harris would side with those who favour neo-liberal policies based on free market principles and

¹⁰⁹ Moore, A. D. *Op cit*, pp. 97-98.

¹¹⁰ Moore, A. D. *Ibid*, p. 97. Moore quoting Cohen.

¹¹¹ Harris, J. W. *Op cit*, p. 263.

¹¹² *Ibid*, p. 365.

monopoly ownership. As Reeve (1986) observes, claims for greater levels of market rationality as the only system that provides a way of working towards equality, based on graduated capital taxes as part of the solution to reduce wealth disparities in developed countries, are anathema to utilitarian arguments that contend an unreasonable burden is placed on poorer present generations to advantage richer later generations.¹¹³ Justifying property rights as explained here, is fraught with difficulties, and involves complex arguments about the social merits of property, particularly for those groups who are not in a position to enjoy the advantages that property might offer.

As noted in the foregoing discussion on utilitarian values, the contemporary economic justifications developed in Western states for property rights emerged from a general disillusionment with utilitarian arguments consistent with the difficulty of measuring human happiness in one individual as compared to another. As also noted and argued throughout this chapter, the capacity of individuals and states to secure private property and trade in ideas has a long history in the West tied to capital investment and the robustness of property institutions to protect domestic wealth once it is generated. It is important to reiterate that issues of property, such as ownership claims over knowledge resources, are inseparable from the social settings within which property institutions exist for people wherever they are. By this reckoning, it is Hume's social contract underpinned by justice based on equivalence measured in terms of fairness that provides the most suitable theoretical track for property rights to be realised advancing ideas of justice in propertied relations based on the notion that the least advantaged people in society should be able to achieve as good an outcome as possible. While Rawls' arguments about justice do not develop a specific theory of property, his ideas, and those of Posner, lend support to 'correct principles of justice' as a social necessity in institutions where market rules have emerged and predominate over reciprocal values.¹¹⁴

¹¹³ Reeve, A. *Op cit*, p. 172.

¹¹⁴ Becker, L. C. (1977). *Op cit*, p. 104.

Bringing together the traditions of reciprocity and the objectives of justice requires political will and, in turn, community cohesion evident in collaborative efforts that allow benefits to accrue to the least advantaged.¹¹⁵ Munzer's (1990) views outlined above bear out concerns that economic inequality demonstrated by uneven propertied relations has a detrimental effect on the social interests of individuals and groups. Hence property institutions ought to "be so designed that there is not too great a gap between the wealth-holding of individuals".¹¹⁶ Both Munzer and Waldron (1994) adopt Lockean principles and Humean values of property in their theories. However, for Becker, the theories of property aimed at justice solutions, developed by Munzer and Waldron (1994) from the Enlightenment theorists, have reached the stage of diminishing returns. In his view, it is time to move to the core of the issue which centres on the notion of equality. This requires substantiating the main Enlightenment arguments for context and meaning and then critiquing the pluralist lines of enquiry laid down by Waldron and Munzer in order to advance the debate on rights to another level.

Becker's contention that we lack an overarching justification for property rights, or a "supreme principle that could unify or solve priority problems",¹¹⁷ is balanced by his justifications that reciprocity firmly rooted in virtue theory (as outlined in chapter two), can ameliorate the otherwise corrupting influences of property when ownership is concentrated by proprietary rights. Reciprocity is central to Becker's moral deliberations in that while injustice prevails in many situations, the persistence of unjust practices does not make property morally defensible. For this reason, Becker continues his critique of Waldron's pluralism on the grounds that he uses Lockean ideas of private property rights and links these with Hegelian metaphysics to construct a connection between property rights and human psychological development. The idea that injustice is "a structural feature of the human psyche" is not a validation for injustice and

¹¹⁵ Harris, J. W. (1996). *Op cit*, p. 259.

¹¹⁶ *Ibid*, p. 263.

¹¹⁷ Becker, L. C. (1992). *Op cit*, p. 197.

moral neglect, according to Becker.¹¹⁸ Similarly, Becker sees Munzer's framework of utility and efficiency, labour and desert, assembled through a deontological conception of distributive justice tied to equality as also presenting drawbacks. For Becker, pluralists like Munzer and Waldron should continue to advance moral ideals and show:

that there are multiple, independent and equally fundamental moral principles underlying the justification of private property ... this is an independence/coherence problem and categorically pluralists ... must be able to show that their multiple principles are irreducible, that no one can be adequately defined, or derived wholly in terms of the others, and none [can be entirely dispensed with].¹¹⁹

These arguments about the significance of property to human societies reveal the complex nature and multi-layered political problems that arise and are associated with assigning rights and establishing their legitimacy. A classified inventory of public good standards for organising rights is therefore philosophically and practically viable based on the normative principle of reciprocity and social attributes to stand alongside legal mechanisms to secure both rights and property. Such rights based on moral codes in the view of Steiner (1994) ought to be constituted by rules taken to include arguments in support of justice that lend veracity to normative values exercised between subjects and objects motivated by duties and obligations interpreted and respected in law.¹²⁰

In this thesis reciprocity brings the rights arguments closer to justice. Reciprocity, as a virtue-theoretic argument, makes equity the centre-piece of propertied relations by arguing that fair and balanced treatment in trade relations through concessions to a social ethics of justice complements fair use and equivalent returns. Reclaiming the public good function of reciprocity through codes of conduct based on equivalent returns helps to justify why tangible property should be respected at all. As has been explained, property rights are grounded in wide-ranging philosophical theories tied to economic arrangements that have

¹¹⁸ Becker, L. C. (1986). *Reciprocity*, p. 74.

¹¹⁹ Becker, L. C. (1992). *Op. cit.*, p. 199.

¹²⁰ Steiner, H. (1994). *An Essay on Rights*, pp. 55-56.

deep historical roots. These roots contain the social basis of property and are disrupted if economic imperatives deny that 'as good and enough be left for others'. Indeed, if reciprocity is not fully recognised and implemented the social needs of future generations are compromised.

VII. Conclusion

This chapter has examined propertied relations through various philosophical and scholarly interpretations ranging from the concept of possession, social contract theories of state and individual rights, utilitarian approaches to contract theory aimed at market efficiency and, finally, a rights perspective employing justice and equity. The social foundation of property has changed relatively little, with Locke's 'leaving as good and enough for others' viable in terms of possession and exchange; Hobbes' concern with scarcity and untrammelled power a mediating political consideration; and Smith's moral sentiments that the public good be protected from private interests, as relevant today as in its time. What has changed are appeals to property rights brought about by economic transformations where rights have been made robust through instrumental practices built up to support the commercialisation of all forms of knowledge through the strengthening of propertied relations for material gain.

Institutions, legal and bureaucratic, have expanded to accommodate property ownership as determined by competitive markets. Most symptomatic of the problems that impede reciprocity is the nature and extent of the links made between property and rights in the interests of powerful commercial interests. Each section of this chapter has demonstrated how the security for a society provided legally via property rights needs to be accompanied by a commitment to reciprocity for the maintenance of public good outcomes. The traditional philosophical perspectives on tangible property have been important for determining those rights central to reciprocity, for establishing what aspects of property need safe-guarding and for indicating where there is leverage within

the institutional structures of property that would allow trade equivalence and justice outcomes to emerge.

Tangible property creates difficulties for reciprocity, particularly when corruption abuses the legal requirements of property and commercially directed market relationships intrude upon the reciprocal obligations of property. From Plato to Waldron, property has attracted antagonists and protagonists, yet, almost without exception, there is agreement that an unreserved emphasis on private property and market values is detrimental to the public good when law leaves reciprocity in its wake. For this reason, Hume's deliberations on justice as outlined earlier offer substantive proposals for reciprocity to be realised and reconciled with property supported by communitarian values. Indeed, the different world views on property that predominate might conceivably be resolved if justice and fairness become the prerequisite to any discussions that involve propertied relations. In the meantime, while the autonomy of the private individual is important in securing property rights, as Mill argues, the collective political will of society is enfeebled when over-ridden by strengthened private rights, as Marx and Hegel contend. This chapter identifies property rights as a significant political issue tied to the maintenance and power of property-owning groups in society whose considerable control of knowledge resources has been used to unbalance reciprocity between right-holding groups.

The critical insight offered by Locke and his optimism in relation to the capacity of the individual to labour and so attain property over that labour, secured by rights and protected by civil society, is tempered by Rousseau's notion of rights vested in sovereign authority. For Rousseau, sovereignty is undermined when political power employs property ownership to exploit individual rights for economic ends and to exclude sections of society. Highlighting the rights themselves, rather than property, demonstrates that while private rights may satisfy the majority there are increasing numbers excluded from claiming private rights because of political power assured by commercial imperatives which

effectively forecloses entitlement on instrumental grounds eschewing the principle of reciprocity.

The mechanisms for securing property rights in the interests of wider public good requirements related to justice lie in obligations to traditions premised on the value of reciprocity to both the individual and society. This chapter has identified the historical and evolutionary points at which the individual and the public collectively have asserted rights to be represented and protected by property and, in contrast, where this has been abrogated by private authorities whose market objectives and proprietary claims concentrate property around rules framed by the dominant interests of capital. While individual rights are compromised by private ownership and authority concentrated in this potent form of property, group rights also face challenges as a result of political manipulations resulting from the failure of states and institutions to enact and uphold reciprocal obligations. The evolution and establishment of legal rights over tangible property preceded intellectual property rights by several centuries. While some parallels exist between the two systems in terms of early noble privileges and monopoly rights, neither form of property developed in an institutionally consistent way. The transition from instrumental norms for regulating tangible property to examining the rules embodied around intellectual property in order for knowledge to operate in a trade framework is the subject of the next chapter which explores the commercial imperatives behind ideas.

The commercial imperatives of trade forged by capital and supported by property and trade law, form the basis for a critical exploration of property rights in this chapter, laying the groundwork for an analysis of intangible property in chapter five. Identifying the mutually exclusive yet overlapping facilities between tangible and intangible property foreshadowed in this chapter serves as a base to examine the political impact of property ownership and control. For May (2002), ownership and control fixed to commercial power by propertied relations is characteristic of the global intensification of new technologies and

their material application. This tells us much about the structure of property and the conditions that give rise to benefits and rewards in the 'new' information societies where the problem of exclusion has important implications for the dissemination of knowledge.¹²¹

¹²¹ May, C. (2002). *The Information Society: A Sceptical View*, p. 72.

CHAPTER FIVE

INTELLECTUAL PROPERTY

The theoretical justifications for property demonstrated in the previous chapter illustrate how ideas became inextricably linked to demands for property rights to protect knowledge in the interests of trade and Western industrial power. This chapter outlines and discusses the various forms of IP and their use in promoting individual creativity, encouraging innovation and maximising production through the application of technologies including the potential to reap material returns from competitive trade. The chapter begins by distinguishing tangible from intangible property explaining what legal ownership claims can be made under what circumstances followed by an historical and social account of the key forms of IP and inter-relationships that reconcile economic and legal developments with a commercial function for patents, trademarks and copyright commensurate with trade. The analysis of the different forms in section three emphasises governance issues and the implications of these for reciprocity. Section four examines the nature of developments to expand global rules and regulations and institute the framework under which governance operates. The sub-sections of this part appraise the final document and institution of TRIPS, from its foundations in state legislation to the economic impact of creating knowledge as a scarce resource in order to cast light on the relations of power and authority that the politicisation of ideas have come to represent.

I. Tangible Property, Intangible Property and Scarcity

The distinctions between tangible and intangible property are important to establish. Tangible property can be bought and sold, or held indefinitely, because it is subject to private contract. Intellectual property is also private but distinguishable from tangible property as rewards granted for ideas are based on an exclusive time frame,

at which point the law decrees the original idea returns to the commons.¹ Consequently, “the greatest difference between the bundle of intellectual property rights, and the bundle of rights over other types of property, is that intellectual property always has a self-defined expiration, a built-in sunset”.² Copyright returns to the public domain at a minimum of fifty years — commonly now seventy years — after the death of the author. Patents expire anywhere between twenty and thirty-four years, and trademarks are renewable for between five and ten years.³ Historically, IPRs have been justified legally on public good grounds to prevent the creativity of individuals or groups from being exploited without due recognition. For commercial reasons trade secrets have the longest life and are jealously guarded for their economic value to firms and states, while geographical indicators and appellations of origin are an important part of trade regulation to preserve national characteristics and cultural distinctions. The component value of industrial parts, plans and the knowledge associated with the uniqueness of products and services related to business are also privately protected from the public domain by strict legal non-disclosure contracts. This chapter focuses attention on patents, copyright and trademarks recognising these as the key intellectual rights.

While time-frames are the most discernable difference between physical property and intellectual property, IPRs operate to provide a protection time before any new technology is introduced. These timeframes offer security from imitation and plagiarism thereby upholding the originality of the idea or invention while giving investors time to recoup the costs of research and development. Less is known about how intellectual property operates in terms of interpretations of legal protection and enforcement mechanisms than physical property which is commonly more widely

¹ Firth, A. (1997). *Perspectives on Intellectual Property: The Prehistory and Development of Intellectual Property System*, p. v.

² Hughes, J. (1997). ‘Philosophy of Intellectual Property’, in A. D. Moore (eds), *Intellectual Property: Moral Legal and International Dilemmas*, p. 113.

³ For a full discussion on all the categories of intellectual property under the jurisdiction of TRIPS, timeframes and legal articles, see Arup, C. (2000). *The New World Trade Organization Agreements Globalizing Law Through Services and Intellectual Property*, pp. 187-201.

understood by people. D'Amato and Long (1997) note: "we lack the guidance of coping with ordinary conversation about intellectual property ... those who have no professional reason to be involved with it rarely think about it, as individually we tend to covet fancy homes, not valuable patents".⁴ Moreover, while people expect justice to prevail in all forms of tangible property transactions, justice claims around intellectual property rights are generally less politicised given the broad public good ideals that have historically surrounded knowledge. In addition, unlike tangible property, intellectual property is accorded a finite duration since, in theory, IP returns to the public domain after a set period giving it the appearance of a more egalitarian form of property compared to tangible property. While it may be seen as egalitarian the complex and arcane nature of IP, and the fact that it is a branch of law, frequently renders it less transparent in terms of what legal claims can be made on ownership compared to the more clearly defined ownership parameters of tangible property. Because intangible property is not in the public gaze to the same extent as tangible property, and for the reasons given above, achieving reciprocal concessions and balanced outcomes for IP through trade is less straightforward than for tangible property.

The legal incentives offered for intellectual property are granted in the belief that, "my use of your intellectual property does not interfere with your use of it, whereas this is not the case for most tangible goods".⁵ Physical property — land, minerals, water, a car or personal computer — gives owners an exclusive use and a right to exclude others from use at the same time. Intellectual property, on the other hand, may be in use by large numbers simultaneously, so once ownership is registered through a patent or copyright the knowledge takes on an economic mantle whereby a price can be extracted for use. A feature of competitive markets for knowledge is the construction of scarcity and the establishment of rival goods in order to obtain

⁴ D'Amato, A. and Long, D. E. (1997). *International Intellectual Property Law*, p. 28.

⁵ Moore, A. D. (1997). 'Towards a Lockean Theory of Intellectual Property', in A. D. Moore (ed), *Intellectual Property Moral, Legal and International Dilemmas*, p. 81.

the best market price.⁶ Rival goods are those that can only be used by one person at a particular point in time, while non-rival goods may be used by many people simultaneously. The distinction between rival and non-rival goods is important when discussing IP because, “acquiring an IPR for a particular creation of knowledge is an example of making a non-rival good excludable”.⁷ Creating rights in knowledge induces an artificial scarcity that effectively sends a message to the market that rewards and incentives for innovation are due and must be recognised.⁸ Conceivably, “you may prevent someone from publicly using an idea, although preventing the private use of ideas may not be possible”.⁹ For example, when one of the first scientists working on sequencing the human genome, Craig Venter, decided to create a new company called Celera in May 1998 he retained and expanded upon the original knowledge built up in previous DNA work at the Perkin-Elmer Corporation. Today’s scientists not only have their research results but, as Cornish (2004) observes, intellectual property rights are bundled into portfolios protected and tied to contracts between the scientists and the firm or institution that supported the original idea or discovery.¹⁰ Consequently, while gene sequences may be part of sets of publicly owned ideas, much public sector knowledge is now being protected and managed in collaboration with private sector interests by universities and other institutions for the purpose of generating licensing income through IPRs.¹¹ The proprietary nature of science in the industrial age, where tangible property created markets for all manner of goods at a price based on supply and demand, has taken a new turn in the knowledge age where ideas have acquired value realised in profitable returns for intangible assets vital to global marketplace investment portfolios.

⁶ Sternberg, E. (1999). ‘Transformations: The Forces of Capitalist Change’, in W. E. Halal, and K. B. Taylor (eds), *21st Century Economics: Perspectives of Socio-economics for a Changing World*, p. 3.

⁷ Dixon, P. and Greenhalgh, C. (2002). ‘The Economics of Intellectual Property: A Review to Identify Themes for Future Research’, Oxford IPR Research Centre, p. 4.

⁸ Arrow, K. J. (1994). ‘Markets, Information and Uncertainty; Essays in Honor of Kenneth J. Arrow’, in G. Chichilnisky (ed), *Information and the Organization of Industry*, p. 21.

⁹ Hughes, J. *Op cit*, p. 129.

¹⁰ Cornish, W. (2004). *Intellectual Property, Omnipresent, Distracting, Irrelevant?* p. 1.

¹¹ Drahos, P. with (sic) Braithwaite, J. (2002). *Information Feudalism Who Owns the Knowledge Economy?* p. 164.

Intellectual property rights replace the largely non-rival character of knowledge with monopolies granted for a set period of time to prevent further competition thereby giving the holder a chance of extracting material rewards.¹² Paradoxically, the potential for intangible knowledge to be exploited as an economic resource occurs precisely because a monopoly status generates a scarcity at the same time that it objectifies the resource. In economic terms, “objectified knowledge is the highly differentiated stock of intellectually appropriated goods that are provided by nature and society which may also be seen to constitute the cultural resource of a society”.¹³ Economists wrestle with whether the monopoly costs of “IPR are less than the benefit to society emanating from the spur IPRs give to innovation”,¹⁴ but few explore the political implications of asymmetrical trade bargaining or question the indivisibility of power and authority to progress knowledge through redolent free trade phraseologies that disqualify obligations toward reciprocity by virtue of protection around competition. Some, like Maskus and Reichman (2004), contend that monopolies and IP re-regulation go hand-in-hand, making it difficult for both innovating individuals and developing country firms to “break into global — or even domestic — markets and compete effectively”.¹⁵ Efforts to objectify ideas through property which are then exploited for commercial ends is linked to the material value of investment heightened by capital gains from the potential supply of innovative ideas vital to the social construction of knowledge. How intellectual property emerged historically and attained commercial status becomes evident from an examination of the key forms of IP encapsulated by protection rights.

¹² May, C. (2003a). ‘Why IPRs are a Global Political Issue’, *European Intellectual Property Review*, 25 (1), p. 1.

¹³ Stehr, N. and Ericson, R. V. (1992). ‘The Culture and Power of Knowledge in Modern Society’, in N. Stehr, and R. V. Ericson (eds), *The Culture and Power of Knowledge*, p. 10.

¹⁴ Dixon, P. and Greenhalgh, C. *Op cit*, p. 5.

¹⁵ Maskus, K. E. and Reichman, J. H. (2004). ‘The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods’, *Journal of International Economic Law*, 7 (2), p. 282.

II. Forms of Intellectual Property

This section examines the origin and development of patents, trademarks and copyright as the key intellectual forms that give legal expression to creative ideas.

(A) Patents¹⁶

The first semi-formal attempt at instituting rights over IP originated in a city-state without a single political authority and no written constitution.¹⁷ When the Republic of Venice awarded Johann Speyer the exclusive right to print books in 1469 for a period of five years, this grant became the benchmark for a number of later patents covering such items as glass, the Bible and ammunition.¹⁸ The Parte Veneziana in 1474¹⁹ legally codified the first industrial rights to inventors,²⁰ laying down “the principles on which today’s patents are built, including the usefulness of new inventions for the state and the exclusive rights of the first inventor for a limited period with penalties extracted for infringement of rights”.²¹ Patents were subjective, awarded to individuals and based on monopoly status with an underlying expectation of wealth creation. For those able to argue their case in law a particularly powerful form of monopoly was established. Across Europe throughout the 16th

¹⁶ The word patent or ‘open letter’ comes from the Latin ‘*litterae patentes*’ meaning documents granting official rights and privileges. Certain establishments were conferred rights by official appointment for military, judicial and colonial posts and many of these were tied to privileges granting rights to land conveyance, noble and monopoly rights and invention. Much later, Machlup (1958) defined a patent in economic terms as a right that confers security of power to enforce a state grant by excluding unauthorised persons for a specific number of years from making commercial use of a clearly identified invention. See Machlup, F. (1958). ‘An Economic Review of the Patent System’, reprinted in F. M. Abbott, (1999). Introduction to Intellectual Property: Forms and Policies’, in F. M. Abbott et al. (eds), *The International Intellectual Property System: Commentary and Materials*, pp. 224-225.

¹⁷ May, C. (2002c), ‘The Venetian Moment: New Technologies, Legal Innovation and the Institutional Origins of Intellectual Property’, *Prometheus*, 20 (2), p. 160.

¹⁸ Palmer, T. (1997). ‘A Non-Posnerian Law and Economics Approach’, in A. D. Moore (ed), *Intellectual Property Moral, Legal and International Dilemmas*, p. 182.

¹⁹ In 1593 Galileo Galilei justified a patent application that an invention was his property and created at great effort and cost which means it should not become the property of others. Likewise Martin Luther protested against illegal copyright on the same grounds. See Lehmann, M. (1989), ‘Property and Intellectual Property - Property Rights as Restrictions on Competition in Furtherance of Competition’, in: *IIC* 20 (1), p. 8, and reprinted in P. Drahos, (1999). *Intellectual Property*, p. 30.

²⁰ See World Intellectual Property Organization (WIPO), (1997). *Introduction to Intellectual Property Theory and Practice*, p. 17.

²¹ WIPO, *Ibid*. An informative discussion is presented here on the history and evolution of IPRs. Speyer’s patent had the effect of officially recognising the status of rights to knowledge and gave the public notice for patents to have their privilege controlled subject to law and not purely as a crown prerogative through which income could accrue.

century patents continued as a form of privilege or special right, granted by monarchical power and imbued with a sense of princely favouritism.²² Rather than acting as a direct reward and protection for industrial development, patent grants were given to individuals selectively and it took time for patent rights to eschew the language of privilege vested in tax exemptions for the wealthy, aristocratic titles, inheritance of land and land resource deposits. Almost without exception, the privileges granted monopoly rights went to favourites of the court and royal supporters. The German princes in particular began a new approach by conferring privileges on individuals for new technological inventions where utility and novelty were notable features enabling patentees to charge higher prices induced by the significant commercial benefits that could accrue to the economy.²³

The underlying assumption that knowledge had elitist tendencies was evident as early as the 11th century when guilds of freemen formed assemblies to protect and strengthen their individual expertise.²⁴ As trade expanded from the Middle Ages, craftsmen and artisans formed into industrial and artistic guilds to protect their market share and profits through monopoly. The guild system prevented competitors from entering the market ensuring a monopoly on any new ideas.²⁵ Those most able to gather the resources, extend innovations and further utilise their capital were the nascent (quasi) capitalists.²⁶ By the early 1700s patent applications were more widely applied setting boundaries on monopoly power induced by the anti-patent, anti-tariff free-trade movement which swept across Britain and Europe

²² Abbott, F. M. (1999). 'An Economic Review of the Patent System, Introduction to Intellectual Property: Forms and Policies', in F. M. Abbott, (eds), *The International Intellectual Property System: Commentary and Materials*, p. 226.

²³ Machlup, F. (1984). *The Economics of Information and Human Capital*, p. 163.

²⁴ Saul, J. R. (1993). *Voltaire's Bastards: The Dictatorship of Reason in the West*, p. 241.

²⁵ Koepsell, D. R. (2000). *The Ontology of Cyberspace Law, Philosophy and the Future of Intellectual Property*, p. 44.

²⁶ May, C. (2002b). 'Unacceptable Costs: The Consequences of Making Knowledge Property in a Global Society'. *Global Society*, 16 (2), p.127.

with a corollary in governments' ability to manipulate trade barriers and advance national wealth through industrial growth and technological expertise.²⁷

The British Statute of Monopolies enacted in 1623 attempted to dispense with political cronyism and restrict patents to a maximum of fourteen years.²⁸ This Act gave the right of invention back to the first and true inventor and recognised patents in a broader context of reward for the advancement of manufacturing industries.

The grant of a patent was discretionary, in that inventions had to be 'useful', must not raise the price of domestic commodities or injure trade or otherwise inconvenience the state. Further, the 'inventor', need not be the actual originator of the technology or skill. Lessons learnt overseas could receive a grant of patent back home. Consequently, instead of encouraging the immigration of highly skilled craftsmen, the *Statute of Monopolies* sanctioned continual acts of appropriation of other workers' skills, ingenuity and traditions. The textile industry was one such industry that developed with the assistance of foreign know-how and ingenuity.²⁹

Commerce made robust by the guild system, and buoyed by rising nationalism and secular activity, intensified monopoly power under corporate control. Monopolies on "wine, coal, soap, salt, clothes and pins, led Sir John Culpepper to make a comment in the Long Parliament in 1640, that corporate monopolies were like the frogs of Egypt, they have gotten into our dwellings, and we have scarce a room free of them".³⁰ In 1790 the US government introduced patent law that sought to couple knowledge with constitutional procedures and reciprocal benefits granting Congress the mandate to "promote the Progress of Science and the Useful Arts".³¹ This legal sanction of protection for intellectual ideas gave inventors and authors exclusive rights to the fruits of their discoveries and writings. By the 18th century the protection of domestic patents abroad became an international issue.

²⁷ Abbott, F. M. *Op cit*, p. 228.

²⁸ Bowrey, K. (1997). 'Art, Craft, Good Taste and Manufacturing: The Development of Intellectual Property Laws', *Law in Context*, 15 (1), p. 80.

²⁹ Bowrey, K. *Ibid*, pp. 80-81.

³⁰ Drahos, P. with Braithwaite, J. *Op cit*, p. 35.

³¹ Machlup, F. *Op cit*, p. 163.

The industrial revolution, the abolition of compulsory guilds, the introduction of the freedom to carry on trades, the advance of technology and communication, demanded private law protection (for IPRs) ... more than at any other time in economic history.³²

International conventions bound national legislatures to securing ingenuity, novelty and utility through protection. The Paris Convention (1883) became the first formal international agreement to offer protection for industrial property, followed in 1886 by the Berne Convention for the Protection of Literary and Artistic Works. In 1893 the United International Bureau for the Protection of Intellectual Property (BIRPI) combined these two secretariats into one agreement and the era of multilateral negotiations for governing intellectual property was underway.³³

Machlup (1958) identified four criteria relating to patent protection and the rights of inventors to hold sway over their property. While each of the conditions has exclusive clauses about how rights should be used, the prevailing argument for IPRs is premised on the reciprocal foundation, as outlined in the previous chapter, that rights offer incentives for individuals to be creative guaranteed by protection. These are characterised first by the proposition that stealing another's ideas is regarded as theft based on the principle that the work of an individual's mind is exclusively hers/his and is therefore a private right. Second, monopoly reward for a set period provides protection and justice to individuals for their creative efforts. Third, the profit-incentive recognises the need for social progress and acknowledges the role and risk inventors and investors take when exploiting ideas for commercial purposes. Finally, recognition is given that secret ideas require exclusive commercial protection. Taken as a whole, these conditions provide veracity to the suggestion that exchange bargains between the inventor and society are justified based on the

³² Lehmann, M. *Op cit*, p. 30.

³³ Under the supervision of the Swiss Federal Government, BIRPI (the acronym for the organisation taking the French version), officials administered the clauses within the multilateral treaties from Berne, Switzerland. BIRPI underwent a name change in 1967 at the Stockholm Conference when it became known as the World Intellectual Property Organisation (WIPO), a name retained today.

reciprocal argument that this knowledge will become public and ultimately be used for the benefit of all.³⁴ Abbott (1999) rejects these criteria for patents and, like Machlup, eschews the idea that natural rights are a sufficient justification for offering patent protection:

If the right to own an invention is a natural right, why did nature make it so easy for others to reproduce an invention? Perhaps, he observes, nature intended humans to imitate each other's creative abilities in order to promote the wide distribution of new knowledge technologies.³⁵

Abbott also contends that a change in the criteria relating to the value of patents has emerged with technological developments wrought by the knowledge age where the scope of patentable material has effectively been enlarged by the rapid progress in ideas and their private application. For example, the granting of a patent for new military equipment may now apply and be held by private contractors where once it did not because research and development to protect and secure the state came largely from public investment. Equally it might be argued that rational market policies undercut the wider reciprocal scope of patentable material adding to a shortage of government sponsored research activity with funds for public health and other welfare considerations left to private organisations through the support of private funding.

Whether patents ought to be restricted in key areas of the knowledge economy such as health, welfare or the armed forces is a moot point but one which warrants consideration against a thriving industry processing patent applications (discussed in chapter six), that serve the economic needs of private interests as well as state interests motivated by revenue gathering. Indeed, Kinsella (2001) argues that technologies are being granted patents for “defence purposes with overheads [being] spent on patent lawyer’s salaries and patent transfer office fees that would otherwise

³⁴ Abbott, F. M. *Op cit*, p. 232.

³⁵ *Ibid*, p. 247.

not have to be spent if there were no patents".³⁶ Patents are therefore political instruments having gained a reputation, by virtue of their secure attachment to science and scientific technique, as vital to the economic wealth-seeking capacity of states for welfare, for military purposes and for private commercial gain.

By the 19th century the relationship between patents, scientific innovation and technical application had resulted in what Ellul (1964) describes as an enslavement of science to technique characterised by the imperatives of commerce and trade expansion. In his analysis this situation has had an effect on the extent to which capital is utilised in the interests of monopoly control that reverberates from feudal times to today. In particular:

It is solely because the *bourgeoisie* made money, thanks to technique, that technique became one of their objectives ... The *bourgeoisie* were so well aware of the relation between economic success and the scientific foundations of that success that they kept in their own hands, almost as a monopoly, the instruction which was the only means of access to the great schools and faculties that trained the technicians of science and the technicians of society.³⁷

The symbiotic relationship between capital, corporate research laboratories and science-led foundations provided the facility for patent recognition as wider investigative and scientific techniques were developed. To Arora, Fosfuri and Gambardella (2002) firms and companies systematically applied scientific knowledge to advance material progress complemented by investment in manufacturing and marketing in the most highly industrialised economies.³⁸ The development of scientific laboratories and shareholder funding had a corollary in corporate determination to seek more extensive patent protection to maintain competitive advantage. Drahos and Braithwaite (2002) describe how in the late 19th

³⁶ Kinsella, N. S. (2001). 'Is Intellectual Property Legitimate'? *The Federalist Society for Law and Public Policy Studies*, retrieved 1 July, 2002: www.fed-soc.org/Publications/practicegroupsnewsletters/intellectualproperty/legitimate-ipv3i3.htm p. 2.

³⁷ Ellul, J. (1964). *The Technological Society*, p. 53.

³⁸ Arora, A. Fosfuri, A. and Gambardella, A. (2002). 'Markets for Technology in the Knowledge Economy', *International Social Sciences Journal*, 171. p. 115.

century the English and Swiss (amongst others) hid their mercantile protectionist policies in patent law protecting their own industries, but allowing them to free-ride on the strength of the German chemical industry. Thus, patents have long been utilised by science and industry as a form of national trade protection and have acquired such an omnipotent status that when the “developing countries try to protect their own industries using the rules of intellectual property they are slapped down by Western powers”.³⁹

Patents originated as a form of privilege and as protection for private inventions to further economic development ably assisted by political authority. At times patents have been accepted as monopolies while at other times their exclusive value has been down-graded by protection clauses tied to state efforts to arraign private power. In the powerful consumer societies of the 20th century entrepreneurs, firms and investors demand strengthened rights around design and plant patents in particular to exclude others from acquiring scientific knowledge favourable to rational market arguments of capital advancement and inimical to the public good values of reciprocity. Issues around what is considered a suitable timeframe for the private exclusionary grant of patent protection and efforts to widen the scope of monopoly control have given rise to debates on appropriate rewards for original invention and market demands for cost efficient innovations. The proliferation and expanded scope of patent awards is discussed using examples in subsequent chapters, suffice to say the link between broad patent protection and the numbers of patents being granted, and to whom, has become a significant problem for achieving reciprocity. The large scale scientific investment and capital expenditure linked to patent acquisition is not unrelated to the ownership and control of patents making the progression of science both a highly political and commercial undertaking. For these reasons, it is timely that a normative conceptualisation of reciprocity based on the justifications for IP set down in chapters two and four, is undertaken to

³⁹ Drahos, P. with Braithwaite, J. *Op cit*, p. 35.

determine where equivalence and benefits are eschewed by expanded forms of governance. The arguments relating to the proprietary use of patents under global governance rules are examined in chapter six but, for now, trademarks require consideration.

(B) Trademarks⁴⁰

Like patents, trademarks are steeped in history and characterised by initials or symbols denoting ownership of a good by identifying its creator and signifying style, pattern and purpose. Early Islamic mercantilists used marks to indicate conformity and attribute quality to products. Use of “the *muhtasib*, or the market inspector's seal stamped on measures, scales and mints during the Abbasid period” indicated fair trade practices.⁴¹ Piracy and counterfeiting were common with Etruscan pottery so desired that its marks were copied and counterfeit examples frequently found.⁴² By the Middle Ages English guild rules legislated for marks to be attached to goods as a sign of craft production but were not, at this stage, designed to entice customers for economic purposes which came later with moves to export and mass produce industrial and consumer items for international markets. As competition in trade increased a marked product became preferable to an unmarked one as a symbol of quality and guild membership.

A rise in counterfeiting following the abolition of French and English guilds in 1791 and 1835 respectively was not adequately dealt with until the problem was addressed by the Paris Convention signed in 1883,⁴³ merging independent national

⁴⁰ The definition of a trademark given in chapter one is extended here to include the United States International Trade Commission's designation of a trademark as “any word or name, symbol or device or any combination thereof, adopted and used by a manufacturer or merchant to identify his goods and distinguish them from those manufactured or sold by others”. See D'Amato, A. and Long, D. E. (eds), *Op cit*, p. 5.

⁴¹ Quoted and outlined in a comprehensive discussion on Islamic viewpoints of trademarked goods in Azmi, I. M. Maniatis, S. M and Sodipo, B. (1997). ‘Distinctive Signs and Early Markets: Europe, Africa and Islam’, in A. Firth, (ed), *Perspectives on Intellectual Property*, pp. 150-158.

⁴² WIPO, *Op cit*, p.183.

⁴³ Prior to this Convention and before Federal law was enacted in 1881 individual states in US developed their own trademark statutes within common law to prevent manufacturers copying others goods and to protect the good will of businesses. Found in Koepsell, D. S. (2000). *Op cit*, p. 45.

views standardised by international treaty that transformed the categories and “contributed substantially to making the field of industrial property law as international as it is today”.⁴⁴ The first attempt at an international trademark registration treaty was instituted by the Madrid Agreement of 1891 which became party to the Paris Convention monitored by the World Intellectual Property Organisation.⁴⁵ Annand (2001) reports on the tensions between law and commercial interests to attain reciprocal agreement on the operational aspects of trademarks:

The history of the Acts for regulating the registration of marks is the history of a continued struggle on the part of the mercantile community to bring about a state of law suited to their particular requirements, of repeated attempts on the part of the legislature to comply with those requirements, and of a succession of discoveries of the failure of the language employed, when submitted to judicial decision, to carry out the objects arrived at.⁴⁶

The Madrid Agreement did not undergo any significant revisions until 1967 followed by further modifications in 1989 making way for new states to join. The Madrid Protocol supplemented the 1967 Agreement signed in Stockholm becoming the precursor to the Trademark Law Treaty (1994) that simplified and harmonised regulations in preparation to legally enact the TRIPs Agreement in 1995.⁴⁷ Despite multilateral consensus being reached on how the trademark protocol could be made workable, the US government stalled ratification foreclosing on full enactment of the treaty as the State Department used its power to over-ride earlier trans-governmental⁴⁸ efforts “objecting to the Treaty's voting structure which gave the European Union a vote on amendments in addition to the individual votes of each

⁴⁴ WIPO, *Op cit*, p. 23.

⁴⁵ WTO, (2002). *Madrid Agreement*, retrieved, 1 July 2003: www.wto.intra.org/madrid/html.

⁴⁶ Annand, R. (2001). ‘Developments in Registrability: The Definition of a Trade Mark and its Requirement for Distinctiveness’, in N. Dawson and A. Firth (eds), *Perspectives on Intellectual Property Trade Mark Retrospective*, p. 125.

⁴⁷ For a full discussion on trademark law see (WIPO), *Op cit*, pp. 183-211. And for the Madrid Agreement, see pp. 407-418.

⁴⁸ Cheek defines trans-governmental networks as “the repeated interaction of government bureaucrats with a common purpose ... formed when bureaucrats in one country cannot fulfil their obligations under domestic law without coordinating [their interests] with bureaucrats from other countries”. See Cheek, M. L. (2001). ‘The Limits of Informal Regulatory Cooperation in International Affairs: A Review of the Global Intellectual Property Rights Regime’, *The George Washington International Law Review*, 33 (2), pp. 277-323.

EU member country”.⁴⁹ Despite these manoeuvres, by August 2003 the US signalled its official membership to the treaty pending revisions to the draft rules. While power and competitive pressures do not necessarily mean issues cannot be resolved, inter-state tensions over trademarks point to the political significance of these symbols defined by trade bargaining.

Trademarks are powerful and recognisable symbols of commerce through which “we communicate with each other by using the language of brand and logos,” notable for their wealth creation.⁵⁰ Trademarks define the scope and efficacy of private control with developed state and trans-governmental networks actively pursuing stronger regulatory controls assisted by trade policies to counteract piracy. Dommering (1998) reports some fifty countries so far have opted to join an international system of registration for trademarks and brands that serve the purpose of protecting intellectual creations to avoid piracy and theft.⁵¹ Strengthened rights are vital for a number of other reasons, such as using trademarks to identify and promote public initiatives aimed at deflecting piracy and counterfeiting, tying national heritage items to national branding exercises, and establishing reciprocity between diverse groups and the state in order to protect genuine articles and creativity from exploitation.

The importance for reciprocity is linked to state, civil reciprocal arrangements to advance science and the useful arts – one of the primary reasons the US Congress gives for granting intellectual property rights. While many governments actively seek rights of registration for trademarks to promote the arts and sciences as a reciprocal exercise in state/commercial funding, branding is a costly exercise. For this reason, public sector values may be deflected from common good reciprocal goals within the arts and sciences to private organisations keen to extract trade

⁴⁹ *Ibid.*

⁵⁰ Klein, N. (2001). *No Logo*, p. 196.

⁵¹ Dommering, E. (1998). ‘Addresses in Cyberspace have no Physical Place’, in J. J. C. Kabel and G. J. H. M. Mom (eds), *Intellectual Property and Information Law*, p. 305.

benefits from art and cultural artefacts.⁵² The reciprocal social and cultural value of such items may be lost to economic expediency. Alternatively, if the rights are well executed due recognition rewards the originator of the product whose protection is guaranteed. The political implications of trade marks on cultural groups' traditional knowledge is discussed further in chapters seven and eight but, for now, as Kerr (2003) notes, challenging reciprocal trade are "fears of a new wave of colonisation in the form of brand loyalty to foreign owned marks, premised in large part on the global marketplace significance of trademark bearing consumer goods".⁵³

Strengthened rights under TRIPS and the WTO require greater levels of legal interpretation and understandings of enforcement procedures. As a result of trademark competition litigation has increased and led to calls by some European states for a 'merchandising right' for all symbols that, by virtue of their public value, have been misused and/or appropriated. This right exists in the US for commercial icons and extends to celebrities, animals, fictional and inanimate objects, as well as providing protection to the human owners of non-human entities.⁵⁴ In the absence of any law against personality appropriation in the United Kingdom, the Trustees of the Memorial Fund made application to the Trademark Registry to invoke the law to protect the image and personality of Diana, Princess of Wales, following her death. Though unsuccessful, the case highlighted the absolute control and censorship that potentially could have emerged in terms of the way society would be permitted to view the Princess after her death.⁵⁵ Where rights are abused then, in accordance with Becker's position on reciprocity as outlined in chapter two, there should be reparation for the harm done and recognition given in proportion to the level of

⁵² Snapper, J. (1991). 'The Uses and Justifications for the Regulation of Intellectual Property', in *Social Epistemology*, 5 (1), p. 78.

⁵³ D'Amato, A. and Long, D. E. (1997). 'Cultural Impact of Intellectual Property Form', *International Intellectual Property Law*, p. 95.

⁵⁴ Pinackers, J. C. S. (1998). 'Misappropriation of Goodwill of Popular Symbols', in J. J. C. Kabel and G. J. H. M. Mom (eds), *Intellectual Property and Information Law*. p. 293.

⁵⁵ For a full discussion of the role of WIPO in personality appropriation, see Waelde, C. (2000). 'Commercialising the Personality of the Late Diana, Princess of Wales - Censorship by the Back Door?' in N. Dawson, and A. Firth (eds), *Perspectives on Intellectual Property Trade Marks Retrospective*, pp. 213-228.

exploitation or appropriation. Interpreting these considerations becomes a matter of law that is best displayed by the moral codes that guide reciprocal exchange including respect and public good outcomes.

Trademarks are exacting symbols of corporate power sanctioned by states for a variety of commercial reasons. They are also about protecting brands and have public values attributed to them tied to ownership over ideas that cannot be interfered with by outsiders. Their value in promoting the arts and sciences for the reciprocal good of humanity lies in the space between variants of proprietary control and concessions to moral standards of good conduct and benefit-sharing. Geographical indicators also have an important role in identifying names and indicating types and the source of origin for products accompanied by product symbol and style. European Union states push “strong protection for geographic indicators of wines and spirits through the creation of an international registry” covering rural regions and localities in efforts to both use trade liberalisation to their own advantage and protect nationally identifiable products that have social and cultural significance.⁵⁶ The South Africa-European Union Free Trade Agreement and NAFTA talks have both foundered on the use of terms adopted by one state and region that are said to abuse the original source and cultural significance of items in another place.⁵⁷ Indeed, geographical indicators have stood alongside patents around pharmaceuticals as a further example of the politicisation of knowledge where the social value and cultural impact of terms, symbols and classifications clashes with broader economic interests of reciprocal trade.

(C) Copyright

Copyright and related rights cover a comprehensive range of intellectual property with a considerable commercial history attached to the application of these rights.

⁵⁶ Kerr, W. A. (2003). ‘The Efficacy of TRIPS: Incentives, Capacity and Threats’, *The Estey Centre Journal of International Law and Trade Policy*, 4 (1), p. 11.

⁵⁷ Craven, E. and Mather, C. (2001). ‘Geographical Indicators and the South Africa-European Union Free Trade Agreement’, *Area*, 33. (3) September, p. 312.

Like patents, copyright was born to serve the interests of royal privilege with private publication facing censorship through regulation.

As early as the Tang dynasty, China (A.D. 618-907), the legal code prohibited the transcription and distribution of a wide range of literature in order to protect the emperor's prerogatives and interests. An extensive regulatory apparatus was created around the industry of printing under the Sung dynasty (960-1179). Exclusive state privileges were implemented for categories of sensitive literature, from astrological charts, prognostications, and almanacs to official promulgations, dynastic histories, and civil service examination literature. Private printing houses could register a particular work with Imperial officials and receive an exclusive privilege to print and sell it. The measure of the greatness of a Chinese scholar was not to be found in innovation Confucian thought despised commerce and thus also writing for profit; instead authors practiced their craft for the moral improvement of themselves and others. This is not to suggest that there was no commerce in books in China. In the land that invented movable type, a book trade flourished as early as the eleventh century. Chinese authors had no property right to their published works or the particular expressions and could not exclude usage by others. The contents of the book could not be owned. Only the paltry vessel the paper and ink of a manuscript or a printed book that bore the ideas and expressions could be bought and sold.⁵⁸

In Britain, copyright protection was brought about by the advent of the Gutenberg press which enabled the printed word to reach a wider public audience making it profitable for writers, journalists and publishers to commercially extend their work to a small, but growing, literate public. It was the publishers and printers who pressed for legislation to guard against plagiarism and piracy, rather than the authors themselves lobbying for rights of protection over original ideas. England's first printer, William Caxton, was instrumental in the rise of printing as a commercial business and oversaw the creation of a new guild called the stationers.⁵⁹ By giving the stationers a royal charter of incorporation and a monopoly right the crown acquired a means to control seditious and heretical material, and to restrain

⁵⁸ Hesse, C. (2002). 'The Rise of Intellectual Property, 700 B.C.-A.D. 2000: An Idea in the Balance', *Daedalus*, 131 (2), retrieved 25 March, 2003: www.proquest.umi.com/pqdlink, p. 2.

⁵⁹ Caxton later became a highly successful merchant and trade negotiator for semi-feudal business interests being conducted between France and England.

revolutionary activity, although torture and killing was still, by and large, a more frequent form of state control.⁶⁰

When the 1710 Act of Anne was passed into English law the emphasis on copyright shifted from one of privilege and royal decree to an official decree recognising private rights within the scope of the public domain. This Act was significant for the encouragement it offered writers to produce books that were publicly accessible without the fear that counterfeit material would devalue their labour. Protection rights were given to authors for 14 years from first publication and another 14 years if the author was still living at the expiry of the first period. Seville (1997) reports that these provisions were completed with some difficulty relating to subject matter, the length of cover, and the definition of an infringement act.⁶¹ In France there were similar issues as Royal monopoly privileges and company controls gave key publishers and booksellers an edge on their business opponents giving rise to unfair competition. In 1763 the writer and philosopher Diderot referred to his publishers as pirates and called for the strengthening of authors' rights to avoid monopoly control. Ironically, he applied mercantilist logic claiming the state would be the loser if monopoly remained with the firms.⁶² In the end, for the English and later for the French, new copyright legislation came to represent:

An uneasy compromise between the position of the Stationers' Company and the advocates of authors' natural rights on one side, and the position of the pirate publishers and the advocates of 'the public interest' on the other.⁶³

During this time rules governing price controls were instituted by government over companies so that libraries and universities could access and acquire copies of written work to build up stores of knowledge and information preserving them as a mark of a learned and civil society. Two further important pieces of legislation in

⁶⁰ Drahos, P. (1996). *A Philosophy of Intellectual Property*, p. 22.

⁶¹ Seville, C. (1997). 'Talfourd and His Contemporaries: The Making of the 1842 Copyright Act', in A Firth (ed), *Perspectives on Intellectual Property*, p. 50.

⁶² Chartier, R. (2002). 'Property and Privilege in the Republic of Letters', *Daedalus*, 131 (2), retrieved 19 July 2002: proquest.umi.com/pqdlink p. 1.

⁶³ Hesse, C. *Op cit*, p. 5.

England fostered moves for greater protection for authors: the 1814 Copyright Act, followed by the more contentious 1842 Act that was six years in the making following repeated rejections from stationers fearful of losing their monopoly position. The stationers contested the common law and the new economic and intellectual rights imbedded in the statute,⁶⁴ using mass petitioning in an attempt to show that it was a monopoly and that the new law would act as an intolerable fetter on the diffusion of knowledge.⁶⁵ The 1842 Act was notable for establishing domestic legislation in Britain that by 1911 had set the foundations on which later international copyright legislation would be based.

Across Europe governments were confronted with similar legal dilemmas regarding setting copyright protection. Kant, amongst others, “regarded an author's literary and other creative work as an extension [and] reflection of ... personality” with entitlements for protection made on natural justice grounds in accordance with each individual's personality.⁶⁶ The subject matter posed the greatest legal challenge for public and private alike and nowhere was this more contentious than in calculating the reach of the law in the establishment of rights between ideas and expression. The common problem was working out “by what legal formula IPRs could be granted to meet the conditions between the general idea and the author's expression of the idea”.⁶⁷ For these reasons, copyright law grew out of the philosophical traditions of rights in common law and became associated with property and pricing through commercial imperatives which opened up printed matter to competitive markets and trade. Natural justice arguments were given as much credence as

⁶⁴ Copyright continued to be problematic in terms of legal interpretations until the House of Lords settled the case of *Donaldson v. Beckett* in 1774 which ruled that at common law the author had the sole right of printing and publishing his work, but once it was printed the statute became the form of regulation. For a detailed and valuable discussion on copyright see Drahos, P. (1997). *Op cit*, pp. 22-28. Drahos uses the analyses of Arber, E. (ed), *A Transcript of the Registers of the Company of Stationers of London 1554-1640 A.D.* (London, 1875-94, privately printed, 5 volumes). Other specialised texts are included. Also see WIPO, (1997). (ed), *Introduction to Intellectual Property*, pp. 23-25, and de Freitas, D. ‘The Main features of Copyright Protection in the Various Legal Systems’, *World Intellectual Property Organisation*, WIPO/CR/KL/86/5.

⁶⁵ Seville, C. *Op cit*, p. 50.

⁶⁶ WIPO, (ed), *Op cit*, p. 25.

⁶⁷ Seville, C. *Op cit*, p. 53.

economic interests in civil law cases that came before the courts for adjudication on infringements.⁶⁸ Equally importantly, any violations of the exclusive rights to the copyright were legally considered an infringement, and also an act of piracy.⁶⁹ Courts upheld legal cover and reward for dramatic, artistic, literary and musical copyright for a 50-year period after the author's death upon which time anyone was free to translate, to make adaptations or to perform works in public.⁷⁰

In the present era of global commercial competition in the areas of communications, entertainment, sport and arts, copyright rules have moved increasingly to recognise private authorial rights rooted in the sanctity of the personality. In the US in particular, this progression has been notable for its intensified efforts at controlling knowledge for private purposes. Thus:

In the course of the twentieth-century American copyright law has switched ... from adherence in the Berne Convention of 1898, to the Digital Millennium Copyright Act of 1995. [This] has been a story of the steady strengthening of the proprietary rights of intellectual property rights holders at the expense of public access and interest. It is a history of the tipping of the balance in the founding principles of eighteenth century intellectual property law away from the aim of public utility through 'encouragement of learning' toward the enhancement of private commercial gain.⁷¹

Legislating for fairness and reciprocity in copyright law has cultural implications and is a social issue underscored by normative considerations. Dreams, impressions, ideologies, particular details, truth and certain forms of knowledge do not attract copyright but, computer software, dance, music and writing that ultimately become the tangible hardcopy of an individual or group, or the end product of a process of authorship made up of content that includes original ideas, is copyright. How to get the optimum social value of 'fair use' and a reciprocal balance between private protection and the public good is an area of legal interpretation and on-going case

⁶⁸ WIPO, *Op cit*, pp. 23-25.

⁶⁹ Gutterman, A. S. and Anderson, B. J. (1997). *Op cit*, p. 2.

⁷⁰ Doern, B. G. (1998). *Global Change and Intellectual Property Agencies: An Institutional Perspective*, p. 81.

⁷¹ Hesse, C. *Op cit*, p. 7. A similar discussion can be found in Boyle, J. (1997). *Shamans, Software and Spleens: Law and the Construction of the Information Society*.

law utilising enforcement and dispute settlements applied on behalf of IP experts and consumers alike as is discussed in chapter nine.

The advent of digital technologies and communication networks herald significant changes to the way knowledge is exchanged and copyright enforced as private reproduction increases with little effort and no loss of quality to the original. Reciprocal values between the originator of an idea and the consumer are frequently disrupted as many consumers consider it their right to access, through the communication tools available, what 'the market' provides at no extra cost and with little regard for IP rules and the position of originality. While case law is increasingly relied on to interpret copyright infringements, simultaneously, copyright is moving toward contract, with only cursory attention being paid to moral arguments as legal rules allow negotiations, particularly in relation to internet technologies between purchasers and authors, to assume a transaction position of zero cost. Further appraisal of copyright with particular attention to the political dimensions of digital technologies and the implications for reciprocity is discussed in chapter six. The next section outlines some of the political factors informing arguments for and against expanding the rules of IP.

III. The Political March to Strengthened IPRs

From the mid-1980s GATT member-states began to look at strengthening patents, trademarks, copyright, and other legal codes to protect trade secrets, geographical indicators, plant varieties and breeders' rights through tighter governing regulations. The effort to make national IP and global governance regulations compatible with trade had a ready audience in strong states and corporations keen to shield their capacity to accumulate ideas through all forms of IP and use capital enclosure and labour force restrictions to advance the material aims of their knowledge economies by expanding innovation strategies in areas where economic security and financial gains could be relied upon to deliver investment promises.

Evidence that strengthened IP would provide material advancement for some states over others is seen in Hughes' (1997) observation that "most holders of copyright and patents come from at least middle-class backgrounds".⁷² Efforts to transfer knowledge technologies and establish legal infrastructures with people versed in IP law in the less-developed states (and many of the developed states) during the 1980s and 1990s aimed at opening markets and making preparations for strengthened IP rights had World Bank and WIPO support under the banner of trade liberalisation. According to Okediji (2003) these measures attracted limited success with scant empirical evidence for the proposition (held mainly by economists and free-trade proponents) that stronger IP attracts foreign direct investment or encourages the transfer of technology from the rich to the poor.⁷³ In Dutfield's (2003) view: "improving the system seems to imply strengthening the rights available. Increasingly, strong patent rights are regarded by governments as an essential component of national innovation policy for achieving a 'knowledge economy'".⁷⁴ Significant differences in levels of development and economic prosperity experienced by individual states suggests that when the TRIPS Agreement and harmonisation finally came into law it served to hinder rather than assist the process of reciprocity. To Nye and Keohane (1998) the developed states' desire for stronger levels of IP protection was simply an attempt to 'feather their own nests' at the expense of the developing world and demonstrated that "contrary to the expectations of some theorists, the information revolution has not greatly decentralised or equalised power among states".⁷⁵

The political ground between strengthened rights and the limited application of rights is significant. For example, efforts requiring states to comply with global

⁷² Hughes, J. *Op cit*, pp. 110-111.

⁷³ Okediji, R. L. (2003). 'The WIPO Agenda: New Treaty Development and Harmonization of Intellectual Property law', in C. Bellmann, G. Dutfield and R. Melendez-Ortiz (eds), *Trading in Knowledge Development Perspectives on TRIPS, Trade and Sustainability*, p. 91.

⁷⁴ Dutfield, G. (2003). *Intellectual property Rights and the Life Science Industries: A Twentieth Century History*, p. 208.

⁷⁵ Keohane, R. O. and Nye, J. J. (1998). 'Power and Interdependence in the Information Age', *Foreign Affairs*, 77 (5), p. 89.

harmonised rules contrasts sharply with the situation in the early 19th century when free trade initiatives and a lack of international IP protection co-existed. This enabled industries such as publishing to become established and during this time the US set up some of its most valuable library collections. While exhibitors at international fairs feared piracy and loss of their original ideas, the US was making use of other nationals' knowledge and suppressing innovation at the international level.⁷⁶ Indeed, the Honourable Sir Robin Jacob, Judge of the Patent Courts of England and Wales, commented in 2001 that the onward march of intellectual property into countries who gain little or no social and cultural benefit has produced deleterious results:

When our countries were young and backward the last thing we needed was our fledgling industries under a yoke of foreign rights. On the contrary, in the United Kingdom we gave patents to people who went abroad to steal ideas from foreigners, and the USA only gave copyright rights for works first published in the United States - if first published elsewhere, Americans were free to pirate.⁷⁷

Arguments for limitations to IP enabling developing states room to establish knowledge industries and achieve a level of equivalence before integrating with the capitalist trading system are not seriously entertained because of the competitive nature of the trade in knowledge. Indeed, under the present trading regime TRIPS confers what is essentially economic power on individuals (although it is primarily private organisations) providing an uninterrupted right to expend capital to secure creative ideas through the commercial and strategic use of IP. The implications arising from the commercial and strategic use of IP and its variable outcomes is examined in the next chapter and in chapter nine where correlations between intellectual capital and intellectual property are explored.

⁷⁶ Sell, S. K. (2003). *Private Power Public Law The Globalisation of Intellectual Property Rights*, pp. 10-11.

⁷⁷ Jacob, R. (2001). 'The Onward March of Intellectual Property Rights and Remedies', in R. Dreyfuss, D. L. Zimmerman, H. First (eds), *Expanding the Boundaries of Intellectual Property Innovation Policy for the Knowledge Society*, p. 416.

Conferring IPRs involves a reciprocal bargain between private holders of ideas given the opportunity to realise their creations in return for obligations that such rights will result in overall public benefit to society before the idea again becomes the property of the commons.⁷⁸ IPRs are distinctive for their capacity to codify rules structured around particular rights in relation to their economic value and sense of economic usefulness. From an economic standpoint the ability to generate wealth from ideas persists based on the Lockean idea “that the encouragement of individual effort by personal gain is the best way to advance public welfare and reward the talents of authors and inventors”.⁷⁹ As discussed in the previous chapter there is merit in offering rewards on this basis. However, the strengthening of rights to a level that goes beyond a fair reward impedes individual effort, dissolves reciprocity and undermines the status of private monopoly operating under a limited timeframe.

The arguments for strengthened rights comes from strong states and corporations who claim that much individual innovation is achievable only through mobilising expert labour at the corporate level where the mix of ideas, capital and innovation is required to make technological application economically viable. Monopoly rights are then sought in order to secure shareholder rewards for investment with utility and research costs feeding into monopoly. Shipman notes:

When asked why they need to charge so much for new technology, companies point to the escalating costs of innovation. New drugs cost so much to bring from petri dish to production line, new cars from prototype to showroom, new microchips from drawing board to desktop, that no one would pursue them without the assurance that the first to get a patent can set a monopoly price.⁸⁰

Given US constitutional justifications for regulating intellectual property where Congress has the power to confer rights under limited timeframes in order to

⁷⁸ Drahos, P. *Op cit*, p. 120.

⁷⁹ Hughes, J. *Op cit*, p. 119.

⁸⁰ Shipman, A. (2002). *The Globalization Myth*, p. 42.

promote the sciences and the useful arts⁸¹ we need to ask, as Snapper (1991) does, whether measures to advance the progression of science are being met through current intellectual property timeframes and rules where utility for commercial purposes rather than reciprocity is sought. This thesis argues that it is precisely the absence of a public good commitment to limited timeframes and the strengthening of rights that is at the heart of the reciprocity problematic. The normative philosophies of Locke that ‘as good and enough be left for others’ set down in the previous chapter, and the virtue-theoretic arguments of Becker related to obligations posed in chapter two, offer the most stable foundation for IP protection. This is particularly so because while the owners of intellectual property often trumpet the moral value and human benefit of scientific discovery, in reality, the material interests of private power often override the greater public good. For D’Amato and Long (1997):

Terms such as the ‘common heritage of mankind’ are often used to defend the refusal or failure to provide strong intellectual property right protection. By contrast, industrialized countries, which are generally perceived as exporters of intellectual property, rely upon the economic rights which inhere in property to defend strong protection rights.⁸²

As the pursuit of knowledge to meet private wealth creation becomes synonymous with economic utility and profit, the IP system — designed to reward inventions and discovery for its potential to offer wider social benefits — risks returning to the privilege and monopoly position of old. For instance, trade secrets have the capacity to suppress technological innovation because data does not have to be published openly while the consolidation of patents and other property rights in portfolios held by firms arguably prevents the spread of ideas protected from competitors’ hands. Before considering further the justifications for IPRs and the circumstances under which reciprocity adds social value to knowledge, indeed, whether reciprocity can be recast under free trade, we need to examine how arguments of market

⁸¹ Snapper, J. *Op cit*, p. 79.

⁸² D’Amato, A. and Long, D. E. *Op cit*, p. 27.

rationalism assisted TRIPS rule-making, intensifying corporate ownership and state control over IPRs for competitive commercial purposes.

IV. The Organisational Route to Expanded Global Rules and Regulations

The 1947 Havana Charter attempted to incorporate trade and employment issues into a resolution for a multilateral trade body that would *inter alia* recognise intellectual property in competitive trade transactions, but it was not ratified by the United States Congress.⁸³ Despite this set back, the Interim Committee of the International Trade Organisation was successful in setting up the GATT in 1947 to advance trade liberalisation “through the elimination of tariffs and other trade barriers”.⁸⁴ In terms of intellectual property, the Rome Convention of 1961 bound the signatory states of GATT to international property rights protection covering broadcasting, phonogramme production and performance rights before many countries had put into place national protection rights reflecting the importance developed states placed on IP in relation to global trade expansion.⁸⁵ By 1967 the World Intellectual Property Organisation (WIPO) had replaced the 1893 BIRPI, instituted under the Stockholm Convention with a mandate to promote research and development and assist the transfer of technology through foreign direct investment (FDI), to less developed states.⁸⁶ Interest in IP from other bodies, including the International Chamber of Commerce (ICC) which had a stake in FDI, resulted in these original good intentions becoming nothing more than platitudes with Sell (2003) describing WIPO as a once relatively balanced agency having now become

⁸³ One explanation given for the US refusal to re-submit it for further discussion was the fear it would lead to a loss of national sovereignty. It could also be argued that the US industry had benefited greatly from weak IPR protection during the 18th century allowing it to ‘borrow’ ideas from abroad meaning government was more than a little reluctant to strengthen protection on that basis. See D. Gervais, (1998). *The TRIPs Agreement: Drafting History and Analysis*.

⁸⁴ Sutherland, P. Sewell, J. and Weiner, D. (2001). ‘Challenges facing the WTO and Policies to Address Global Governance’, in G. P. Sampson (ed), *The Role of the World Trade Organization in Global Governance*, p. 102. Twenty three countries signed the original agreement.

⁸⁵ Doern. B. G. *Op cit*, p. 81.

⁸⁶ Michalopoulos, C. (2001). *Developing Countries in the WTO*, p. 129.

little more than “a tool for promoting the interests of the proponents of the most protectionist IP forms”.⁸⁷

Queau, reporting on the collusion between the organisation and commercial interests in *Le Monde diplomatique*, noted that by the end of 1997 WIPO was dealing with over 50,000 industrial patent applications, up from a few thousand ten years earlier, giving the organisation sizable financial surpluses. Following this exponential rise in applications WIPO reduced the fees it charged by about 15%. This discount did not detract from the immense wealth being accrued by an organisation drawing substantially on a common fund of public information and knowledge. Queau criticised WIPO for making large sums of money from a common pool of public knowledge without adopting reciprocal obligations.

The combined public power of the member countries is put to the service of defending the private interests of those filing patents We are talking about global public goods, it would be only fair to use the income WIPO derives from patent applications to encourage, for example, the creation of a virtual world public library consisting entirely of texts in the public domain and therefore accessible to all.⁸⁸

The political implications arising from trade and the role of WIPO are addressed later in this chapter but in terms of GATT/WTO changes the longstanding relationship existing between WIPO and commercial interests should be noted. The legislative predecessors of WIPO had historical origins in the 19th century Berne and Paris Conventions where interim revisions tied patent applications to professional organisations such as the Association of Intellectual and Property Protection (AIPPI) and the ICC. Many of the updates to the convention came out of proposals put forward by experts from these commercial bodies. For many years WIPO sought advice from individuals within these organisations for its proposed directions and the close association between WIPO, patent lawyers and business executives was

⁸⁷ Sell, S. K. *Op cit*, p. 20.

⁸⁸ Queau, P. (2000). ‘Defining the World’s Public Property: Who Owns Knowledge?’ *Le Monde Diplomatique*, Retrieved April, 6 2003: www.mondeDiplo.com/2000/01/14queau?var_s=who+knowledge%3F, p. 3.

significant in the later formation of TRIPS. For Dutfield, WIPO is an organisation that has a long history and close relationship with patent lawyers and business. It follows a pro-business line and, as he explained: "I'm trying to make a big deal, a big fuss out of WIPO, because to me it is the real danger, WIPO has the power and money to co-opt and corrupt, which it does".⁸⁹ The past and current status of WIPO and its commercial connections are highly relevant to the scope and function of the globalisation of intellectual property rights and to the form and content of the regulatory framework developing under the Uruguay Round.

(A) Heading for Uruguay: State and Non-state Perceptions

At the time of the Tokyo Round in 1973 WIPO was supporting industry leaders' concerns that economic growth was being jeopardised by a lack of robust patent rights at both the domestic and international level. Corporations and major states claimed that "low or non-existent levels of intellectual property protection were a barrier to exports, given that exports were very often, very quickly, being pirated".⁹⁰ Calls made at Tokyo for new trade rules to prevent piracy and stem the influx of counterfeit goods flooding into the developed markets from the newly industrialising countries failed to materialise by 1979 when the Round closed.

By the 1980s however, the view that IPRs were more than obstacles to free trade, gained momentum as the trade in counterfeit trademarked goods and pirated copyright material flourished in international market-places.⁹¹ A new Round of talks was soon being planned in which the trade in services and technology would head discussions within the wider context of national privatisation and de-regulation

⁸⁹ Interview held in May 2003, with G. Dutfield, Barbican Centre, Queen Mary and Westfield College, London.

⁹⁰ Jeremiah, J. R. (1997). *Merchandising Intellectual Property Rights*, p. 309.

⁹¹ The recording and clothing industries were major sources of illegal infringements on copyright and trademarks. Definitions of the distinctions between counterfeiting and piracy, and a discussion on how TRIPs reworked the law to cover goods that were being counterfeited and pirated, can be found in J. H. Reichman, 'Universal Minimum Standards of Intellectual Property Protection under the TRIPs Component of the WTO Agreement', in Correa, C. M. and Yusuf, A. A. (1998). *Intellectual Property and International Trade: The TRIPs Agreement*, pp. 73-74.

strategies.⁹² An agreement on intellectual property did not exist before the Uruguay Round and although the 1947 GATT made specific reference to IPRs in Article XX (d), intellectual property was not a prime consideration of Anglo-American economic development, nor had IPRs been given any special priority in trade talks.⁹³ The prominent place of IPRs on the Uruguay agenda indicated a paradigm shift in Western perceptions in recognising that these rights could assume a trade position not seen to any great degree in any previous negotiations.⁹⁴ Alongside IP, as Sampson (2001) explains, the Uruguay Round agenda also focused attention on domestic regulation, structural impediments, competition policies, and other features of economic trade, often not directly related to IPRs, but certainly of relevance to the form the legislation would eventually take.⁹⁵

Indeed, the USA placed such importance on the inclusion of IPRs that, prior to the beginning of the Round, they sought categorical assurance that IPRs would feature on the agenda with the threat: “no intellectual property; no round”.⁹⁶ This demand had political and economic overtones beyond the desire for corrective features to the existing regulatory regime aimed directly at re-regulation. As Gutterman and Anderson (1997) explain, the importance of different forms of intellectual property and their market exchange value saw technology-based industries call for wider protection on patents, trade secrets and copyright, while creative firms such as fashion and movie studios, software producers and authors made claims on copyright and trademarks.⁹⁷ These industries had a stake in wider protection measures for research and development purposes but also argued that an over-supply of counterfeit goods was harming the flow of the most highly-industrialised

⁹² Gervais, D. (1998). *The TRIPS Agreement: Drafting History and Analysis*, p. 8.

⁹³ Lee, K. D. and von Lewinski, S. (1996). ‘The Settlement of International Disputes in the Field of Intellectual Property’, in F. K. Beier and G. Scricker, (eds), *From GATT to TRIPS: The Agreement of Trade-related Aspects of Intellectual Property Rights*, p. 286.

⁹⁴ Diamond, W. A and Hart, M. M. (2001). ‘Post-Modern Trade Policy: Reflections on the Challenges to Multilateral Trade Negotiations after Seattle’, Unpublished paper, reported in P. Sutherland, J. Sewell, and D. Weiner (eds), *Op cit*, p. 90.

⁹⁵ Sutherland, *et al. Op cit*, p. 90.

⁹⁶ Braithwaite, J. and Drahos, P. (2000), *Global Business Regulation*, p. 56.

⁹⁷ Gutterman, A. S. and Anderson, B. J. *Op cit*, p. 21.

states trading goods and reducing corporate shareholder profits. For example, the EC was concerned at the level of counterfeiting in luxury European trademarks.⁹⁸ For the developing states IPRs acted as a means whereby rich states could raise costs and inhibit commercial development. India and Brazil, in particular, objected to negotiations around minimum IP standards on the basis that protection was a sovereign state prerogative that ought to be regulated in accordance with the developmental needs of each state.⁹⁹

The less developed states saw the move towards strengthening IP legislation in an even less favourable light: “knowledge should be made available at a minimal cost to everyone since it is the common property of all ... the technology needed by these countries should be given to them at a low cost” because the development of relatively impoverished states is a goal that in the end benefits all.¹⁰⁰ India and Brazil supported the less developed states on the issue of access to knowledge technologies and with several others, including Thailand and Mexico, expressed concerns that “over-protection of intellectual property rights ... could impede the transfer of technology and increase the cost of, *inter alia*, agricultural and pharmaceutical goods” to poorer states.¹⁰¹ These disagreements and tensions coincided with the failure of the command economies to respond to trade competition giving Western Europe and the US an even greater competitive edge in global trade, along with its counterpart, Japan. Rhetoric about trade liberalisation gave impetus to strong states and business to impose an obligation to harmonise IPRs at Uruguay in precise terms by re-regulating them as economic rights. Ironically, national protection measures through trade law continued to shield wealthy states’ industries against the cost of knowledge innovation and did little to include initiatives for reciprocity. In the debates between IP and trade some commentators considered that TRIPS’

⁹⁸ Drahos, P. with J. Braithwaite *Op cit*, p. 118.

⁹⁹ *Ibid*, p. 134.

¹⁰⁰ Mansfield, E. (1993). ‘Unauthorized Use of Intellectual Property: Effects on Investment, Technology Transfer, and Innovation’, in M. B. Wallerstein, M. E. Moge, R. Schoen (eds), *Global Dimensions of Intellectual Property Rights in Science and Technology*, p.110.

¹⁰¹ Gervais, D. *Op cit*, p. 13.

negotiations were “little more than a rationale for the growth and profit maximisation imperatives of large corporations”.¹⁰²

The discussions on IP at Uruguay need to be seen in the context of international trade negotiation upheavals and disagreements on levels of application made all the more contentious by differing standards of legal compliance and efficiency between member states over IP policy-making. As a precursor to integration and deregulation there were also issues concerning reductions in protectionist trade and the freeing up of markets. With these globalising trends and efforts aimed at establishing and legitimising governing regulations for IP within a trade framework, a new term, ‘harmonisation’, entered into the lexicon of the intellectual property bargaining process, appearing to give currency to reciprocity based on the premise that less protection would emerge from the new regulatory framework of free trade.

(B) Harmonisation: The Move to Standardise

Harmonisation is a term synonymous with the 1980s idea of a ‘level playing field’: “making the regulatory requirements or governmental policies of different jurisdictions identical or at least similar”.¹⁰³ Establishing common legal principles across national boundaries was seen as a way for the US and EU in particular to counter piracy knowing that a certain standard of compliance was mandatory. Standard-setting was also a means of assimilating developing states into the global intellectual property system. For its part the US “had reformed its trade law to allow [its] executive to impose trade sanctions on those countries that did not respect US intellectual property”,¹⁰⁴ a development which, in Sell’s (1995) view, was a direct result of a “coercive US strategy to force recalcitrant countries to pass domestic laws

¹⁰² Shrybman, S. (1999). *A Citizen's Guide: The World Trade Organization*, p. 112.

¹⁰³ For a discussion on the economic imperatives of harmonisation, global standards and public goods, see Bhagwati, J. N. and Hudec, R. E. (1996), *Fair Trade and Harmonization Prerequisites for Free Trade*, pp. 43-66 and, p. 122.

¹⁰⁴ Drahos, P. with Braithwaite, J. *Op cit*, p. 20.

strengthening IP protection".¹⁰⁵ Indeed, by the mid 1980s the controversial issue of how far domestic business rules could be altered to meet global regulatory requirements for the control of new technology was seen as vital to the economic expansion of the most highly developed states and a way for multi-national firms to consolidate ownership and control of IP through rent-seeking. According to Okediji (2003), apart from a few exceptions made toward developing states, the evidence is clear that harmonisation generally tilted the balance of interests at stake in "favour of owners of intellectual property, and, de facto, developed countries ... that has resulted in stronger and more expansive rights for owners".¹⁰⁶ In effect, the 'one-size-fits-all' approach that characterised harmonisation formed against the backdrop of strong transnational and EU/US bargaining given that "the bulk of assets of multinationals are typically found in OECD countries and in a relatively small number of developing countries".¹⁰⁷ As a consequence, the high levels of political manoeuvring eventually led to "a system of global rules that acted as an extensive mechanism for disciplining countries in relation to trading products".¹⁰⁸

Following the signing of TRIPS, corporations with high technology resources added solidly to their property, power and wealth-creating capacities by actively promoting the new standardised framework.¹⁰⁹ The subsequent exponential growth in world trade is attributable to the corporate control of knowledge resources with the rate of corporate trade now "accounting for about 25 per cent of world production and 70 per cent of world trade", with a quarter of that trade being intra-firm.¹¹⁰ The harmonisation of IP, originally touted as a necessary part of the new

¹⁰⁵ Drahos, P. (1997) p. 201, also quoted in Doern, B. G. *Op cit*, p. 95, and Sell (1995), *Op cit*, p. 315.

¹⁰⁶ Okediji, R. L. *Op cit*, p. 90.

¹⁰⁷ Held, D. and McGrew, A. (2002). 'Introduction: Economic Globalization', in D. Held, and A. McGrew (eds), *Governing Globalization Power, Authority and Global Governance*, p. 3.

¹⁰⁸ Maskus, K. E. (2000). 'Regulatory Standards in the WTO: Comparing Intellectual Property Rights with Competition Policy, Environmental Protection and Core Labour Standards', *Working Paper. Washington, D. C. Institute for International Economic*, retrieved 16 June, 2004: www.iie.com/catalog/WP/2000/wp00.htm p. 1.

¹⁰⁹ Arup, C. (1998). 'Competition over Competition Policy for International Trade and Intellectual Property', *Prometheus*, 16 3, p. 376, also quoted in Sell, S. K. (2002). *Intellectual Property Rights*, in D. Held, and A. McGrew (eds) *Governing Globalization Power, Authority and Global Governance*, p. 173.

¹¹⁰ Held, D. and McGrew, A. (2002). *Op cit*, p. 3.

regulatory framework upon which the international trading system would operate, emerged when markets in key commodity products were being de-regulated. As outlined in chapter one, the new standards for IP assisted the strongest economies in their quest to control significant quantities of the world's knowledge resources as will be discussed further in the next chapter. In this next section the role of WIPO in shaping the direction of harmonisation toward commercialisation is discussed.

(C) The Role of WIPO and the GATT/WTO Change

Considerable debate took place prior to the establishment of the WTO about the role of WIPO within the new proposed trade framework. As an independent organisation under the auspices of GATT, WIPO's brief was to work in the interests of its member-states by promoting creative actions to facilitate the transfer of technological know-how to developing countries.¹¹¹ Early in the proceedings the developing states feared the organisation's fundamental role would be compromised by the WTO's regulatory mechanisms. The impetus for strong states to shift their interests to institutional forums that best reflected their economic self interest had been a feature of liberal trade since the post-war era and it appeared likely to happen again in this instance. Developing countries warned that the creation of the WTO might sideline hard fought rules made under GATT over the span of the previous four decades. Braithwaite and Drahos (2000) note how the principles underpinning knowledge as the common heritage of humanity had "been largely defeated by shifting intellectual property issues from UNESCO and UNCTAD to WIPO and the GATT, where knowledge was increasingly being treated as property subject to trade principles".¹¹² Now the shift was to another forum, this time with greater participation from un-elected corporate participants headed by the CEOs of

¹¹¹ WIPO, like other specialised UN agencies, has its own constitution, elected executive head, governing bodies, staff and programmes. Member states make up its governing bodies, but it has the mandate to set its own destiny. WIPO, *Op cit*, p. 28.

¹¹² Braithwaite, J. and Drahos, P. (2000). *Op cit*, p. 29.

transnational companies, who appeared bent on establishing stronger IP rules and encouraging greater trade liberalisation measures.

On another level the developing states preferred the 'devil they knew' in WIPO as the lead institution given that this organisation and others, including UNCTAD, supported diverse IP policies and institutions in developing states.¹¹³ In 1976 UNCTAD set in process the aims of reciprocity outlined in the GATT framework by establishing a code to facilitate the transfer of technology that would, amongst other criteria, put controls on royalties and eliminate price-fixing and other restrictive practices hampering the development of new technologies in developing states.¹¹⁴ Reciprocal measures were short-lived when the code was stopped in 1985 after the developed states hardened their attitude to the developing world. As Lea (2002) explains, "thereafter, not only were old licensing practices retained but, dealings of all sorts were increasingly put on a strictly commercial, rather than humanitarian, footing".¹¹⁵ Arguments by developing states against strengthened IP rights or other forms of trade protection risked attracting trade sanctions and were met with instructions from the WB and IMF that structural adjustment policies were a necessary step despite a 1979 GATT decision affirming that a Work Programme reflect "Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries".¹¹⁶ Throughout the 1980s and 1990s the developing states, including China, India and Brazil, faced repercussions in the form of company mergers, cross-border alliances, and capital trading in Anglo-American states that elevated market economic policies over social benefits that might have led

¹¹³ Doern, G. B. *Op cit*, p. 93.

¹¹⁴ Lea, G. (2002). 'Digital Millennium or Digital Dominion? The Effect of IPRS in Software on Developing Countries', P. Drahos and R. Mayne (eds), *Global Intellectual Property Rights: Knowledge, Access and Development*, p. 151.

¹¹⁵ *Ibid.*

¹¹⁶ World Trade Organization, (2001). *Ministerial Declaration, Doha WTO Ministerial*, retrieved 9 April, 2002: www.wto.org/english/thewto_e/minist_e/min01_e/minidec_e.htm. p. 10.

to greater reciprocal trade outcomes between the developed and developing world than was the case.¹¹⁷

The push by regional trading blocs, transnational corporations and the most powerful states for strengthened rights continued creating pressure on already vulnerable economies, especially in parts of Africa, Asia and South America. Under these market conditions conflict arose not only between rich and poor states but also between WIPO, under whose aegis a mandate to regulate IPRs had long been established, and GATT proposals to establish a global trading organisation. Disagreements centred on how, and in whose interest, the functional rules of the new global regime would operate. Drahos and Braithwaite (2002) note how in 1992 the then Director-General of WIPO, Arpad Bogsch, had written “in somewhat miffed tones that the GATT was not even a proper international organisation”.¹¹⁸ In an interview (conducted in 1994 by Drahos and Braithwaite) this retort was mentioned by a US negotiator who commented “that with the pen about to be taken out of his hands on the writing of intellectual property standards, its status as a non-international organisation must have made Bogsch’s loss of power even more galling”.¹¹⁹ The re-organisation of GATT was, in itself, a strategic commercial response by the industrialised member states to the prickly issue of how to obtain intangible property rights that would protect corporate ownership and control over new knowledge technologies which, by the 1990s, were coterminous with significantly increased revenues from intangibles such as services and IPRs, for domestic product growth.¹²⁰

¹¹⁷ Sassen, S. (1998). *Globalization and its Discontents: Essays on the New Mobility and Money*, p. 1.

¹¹⁸ Drahos, P. with Braithwaite, J. *Op cit*, p. 108.

¹¹⁹ *Ibid.*

¹²⁰ Lea, G. *Op cit*, p. 151.

(D) The Final Document: TRIPS and the WTO

By 1994 political and economic pressure had been brought to bear on developing member states to accept minimum standards of IPRs and institute the new global rules into their national legislation in compliance with WTO rules. TRIPS resulted in a comprehensive statute for the governance of intellectual property not previously recognised to any extent in the history of global trading relations. The Agreement signified a clear acknowledgement of the technological status and power of the patent registration process, the commercial value of copyright and the core business/trading worth of trademarks. Further, it demonstrated a well thought out strategy devised by entrepreneurial individuals and powerful economic agencies to procedurally harness knowledge for their own ends. While these groups defined TRIPS as a matter of simple justice it was, in reality, a matter of complex injustice pulling “off a huge structural shift in the world economy to move monopoly profits from the information-poor to the information-rich” countries.¹²¹

The global importance of intellectual property rights was integrated into the broader context of international trade law for the first time in history inclusive of rights and obligations that effectively brushed aside dissent to achieve consensus for the on-going trade liberalisation order.¹²² Lal (2002) observes:

The proponents of the WTO, and more generally regional free trade associations, speak in an idiom which puts an onerous burden upon those who might wish to dissent from the promising vision to which they appear to be beholden. When world order is invoked, just whose world is serving as the template for understanding? What does it mean to speak of order, and, what languages — of discipline, chastisement, enforcement, pacification, and exclusion — are summoned by the idea of order?¹²³

For the Quad countries in particular, TRIPS enhanced the commercial value of technological knowledge accumulated over a significant period of industrial

¹²¹ Drahos, P. with Braithwaite, J. *Op cit*, p. 197.

¹²² Drexler, J. (1996). ‘The TRIPs Agreement and the EC: What Comes Next After Joint Competence?’ in F. K. Beier and G. Schriker (eds), *From GATT to TRIPs: The Agreement on Trade-related Aspects of Intellectual Property Rights*, p. 18.

¹²³ Lal, V. *Op cit*, p. 72.

expansion and reinforced the dominance of economic liberalisation strategies built up since World War Two. The 1995 TRIPS Agreement realised company capacity to attain full protective rights for the competitive nature of innovation within a trading framework which conferred on all member states an American-style minimum standard for intellectual property rights in the global trading system. As a legal document the Agreement is unique in the way it modified and supplemented previous conventions and rules rather than attempting the lengthy process of amending the pre-existing regimes.¹²⁴ Part 1 and 2 of TRIPS reinterprets, and in places, adds levels of protection for intellectual property. Part 3 provides procedural rules encompassing enforcement provisions, while Part 4 provides precise details relating to acquiring IP, and lays the groundwork for the dispute settlement mechanisms to operate under the umbrella of the newly formed WTO.¹²⁵

From its inception, TRIPS functioned as an example of 'hard law' at work, its purpose being: "to oversee an integrated dispute settlement regime and to undertake a proactive trade policy surveillance role".¹²⁶ Strong dispute settlement procedures and enforcement jurisdictions were part of the Agreement requiring countries whose domestic regimes were weak to up-grade to minimum standards.¹²⁷ To comply with TRIPS the developing countries had a transitional period of four years and, for the least developed countries, an additional six years or eleven years in total were granted.¹²⁸ Rucipero (2001) reports on a 1994 World Bank cost analysis for implementing TRIPS in the least developed member states at a first year financial outlay of around US \$20million. By 1997 the Bank had reassessed the cost of putting into practice three MTAs (including the necessary Sanitary and Phytosanitary Regulations, TRIPs and Customs Valuation) at a much higher rate than the earlier

¹²⁴ Reichman, J. H. *Op cit*, p. 20.

¹²⁵ See the WTO website for full details.

¹²⁶ Trebilcock, M. J. and Howse, R. (1995). *The Regulation of International Trade*, p. 38.

¹²⁷ See Doern, B. G. *Op cit*, p. 93. Gervais also makes the point that Annex 1c that established the WTO Agreement is multilateral given that it takes into account the above mentioned treaties and an agreement between WTO and WIPO. Gervais, D. *Op cit*, pp. 27-28.

¹²⁸ Michalopoulos, C. *Op cit*, p. 130.

estimation.¹²⁹ And while the developing states were not obligated to comply with WTO minimum standards for intellectual property until 2000 a large number failed to meet the criteria and stand in technical breach of the regulations.¹³⁰

The onerous cost of implementing TRIPS for the least-developed states and some developing states hinges on the capacity to participate fully in IPE. An in-capacity to extract knowledge benefits from trade competitors is one factor amongst many for breaches of TRIPS. Dutfield (2003) makes the important point that the cost-benefit structure from the implementation of TRIPs also differs markedly from country to country with issues of market access variable at the highest levels of negotiation:

If TRIPS were fully implemented, rent transfers to major technology-creating countries, particularly the United States, Germany and France, in the form of pharmaceutical patents, computer chip designs and other intellectual property would amount to more than \$20 billion This means that TRIPs represents a \$20 billion plus transfer of wealth from the technology importing nations many of which are developing countries, to the technology exporters, few, if any, of which are developing countries, that may or may not be outweighed by future gains.¹³¹

A number of conclusions can be drawn from this analysis. First, for the developing states TRIPS has seen heavy restrictions placed on their ability to exchange goods and services, not only as a result of harmonisation but also from protectionist practices and the impact of trade law. TRIPS rules and regulations are demanding and complex requiring significant infrastructural legal services to effect trade: less-developed states, in particular, lack these services. In 2000 international capitalist George Soros expressed reservations about the WTO's regulatory global reach

¹²⁹ Rucipero, R. (2001). 'Rebuilding Confidence in the Multilateral Trading System: Closing the 'Legitimacy Gap'', in G. P. Sampson (ed) *The Role of the World Trade Organization in Global Governance*, p. 52. See also UNCTAD/TDR/14 (1994), August Supplement, Geneva, p. 202, and UNCTAD, *The TRIPs Agreement and Developing Countries* (commissioned by the World Intellectual Property Organization), UNCTAD/ITE/1. 1 March 1997. For multilateral trade agreement figures see Finger, J. M. and Schuler, P. (1999). 'Implementation of the Uruguay Round Commitments: The Development Challenge', A Paper Presented to the Conference on the WTO Negotiations, September, Geneva.

¹³⁰ Short, C. (2002). 'Making the Development Round a Reality', in G. P. Sampson (ed), *The Role of the World Trade Organization in Global Governance*, p. 72.

¹³¹ Dutfield, G. *Op cit*, p. 20.

referring to the organisation as “a rather opaque institution established by horse-trading behind closed doors and with rules that are more complicated than the US Internal Revenue Code”.¹³² As Lea (2002) says: “behind TRIPS lurks the spectre of unilateral action by developed nations: TRIPS was supposed to eliminate this possibility but it appears that the US and many others retain their capacity to strike out” through sanctions and trade protectionism.¹³³ Results from a 2001 assessment on the Uruguay Round by UNCTAD suggests that developing state interests have been compromised by high prices for technology and demands to strengthen rights which are not squared with the transfer of technology. TRIPS had negative potential to raise costs for developing countries seeking imported technologies which could be deflected through greater opportunities for technology transfers, especially new technologies. While “the former seems to have materialised, [the] latter continues to be no more than an aspiration for many developing countries”.¹³⁴

Thus, it is clear that strengthened IPRs and technological deficits compromise reciprocity represented by on-going state trading asymmetries resulting in compromised social development and, by implication, trade liberalisation. If the least developed countries are to protect their knowledge resources, as well as trade out of the economic difficulties many face, then on-going consideration needs to be given to how IP rights contribute or detract from technological capacity building. More empirical studies are required on the impact of trade protectionist policies and the position of IP as part of trade agreements when transfers are made from the rich to poor states. The contribution of reciprocity needs to be measured against the regulatory strands of trade law so that obligations toward rewards and benefits can be met on a collaborative rather than resource ownership basis where wealthy state views of accumulation predominate.

¹³² Soros, G. (2000). *Open Society: Reforming Global Capitalism*, p. 349.

¹³³ Lea, G. *Op cit*, p.154.

¹³⁴ Rucipero, R. *Op cit*, p. 53.

At another level the political debates surrounding IPRs are not simply a reflection of long-standing North/South development issues. As has been illustrated with reference to geographical indicators TRIPS gives rise to tensions not only within poor states but also surface in trade bargains within and between wealthy developed states. While TRIPS is significant for the levels of dissent and coercion it inspired arising from historical experiences, it has also created space for extended dialogue between competing interests opening up some areas of trade to greater bargaining. This is especially noticeable in high tariff areas and is pertinent because across the key categories of intellectual rights “protection was largely to be in the form of rights for foreign nationals”.¹³⁵ Yet in a post-TRIPS environment the extent to which parties resort to protective arguments and conveniently uphold the rhetoric of free trade while eschewing reciprocity at the same time, indicates rifts in the processes to secure knowledge transfers. In addition, the political endorsement of expanded property rights and the regulatory direction of capital accumulation toward the ownership of knowledge resources have been significant whereas labour standards, environmental protectionist policies, and consumer rights have failed to receive the same regulatory attention.¹³⁶ Curiously, “all of these functions, except one — free trade — have been ruled out of the equation by US business objections”.¹³⁷ The reasons for this are explored in the next chapter analysing knowledge as property.

V. Conclusion

This chapter has outlined and discussed the connections between tangible and intangible property as well as the credentials and applications of patents, copyright and trademarks. Significant changes to the public good foundations that shape IPRs through re-regulation, including expanded timeframes and legal interpretations based on trading imperatives, have been examined with reference to economic

¹³⁵ Arup, C. (2004). ‘TRIPs: Across the Global Field of Intellectual Property’, *European Intellectual Property Review* (1), p. 7.

¹³⁶ Maskus, K. E. *Op. cit.*, p. 1.

¹³⁷ Monbiot, G. (2001). ‘Governing Globalization [Interview and Debate]’, Caspar Henderson Open Democracy, retrieved 11 December, 2001: www.monbiot.com/dsp_article.cfm?article_id=475, p.1.

utility. The impact of commercialisation on reciprocity was analysed in section three where the re-regulatory model used to frame TRIPS was shown to have limited the application of reciprocity for a number of important reasons. First, the neo-liberal market model, by virtue of its emphasis on private power, only allows partial explanations about issues at the centre of disputes over IP. This is seen in the situation where, over time, the impetus of free trade and market access has worked against reciprocity by intensifying unilateral responses from the strongest states toward weaker trading partners supported by a range of trade laws. These have induced IP compliance for the most part, and are indicative of a powerful shift away from TRIPS when parties are not disposed to comply with rules that impact upon their domestic economic self-interest. There are success stories where weak states have won disputes against strong states and corporations through WTO enforcement procedures. However, the situation remains that the strong states are exporters of intellectual property and the weak states receptors of standards based on Western values and the economic considerations of commercial authority with its overarching material power that shapes the access and dissemination of knowledge.

Second, while IPRs are private rights, under the WTO they are given a liberal trading function that puts costs back on those least able to pay while providing significant benefits for those with the capacity to pay when employed alongside trade law and protectionism. Third, the re-regulation of rules of ownership and control are clearly in favour of international markets where the strongest states and owners of IP enjoy monopoly control over knowledge that is detrimental to local innovation and discovery across a range of strong and weak states. The predominance of commercial attitudes toward intellectual property supported by the strongest states and sector industries will remain unchanged if the legal dimensions of IP are not challenged by the requirements of reciprocity. The importance of reciprocity and its social significance to trading partnerships based on equivalence is jeopardised by re-regulatory rights that concentrate knowledge

ownership in an oligarchic manner. Sound legal interpretations and dispute mechanisms can offer effective solutions for building reciprocity but, by the same token, the current legal framework for IPRs can preclude successful institutional responses because governing priorities are so inextricably linked to commercial imperatives diminishing prospects for reciprocity. The next chapter considers in more detail the impact of knowledge as property, illustrated in on-going arguments related to the commercial imperatives of IP and examines the response, or lack thereof, by governments and corporations to shape strong and durable social prospects capable of encompassing capital and applied science in reciprocal trade mechanisms that attract public good outcomes.

CHAPTER SIX

KNOWLEDGE AS PROPERTY

This chapter advances the theme of knowledge as property defining and illustrating in greater detail consequences for reciprocity from commercialisation. The impact of trade on knowledge, and its technological imperatives in relation to the norms of reciprocity as developed in chapter two, has not been widely addressed in IPE despite the governance of IPRs being a significant political issue characterised by knowledge inequalities between individuals, groups and states. The first section examines the historical background of knowledge as property under three subheadings: labour relations and outsourcing, the internet and reciprocity, and markets for patents in relation to TRIPS. The second section details the ways in which neo-liberal capitalism and competitive demands for knowledge are inimical to free trade. Section three expands on the discussion of piracy looking in particular at the impact of IPRs on developing states followed by an analysis of bilateral agreements. The fourth section examines the regulatory mechanisms of TRIPS pointing to disparities between the governing framework and reciprocity and democracy.

This chapter develops two significant observations: first, that TRIPS strengthened the boundaries of knowledge on the pretext of opening up markets to free trade aimed at spreading the benefits of knowledge widely and, second, that the post-TRIPS stage of trade integration and liberalisation has been largely characterised by the same political features of asymmetrical trade as when the Agreement was brokered, intimating that efforts to create and diffuse technologies in a reciprocal manner through a trade-related regime is constrained by global governance processes. This chapter addresses some of the key reasons for this situation and the egregious results.

I. Historical Background of Knowledge as Property

Most innovative technologies are modifications of multifaceted aspects of knowledge adapted from previous attempts at discovery.¹ As Halal (1999) observes:

Previous economic revolutions exploited new technology but with severe limits. The agrarian revolution spawned civilisation by providing secure food supplies – but people still lived in primitive conditions and fought over limited resources. The industrial revolution harnessed machines to provide material goods – under threats of nuclear war and environmental destruction. The information revolution is fundamentally different because it taps a resource that is almost limitless and especially powerful. Unlike physical resources – land, labour and capital – knowledge constantly is being created, and the supply is inexhaustible, so it resolves the age-old clash over limited means. I think it is accurate to say that for the first time we have access to a resource that is boundless.²

The early 20th century saw the extraordinary rise in the development of new forms of knowledge and the application of innovative technologies leading to a rapid increase in the range of manufactured products. High levels of research and investment met domestic demand for new consumer goods and drove the capitalisation of international production into “things you climbed into, such as cars and mechanical equipment”.³ This dramatic transition period of industrial expansion intensified following World War Two with the establishment of trusts and cartels consolidating trade and forming monopolies over vast natural resources using intellectual property rights to forge agreements between states and firms.⁴ Patents and other property rights, while still benign legal instruments under state control, served product growth and wealth-creation in a number of key cartels which “were woven together through the thread of intellectual

¹ Comor, E. A. (1999). ‘Governance and the Nation-State in a Knowledge-Based Political Economy’, in M. Hewson and T. J. Sinclair (eds), *Approaches to Global Governance Theory*, p. 119.

² Halal, W. E. (1999). ‘The Infinite Resource: Mastering the Boundless Power of Knowledge’, in W. E. Halal and K. B. Taylor (eds), *21st Century Economics: Perspectives of Socio-economics for a Changing World*, p. 54.

³ Kaye, J. (2000). ‘Knowledge: The 21st Century Asset’, *Royal Society of Arts*. 4 (4), p. 48.

⁴ Trusts had formed in the United States by the 1890s. They were large firms that held political sway by virtue of the large numbers of employees and the extent of their business connections. Cartels had a European base but rapidly expanded to include organisations outside that sphere of influence such as OPEC, which brought together oil producers to set prices and control competition in the Middle East. See Sims-Taylor, K. (1996). ‘Human Society and the Global Economy’, retrieved, 9 November 2005: www.distance-d.bcc.ctc.edu/econ100/ksttext/oligopoly/oligopoly.htm.

property agreements. Indeed, hardly any industry escaped the attention of intellectual property law.”⁵

Cartels represented a new phase in the way economic power was organised, sanctioning and giving veracity to the role of business to capitalise on knowledge resources through monopolisation. Cartels emphasised their position of strength by trading as giant corporations concentrated around subsidiary companies that expanded into all manner of product diversification based almost exclusively on the capitalisation of intangible ideas and the technological application of knowledge innovations. While cartels have survived as a form of monopoly, changing patterns of knowledge production have made way for the development of new types of monopoly ownership associated with information communication technologies. Accompanying these developments was a rise in domestic trade protection seen in measures that included price-fixing on commodity items to establish and maintain competitive advantage.⁶ In the span of four decades the symmetry between the knowledge component and the resource components of production, has undergone rapid modification.⁷

The emerging strategic use of IPRs, particularly by the highly developed states and the corporate sector, has roots in industrial power and the globalising features of trade integration. But it has been the mobility of global capital that has made globalisation such a powerful force of commerce. As Gill (2002) notes:

Of the 17 industrial countries for which there is data, exports as a percentage of GDP in 1913 were 13 per cent; not much below the 1993 level of 14.5 per cent. In 1996 capital transfers as a share of industrial-country GDP were still smaller than was the case in the 1890s. However, the scale of globalization today is much greater. The stock of foreign direct investment in 1914 was \$143 billion (in 1990 dollars), compared with well over \$2 trillion in 1993.⁸

⁵ Drahos, P. with Braithwaite, J. (2002). *Information Feudalism Who Owns the Knowledge Economy?* p. 54.

⁶ Strange, S. (1996). *The Retreat of the State: The Diffusion of Power in the World Economy*, pp. 147-160.

⁷ Kaye, J. *Ooc cit*, p. 148.

⁸ Gill, S. (2002). ‘The Political Economy of Globalization: The Old and the New’, in E. Aksu. and J. A. Camilleri, (eds), *Democratizing Global Governance*, p. 77.

The critical feature of contemporary economic growth is manifest in the strategic shift of finance capital into knowledge industries heavily promoted by the most powerful trading states through market liberalisation.⁹ Indeed, knowledge has acquired an instrumental value driven primarily by the deregulation of financial markets and the commercial rhetoric that has grown up around its market use. According to Illich (1978):

Knowledge is now regarded simultaneously as a first necessity and society's most precious currency. The transformation of knowledge into a commodity is reflected in a corresponding transformation of language. Words that formerly functioned as verbs are becoming nouns that designate possession Dwelling, learning and healing were once designated activities, they are now services or commodities to be delivered.¹⁰

By the 1990s the application of knowledge had produced tools of communication small and powerful enough to be put in a pocket.¹¹ The rapid global transmission of communications and the multifarious use of new technologies conducted through high speed satellites, multi-media messaging and digital communication networks provided a springboard for portfolios of IPRs to amass around knowledge industries, increasing access to knowledge resources most spectacularly in developed states. Key to the commercial relationship developed between scientific advancement and markets for knowledge is the transformation of knowledge into information, "a necessary condition for the exchange of knowledge as a commodity".¹² The distinguishing features between knowledge and information and commodification and commercialisation, established in chapters one and three, are further demonstrated in relation to arguments relevant to this chapter that both knowledge and commercialisation are part of a process "by which communities produce, exchange, and use information"

⁹ Tehranian, M. (2002). 'Globalization and Governance: An Overview', in E. Aksu. and J. A. Camilleri, (eds), *Democratizing Global Governance*, p. 7.

¹⁰ Illich, I. (1978). *Toward a History of Needs*, p.79.

¹¹ Cumings, B. (2000). 'The American Ascendancy: Imposing a New World Order', *The Nation*, 270 (18), p. 15.

¹² Forero-Pineda, C. and Jaramillo-Salazar, H. (2002). 'The Access of Researchers from Developing Countries to International Science and Technology', *International Social Sciences Journal*, 171, p. 131.

through the application of knowledge in pursuit of commercial gain.¹³ The political support for knowledge as property is grounded in state imperatives with a corollary in the economic value of IP to competitive trade and employer/labour relations to advance domestic wealth. For weak states, insufficient access to knowledge technologies and a lack of infrastructural mechanisms to deal with instituting IPRs pose significant obstacles. The extent to which different states can commercialise knowledge and engage in reciprocal outcomes is discussed in this next section in terms of labour relations and the issue of outsourcing services.

(A) Labour Relations and Outsourcing

Labour is integral to markets in technology which, for the purposes of this study, refers to the creative capacity, use and diffusion of new technological innovations endorsed by the accretion of IPRs. The changing nature of labour tied to new technologies led Thurow to observe in 1996 that, for the first time in history, “the world’s wealthiest man, Bill Gates, is a knowledge worker and not a petroleum magnate, as has been the case for the past one hundred years”.¹⁴ The function of labour and its connections to IP ownership and control spans core and non-core specialist areas based around commercial activity related to business processing including software development, IP services, information data collection, and distribution. These specialist areas offer a range of new employment opportunities for NICs. In states such as India, China, Bangladesh and the Philippines, an already relatively well-educated labour force with increasingly literate populations has been mobilised to undertake outsourcing labour contracts. A new class of knowledge worker has emerged differentiated from white collar workers in developed states by operating in different time zones, at reduced labour costs, processing set tasks from which the owners of capital can extract economic value for the exchange of information. The substitution of knowledge through other knowledge has significant implications for workers in

¹³ *Ibid.*

¹⁴ Thurow, L. (1996). ‘New Rules: The American Economy in the Next Century’, in P. O’Meara *et al.*, (eds), *Globalization and the Challenges of a New Century: A Reader*, p. 244.

all states where the transmission and function of work is altered: in 1911, 8.5 per cent of the developed states' workforce was involved in transacting information. This rose to 17 per cent in 1947, 25.5 per cent in 1971, and 41.5 per cent by 1981.¹⁵ Information economies lend themselves to global networks of economic activity where knowledge and information rapidly cross national boundaries making outsourcing an integral part of global trade integration.

Reciprocal opportunities from this intensification of electronically centred forms of exchange are assisted by the establishment of new modes of economic importation and exportation developed at relatively minimal costs to the owners of capital which, for corporations, makes good economic sense. To maintain their competitive edge corporations draw on IPRs, attaching trade secrets to outsourcing contracts encircled by stringent privacy clauses. Tacit knowledge and the personality and marketing skills of workers are bound by rules of secrecy and property tying knowledge and ideas to commercial imperatives. In support of corporate interests the US called on countries including China, India and the Philippines to strengthen IP laws around knowledge transactions that serve to protect the capital and ownership of the knowledge labour force. May (2002) explains how the resources of labour are being commercialised through IP as "practices become formalised in work manuals and 'best practice', so skilled segments of labour see more and more of their 'own' resources commodified".¹⁶

Issues of employment such as job security arise for knowledge workers in developed states but impact markedly on workers in developing states where wages in many industrial sectors are low.¹⁷ The view that TRIPS has been most beneficial to developed state workers finds support in the technological acumen of those states where maximum advantage has already been extracted through the ownership and control of new areas of knowledge. TRIPS promotes further gains for these states and workers from the transaction of new knowledge adding

¹⁵ Ward, I. (1995). *Politics of the Media*, p. 281.

¹⁶ May, C. (2002a). 'The Political Economy of Proximity: Intellectual Property and the Global Division of Information Labour', *New Political Economy*, 7 (3), p. 322.

¹⁷ *Ibid.*, p. 334.

to economic growth with the industrialising developing states providing lower cost components, products and services, while the wealthy states generate and supply their own competitors with advanced products of innovative knowledge technologies and ideas.¹⁸ Some commentators have pointed to a growing digital divide¹⁹ revealing not only an absence of reciprocal outcomes but also strong political relationships between IPRs and markets in technologies mirrored by changes to labour market structures. These changes are occurring in the developing world and impact on the economic interests of many of most highly developed states where governments are faced with reforming labour law as rival powers, such as China, show their ability to utilise cheaper labour and technologies to greater effect than some of the more advanced economies. Corporations, for their part, continue to shift their commercial interests across territorial boundaries to achieve the most profitable trading outcomes using labour where it is most cost-effective.

Labour outsourcing from developed to developing states is linked to changing labour-force controls to achieve the most efficient returns for shareholders. For many workers there is no reciprocity in outsourcing with the only outcome the export of domestic jobs. Thus, outsourcing has attracted public criticism, particularly in the US, where the practice of exporting jobs is seen as harmful to the domestic economy. One 2005 report on the extent of outsourcing in goods and services revealed the impact on the US national economy showing that “the US is running a \$125 billion trade deficit with China alone. The US turns over \$1.5 billion per day in its accumulated wealth to pay for all the outsourced goods and services that return to US markets as imports”.²⁰ Mark Clifford has urged the US to overcome its aversion to the highly competitive trade in outsourcing that now accounts for 80% of Hong Kong’s GDP and employs 12 million people in the Pearl River Delta region. In his view, to retain a technological edge the US will

¹⁸ Correa, C. M. (2000). *Intellectual Property Rights: The WTO and Developing Countries*, p. 5.

¹⁹ For one of many informative commentaries on the digital divide see Ramonet, I. (2004). ‘Gaps in the Net’, retrieved 12 May, 2004: *Le Monde Diplomatique*, www.mondediplo.com.

²⁰ Worldwatch, (2005). ‘US Report on Outsourcing’, *Mid-day Report*. (J. Sudbury, Director) Wellington: Radio New Zealand.

need to put more effort into innovation.²¹ Meanwhile, recent IMF and WB research on the transmission of knowledge and the impact of outsourcing on labour in developed and developing economies sees reciprocal advantages for all states through mutually supportive arguments that technology has made trade in services viable with outsourcing, resulting in insourcing.²² Certainly, for the less-developed states the trade in services provides an avenue to advance economic trading prospects and is one of the better outcomes of IP developments where competitors at similar economic growth stages can utilise an available workforce and engage in cost-effective technologies.

(B) Internet and Reciprocity

Communications have increased radically since the invention of the internet. In 1998 “the number of internet users in the US was doubling every 100 days ... there were 100 million users the world over compared to a meagre 3 million in 1994”.²³ The burgeoning rate of internet usage does not represent increased quality of transmission or access to technology for many, but it does reveal intense commercial activity around network communication technologies that opens up possibilities for technology transfers if the political will to reciprocate knowledge is present. Yet issues of governance and the effects of the internet on IPRs failed to gain recognition in the 1996 TRIPS Agreement with Hamilton (1997) noting that despite the exponential growth in internet usage TRIPS made no “concession, not even a nod, to the fact that a significant proportion of the international intellectual property would soon be conducted on-line” with the advent of internet technologies.²⁴ Lessig critiques the US Patent Office and US government for its short-sighted view on the public good value of knowledge in relation to internet innovation and IP development:

Here was a critical new innovation that would significantly affect innovation in cyberspace. Where was the regulatory impact statement?

²¹ Clifford, M. L. (2003). ‘Don’t Blame China for US Job Losses’, *Business Week*, retrieved 24 March, 2005: www.businessweek.com/magazine/contents/03.

²² Amitri, M. and Shang-Jin Wei, (2004). ‘Demystifying Outsourcing: The Numbers do not Support the Hype over Job Losses’, retrieved 9 June, 2006: www.imf.org/external/pubs/ft/fandd2004/12/pdf/amiti.pdf.

²³ Lebedeva, M. (2001). ‘High Technology and World Politics’, *International Affairs*, 47 (2), p. 96.

²⁴ Hamilton, M. A. (1997). ‘The TRIPS Agreement: Imperialistic, Outdated and Overprotective’, in A. D. Moore (ed), *Intellectual Property: Moral, Legal and International Dilemmas*, p. 243.

Here was a government overseeing a radical expansion in patent regulation, within a field that had been the most important component of growth in the United States' economy in the past twenty years. Yet, the government didn't have time to learn whether its patent policy would do any harm or good....²⁵

While the complex issues on internet governance are beyond the scope of this thesis, it is worth noting the way IPRs have encroached on the internet commons raising concerns about how deeply global communication strategies drive the trade in knowledge. Concerns about ownership and controlling authority pervade discussions on the public good value of the net arising from the reluctance of the US Department of Commerce to relinquish its controlling stake in the web. According to Ramonet, ownership rights established through the regulatory frame of IPRs would, in theory, give the US power "to limit anyone's access to any site in any country. It can also block e-mails anywhere in the world".²⁶ For these reasons, the EU and states such as Brazil, China, India and Iran are refusing to be passive bystanders in the current debate over who should control the net. An independent organisation established under the United Nations could assist in addressing issues of authority and while decisions are yet to be reached on who should control the net, the ownership of the internet and associated technologies illustrates tensions and on-going challenges arising from the regulatory endeavours to make knowledge property.

Aside from ownership and control issues, human ingenuity continues to inspire cooperation delivering new ideas where web technologies provide a global forum for reciprocal contributions. Knowledge is encouraged through "new forms of collaborative innovation, whereby ideas and expertise are freely shared, [often] proving more productive than traditional ways of working".²⁷ Indeed, reciprocity appears to be working effectively and can be seen in cooperative methods for sharing knowledge between developed and developing states

²⁵Lessig, L. (2001). *The Future of Ideas: The Fate of the Commons in a Connected World*, p. 211.

²⁶ Ramonet, I. (2005). 'The Spider in the Web', *Le Monde Diplomatique*, retrieved 10 January 2006: www.mondediplo.com p. 14.

²⁷ Aigrain, P. (2005). 'The Internet and Common Goods: Own or Share'? *Le Monde Diplomatique*, retrieved 10 January 2006: www.mondediplo.com, p. 13.

opened up by a surfeit of available free and open source software for use by professional and lay people alike. For May (2006), developments in open source software are not entirely attributable to reciprocity which has been the poor relation to MFN and national treatment (hampered by the promotion of bilateral agreements) under TRIPS. Rather, MFN and national treatment are more responsible for shifting the emphasis on the governance of IP toward sharing by opening up new possibilities for the freer exchanges of knowledge:

MFN ensures that any agreement in favour of a specific country must be extended to *all* other trading partners ... favouritism accorded domestic inventors or prospective owners of IPRs relative to non-nationals is halted; national treatment (article 3 of TRIPs) stipulates that foreign individuals and companies must be treated no worse than domestic companies.²⁸

Cooperation under this ruling has assisted the creation of new sites and expanded knowledge sources in many areas providing an avenue for citizen-run participation. Changes have occurred with non-proprietary software at the same time that new sites continue to reflect business interests made up of extensive commercial networks for the trading exchange of goods and services. Media groups play a large part in advancing the internet as a reciprocal information source and stimulus for knowledge growth and market-place exchange with online trading engaging global audiences and providing communication conglomerates with new sources of revenue and ownership. May (2002) has drawn attention to the way the information economy reflects the continuing accumulation strategies of modern capitalism and how new means of production are “owned by certain important segments of capital, such as multinational content owners — News International or Reed Elsevier — or major software multinationals — Microsoft and Oracle”.²⁹ Despite efforts toward non-proprietary sources of knowledge many corporations continue to seek stronger regulatory controls over new technology in order to gain financially from ownership rights, rather than work out how technology can be used in reciprocal

²⁸ May, C. (2006). ‘Escaping TRIPs’ Trap: The Political Economy of Free and Open Source Software in Africa’, *Political Studies*, 54 (1), p. 129.

²⁹ May, C. (2002a). *Op cit*, p. 322.

trade agreements between themselves and less-developed groups of states. Many states face exclusion from the rewards of technology as trade between the rich and poor is increasingly mediated through royalty payments and licensing agreements based on the exclusive control of resources.

(C) Markets in Patents in Relation to TRIPS.

The continuing growth and global investment in innovation has resulted in markets for complex technologies encircled by IP, in particular patents, serving the economic interests of corporations and the strongest states. As Warshovsky (1994) observes:

Creativity in the form of ideas has replaced gold, colonies, and raw materials as the new wealth of nations The new technologies, new processes, and new products that constitute intellectual property now form the economic bedrock of international trade and national wealth.³⁰

Patents pose a particularly problematic challenge to reciprocity, lying at the cutting edge between ownership and control, market competition and technological innovation. The ability of weak states to enter global markets by developing and integrating new knowledge technologies into their economies may be incompatible with the 'roadblock' of patent protection that already exists around the resources of knowledge. According to Maskus and Reichman (2004), "the ever-increasing levels of protection around information, technology, and creative activity are subject to the exclusive control of IPRs [which] raises concerns about the ability of firms in developing countries to break into global — or even domestic markets — and compete effectively".³¹ The way in which advanced economies and key institutions support patent applications in order to control access rights to knowledge is a political issue that also requires the execution of significant legal expertise to limit patents to the interests and influence of large-scale commercial enterprise. Successive US governments have gained from the provision of legal advisory services in IP that has proved to be a significant source of revenue. For example, the US Patent Office has built a strong

³⁰ Warshovsky, F. (1994). *The Patent Wars: The Battle to Own the World's Technology*, p. 3.

³¹ Maskus, K. E. and Reichman, J. H. (2004). 'The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods', *Journal of International Economic Law*, 7 (2), pp. 281-282.

business oriented toward processing patents in a post-TRIPS environment. There is a certain irony here given a comment by the director of the US Patent Office in 1899 that: “everything that can be invented has been invented, and this office should be abolished as there was no longer any need for it”.³²

The range and scope of patent application has continued to intensify and the bureaucratic administration of IP has expanded to meet demands in areas such as the software industry mentioned in the previous section. In the US, “software-related patents went from 250 in 1980 to 21,000 in 1999, and the number granted has increased eight or nine-fold”.³³ The profits the patent office generates for government are such that Congress and the Patent Office have refused to heed the advice of large, highly competitive software developers like Oracle and Adobe that strengthening IP around certain forms of technology may in fact stifle innovation. Indeed, a company test case brought before the US Court of Appeal for the Federal Circuit in 1998 resulted in the surprising decision that a new kind of mutual service fund based on computer-generated software could be patented, leading to many more patent applications needing to be processed. A raft of patent applications of intangible material to be legally interpreted through rights was tested in law with the result that:

Applications for computer-related business methods jumped from about 1,000 in 1997 to over 2,500 in 1999. High on the list was the Amazon 1-Click Patent, but also on the list were Priceline.com’s reverse auction patent, and British Telecom’s claim that it owned the invention of hypertext links (and hence the World Wide Web).³⁴

The redefinition of novelty and originality agreed upon for business processes now stood within the frame of legal acceptability despite companies such as Adobe claiming business processes should not be subject to protection. There is a certain irony that large corporations (who would seemingly have much to gain) opted for open competition believing it economically imprudent to encircle the

³² Hovey, C. (2002). *The Patent Process: A Guide to Intellectual Property for the Information Age*, p. 9.

³³ Lessig, L. *Op cit*, p. 208.

³⁴ *Ibid*, p. 209.

industry with patents. Lessig (2001) cites Adobe executive Douglas Brotz's arguments against patent protection:

I believe that software per se should not be allowed patent protection. I take this position as the creator of software and as the beneficiary of the rewards that innovative software can bring to the marketplace [and] because it is the best policy for maintaining a healthy software industry, where innovation can prosper Washington was not deterred, and the push for software patent did not go away, quite the opposite. Over time the push was for even broader patent protection, this time to cover business processes as well as software inventions.³⁵

Those distrustful of corporate aims might say their IP portfolios were already well served with patents and pending patents. Then again, perhaps these companies were more interested in their ability to forge company mergers and acquisitions than with patent applications. In any event, the inference that may be taken is that patent ownership would naturally follow from corporate monopoly status anyway. In a 2002 press release the CEO of IP.com stated:

Patent applications are being filed at breakneck speed extending beyond technology and manufacturing innovation to encompass business-related processes and methods. In some cases, ownership of patents, not products and services, establishes who dominates a market. This is resulting in savvy intellectual property companies – even previously unheard start-ups – gaining enormous leverage over competitors.³⁶

Tying patents to new technology raises questions about the reciprocal value of public goods resulting from innovation. For Lessig (2001) government decision-making seems unable to gauge whether patents are a help or hindrance to the public's hold on knowledge resources.³⁷ Singling out the corporate acquisition of patents as the most highly commercial instrument in the intellectual ideas toolbox, Hovey (2002) observed that, "from 1977 until today, approximately four out of every five patents has gone to corporations. Individual companies, more often than not, turn to incorporate innovation before filing for a patent in order to gain more clout in financing, expertise and marketing".³⁸

³⁵ *Ibid*, p. 208.

³⁶ Hovey, C. *Op cit*, p. 3.

³⁷ Lessig, L. *Op cit*, p. 209.

³⁸ Hovey, C. *Op cit*, p. 10.

IPRs are integral to the global trading system yet the respective rights themselves are rarely traded (mainly because they are equipped with timeframe and expiry date), making it difficult to determine the extent of private reward from patents in any way other than by looking at the share price index of publicly quoted companies. Additional information on the importance of IP to the IPE comes from the World Bank reporting in 2002 that, “the United States, in particular, will benefit from enhanced international patent protection by an estimated 19 billion dollars per year”³⁹ providing powerful support to the proposition that IP protection benefits the most highly developed states and financially rich regions through forms of legal control initiated by trade policies and other legal instruments. The support some governments give to corporate bodies seeking patents for proprietary purposes challenges the production of ideas and its public purpose now and in the future. In understanding why patents are acquired and how they are used by business, Dixon and Greenhalgh (2002) refer to the research by Hall and Zeidonis (2001) who, after surveying 100 firms in the semi-conductor industry, conclude that strategic purpose lay behind the accumulation of patent portfolios: IPRs are being used strategically by firms as a competitive instrument.⁴⁰ The rate at which patents are being processed indicates that key industries are assisted in their acquisitive drive to capture potential future knowledge, and that prior art is not being accorded the level of respect traditionally required for IPRs to give legal protection to public domain knowledge. It also indicates that the primacy of reciprocity needs restoring as IP lawyers and business entrepreneurs are becoming very adept at finding loopholes in the regulations that they can exploit to escape from TRIPS articles if it suits their purpose. The next section discusses the wider implications of property as knowledge pertaining to neo-liberal capitalism followed by an examination of links between free trade and reciprocity in relation to IPRs.

³⁹ Dixon, P. and Greenhalgh, C. (2002). ‘The Economics of Intellectual Property: A Review to Identify Themes for Future Research’, *Oxford Intellectual Property Research Centre*, p. 46.

⁴⁰ *Ibid*, p. 22.

II. Neo-liberal Capitalism

Bourdieu's conceptualisation of neo-liberal capitalism as a deliberate project that has worked against reciprocity by "dressing up the most classical presuppositions of conservative thought of all times and of all countries, in economic rationalisation" is endorsed by Gray⁴¹ and Callinicos⁴² who claim neo-liberalism is less of a doctrine or an ideology than a political project for the reconstruction of economies and society through technological ownership and control. While a necessary aspect, ideology does not adequately explain how public knowledge became tied to propertied relations or what happened to reciprocity in the process. On the fundamental character of the neo-liberal project Reich (2000), Cox (1992), Panitch (1992) and Gill (1993) are amongst many who have noted that the state was no longer prepared to defend domestic welfare from external pressures to the extent it had done in the past. Instead, competitive strategies to devolve responsibility to the market with the support of private power found application in instrumental rules. Reich (2000) comments on how:

The neo-liberal state became an instrument of globalisation ... and the encoder of modern capitalism. Neo-liberal processes resulted in a select number of powerful states, (the U.S., Europe, Japan and Canada), concentrating their competitive trade strategies around key institutional forums such as the WTO, the EU and the G8. The realignment of political affiliations through the neo-liberal project was spear-headed by proponents of free trade including economists, legal experts and strong WTO members.⁴³

The rhetoric of market liberalisation and demands from capital offered a rationale for the private protection of intellectual property despite the undermining of reciprocal traditions and the exclusion of economic opinions outside a market frame of reference. For Lal (2002) the all pervasive market rhetoric saw any "intellectual, social, cultural or economic intervention outside the framework of modern knowledge ... as regressive, a species of indigenism,

⁴¹ Gamble, A. (1999). 'John Gray and Globalization', *New Left Review*, 236, p. 119.

⁴² Callinicos, A. (1999). 'Social Theory put to the Test of Politics: Anthony Giddens or Pierre Bourdieu', *New Left Review*, 236, p. 86.

⁴³ Reich, S. (2000). 'The Four Faces of Institutionalism', *Governance: An International Journal of Policy Administration and Institutions*, 13 (4), p. 511.

the mark of obdurate primitives, and certainly futile".⁴⁴ By the late 1990s there was a global backlash against the owners of capital and the neo-liberal project from a number of quarters including developing states and citizen groups. Social activists foreclosed the 1999 WTO talks in Seattle and set the scene for later resistance and disruptions to global forum meetings at G8, Davos and regional trade summits. Gamble has noted that Gray, one of neo-liberalism's most trenchant critics, identified the neo-liberal project as the greatest contemporary threat to human well-being.⁴⁵ Whether economic rationalism could ever be reconciled with the goal of free trade and open markets is the subject of disagreement. Undoubtedly, arguments persist that free trade offers more advantages to create wealth by integration for large numbers of states and their populations than any other system. Importantly, in large measure, free trade continues to be roped off by protectionist policies that negates any virtue it contains as a panacea to the ills of economic under-achievement. Ideas about the merits of free trade peaked in the late 1990s and while some advocates of free trade have oversold the reciprocal trade benefits to be derived from its political foundations, political difficulties arise from inadequate analysis and a reliance on uni-causal economic frameworks driven by ideological factors that ignore reciprocity.

(A) Free Trade and Reciprocity

Malhotra (2002) summarises free trade in the following terms:

The principle justification of the current world trading system and its main global institutional mechanism, the WTO, is that they promote free trade. In practice, they function primarily to facilitate negotiations and bargaining about market access on a reciprocal basis between countries. 'Free Trade' is not the typical outcome of this process; nor is enhanced consumer welfare, much less development. Trade has become the lens through which development is perceived, rather than the other way round. The net result has been the confusion of ends with means. The obvious conclusion is not that trade is undesirable but that the benefits of trade openness for development have been greatly oversold. Deep trade liberalisation cannot be relied upon to deliver high rates of economic

⁴⁴ Lal, V. (2002). *Empires of Knowledge: Culture and Plurality in the Global Economy*, p. 122.

⁴⁵ Gamble, A. *Op cit*, p. 118.

growth or poverty reduction, and does not therefore deserve to be accorded the high priority it typically receives in the development strategies of leading multilateral organisations.⁴⁶

The policies of economic competition that drive trade leave social alleviation in its wake. Trade liberalisation and strategies to open access up to markets has stood at the forefront of institutional leadership in the WTO and other trade forums. For political and economic reasons competition has been aligned with development. Former Director-General of the WTO, Mike Moore, does not waver in his defence of free trade as the arbiter of economic prosperity for all states, arguing that there is overwhelming evidence that free trade is 'good' for countries.⁴⁷ Moore argues that countries which may be politically thwarted from lowering trade barriers can be put on the path to free trade by adopting Bhagwati's idea of 'sequential reciprocity' arising from unilateral action. Sequential reciprocity means that once one country opens up markets to competition others proactively do likewise. This view of reciprocity as an 'active ingredient' to foster and expand trade is employed to "enable politicians to mobilise the pro-trade groups, who will visibly profit from new export markets, and counter the anti-trade, protectionist groups who typically oppose trade liberalisation".⁴⁸

This approach, which puts market competition at the apex of all transactions, has been assisted by protectionism, sanctions and other trade anomalies that contradict the normative goals of reciprocity. The suggestion that free trade and market liberalisation be linked to reciprocity in the manner Moore claims is difficult to achieve. Failure to advance the Doha Round, which stalled without conciliation in mid-2006, reveals that efforts by wealthy states and strong regional partnerships to uncouple trade competition from regulatory mechanisms that might effectively reduce agricultural tariffs and other barriers have largely been expunged. To make trade equivalence measures work by

⁴⁶ Malhotra, K. (2002). 'Renewing the Governance of the Global Economy', in E. Aksu and J. A. Camilleri (eds), *Democratizing Global Governance*, p. 158.

⁴⁷ Moore, M. (2003). *A World Without Walls Freedom, Development, Free Trade and Global Governance*, p. 136.

⁴⁸ *Ibid*, p. 135.

addressing inequalities for poverty-stricken less-developed states requires, at the very least, a move away from the pro-trade, anti-trade dichotomy which itself is problematic. In addition, the failure to allow room for economic viewpoints that diverge from dominant positions, or further development agendas that stand outside the discourse of economic rationality, in the end acts against trade and reciprocity.

The polarisation of competing interests into regional factions also has implications for reciprocity. Regionalism may further impede moves toward sequential reciprocity not only between wealthy and poor states but also by causing friction within and between the newly industrialising states. EU trade Commissioner Peter Mandelson points out that, "70% of the tariffs currently paid by developing countries go to other developing countries".⁴⁹ Rather than achieving reciprocity, competition places strains on trade, development and tariff reductions, and acts against market consensus and collaboration to reduce tariffs. In chapter two the foundation of reciprocity was explicated in terms of mediating fairness through mutual trade benefits demonstrated by restitution and proportionate justice enabling the less-developed states, those beset by weak governance structures and unbalanced trade, to be accorded special and differential trade treatment. The failure of both the rich and the NICs to offer a buffer for the weakest states to compete effectively and reduce trade inequalities continues to be compromised by the mantra of free trade and its ideological underpinnings in market competition. As the solution to the ills of protectionism, free trade, underpinned by trade law, offers little to the poorer states at the bargaining table where their influence and room to manoeuvre is compromised by tariffs and other exclusionary devices.

The 'progressive strategy' of pay-offs underpinning Moore's WTO leadership was predicated on the conviction that free trade and development are indivisible.

⁴⁹ Mandelson, P. (2005). 'Trade and Development: The Road Ahead', Paper Presented at Trade and Development Conference, Brussels, 16 June, 2005, retrieved 20 June, 2006: www.europa.eu/rapid/pressReleaseAction.do?reference=speech/05/358

The Doha agenda would have been further advanced by acknowledging that fair trade and equivalence were clearly the more promising normative public good partners of reciprocity and deserving of more focussed attention in global forums such as the WTO. Instead, the WTO, other regional forums and the G8 have been slow to recognise and adopt alternative trade views in the interests of retaining the economic growth strategies in support of open markets where all states must liberalise and harmonise irrespective of social, cultural or political conditions. A 2003 World Bank study shows “there are incentives for countries to maintain protection in order to extract more concessions from trading partners” as Mandelson notes above.⁵⁰ Lal (2002) draws on Grotius’s elementary principles of fair trade in international law and Kant’s notion of reciprocity through trade hospitality, to argue that strong states have repeatedly eschewed the principle of reciprocity and fairness in trade liberalisation agreements with most of Africa, Asia and elsewhere.⁵¹ Contradictions between the theory of free trade and the dynamic of global competition have intensified around intellectual rights where TRIPS has made property compatible with market demands and restrictive practices. As Castells explains, a paradox is laid bare by “trade restrictions [that function] in a non-disruptive mechanism of control and negotiation”.⁵² Social resistance to the situation in which “80% of the world’s resources are consumed by the richest 20 per cent of the world’s population” is seen in the movement against free trade in favour of fairer trade.⁵³ Importantly, a growing resistance led by activists from a broad spectrum of consumers in developed and developing states are demanding governments and law-makers give more attention to fair exchange through obligations of reciprocal trade.

⁵⁰ Freund, C. (2003). ‘Reciprocity in Free Trade Agreements’, *The World Bank*, p. 1.

⁵¹ Lal, V. *Op cit*, p. 83.

⁵² Castells, M. (1997). *The Power of Identity*, p. 267.

⁵³ Ransom, D. (2000). ‘Fair Trade - Small Change, Big Difference’, *New Internationalist*. 322, p. 10.

III. IP, Trade Protection, Claims and Counter Claims of Piracy

Even where knowledge industries contract work out to less-developed states, foreign-owned corporations transfer profits back “to metropolitan centres where they are re-invested back into knowledge technologies through rights from patents, licensing fees and copyright”.⁵⁴ Sell reports: “In 1995 alone, U.S. multinational manufacturing enterprises ... exports, as measured by royalties and licensing fees, amounted to about U.S. \$27 billion ... while imports amounted to only U.S. \$6.3 billion”.⁵⁵ Such an outcome reflects the active engagement of the private sector in ensuring a positive outcome from the GATT to establish TRIPS. It is a moot point whether or not the lead up to this escalation in revenue from IP rights vindicates the Quad’s urgency to reach an agreement on intellectual property within a trade framework to realise the potential and real wealth from controlling rights over the resources of knowledge. In Farrands’s (1996) view, for the US in particular the importance the government attached to TRIPS at the time had a great deal to do with changing economic interests and protectionism in response to competitive demands rather than issues of piracy. For instance, US trade policy, “always dependent on corporate and political coalitions”⁵⁶ to maintain economic security and strategic industrial decision-making, was becoming more protectionist as its dominant world trading position was threatened by rising Japanese and European power. US determinations to reassert its economic power in the post-Cold War era paralleled then not only tensions between North/North coalitions but also North/South and South/South conflicts which were threatening to eclipse reciprocal trade and obligations toward liberalisation privileged by markets for knowledge.

While the US and EU viewed piracy (those who free-ride on the existing IP of others) seriously, it was the corporations that showed the most concern at the rapid increase in piracy and counterfeiting. While both are age-old problems,

⁵⁴Tehrani, M. (2002a). ‘Taming Capital, Holding Peace’, in E. Aksu and J. A. Camilleri (eds), *Democratizing Global Governance*, p. 32.

⁵⁵ Sell, S. K. (2003). *Private Power Public Law: The Globalization of Intellectual Property Rights*, p. 38.

⁵⁶ Farrands, C. (1996). ‘The Globalization of Knowledge and the Politics of Global Intellectual Property: Power, Governance and Technology’, in E. Kofman and G. Youngs (eds), *Globalization: Theory and Practice*, p. 184.

illegal imitation and reproduction had become more sophisticated and extensive through expanded technologies resulting in trade disputes. To highlight piracy as a trade issue corporations allied themselves to the IPC which lobbied for IP protection to converge with trade policy in Trade Acts such as Sections 301 and 337 of US trade law. Throughout the Uruguay Round the US “used access to its large domestic market as a coercive means to goad other countries into adopting and enforcing stricter IP policies” using trade threats and retaliatory actions through its trade laws.⁵⁷ The move towards establishing more integrated and standardised global forms of regulation for IP became part of a process whereby strong states used regulatory webs of administrative, bureaucratic and legal protocols to enforce procedure for “every facet of economic exchange with economic potential”.⁵⁸

Invoking the various trade acts to achieve IP compliance was pre-empted by the USTR’s study commissioned to review the extent of piracy on US business. The 1988 report by the International Trade Commission (ITC) found that weak IP laws in foreign states opened the way for fledgling industries in developing states to manufacture and sell pirated goods resulting in losses to American corporations of \$23.8 billion in 1986 alone.⁵⁹ Despite criticism of the report from developing states that their industries were meeting market demands for products, the problem was flagged by the ITC as a major issue for global trade because of its affect on the US domestic economy. The annual overall US estimates of \$43-\$61 billion in commercial losses gave the pro-IP business lobby the power to act unilaterally against countries like the Philippines, China, Indonesia, Singapore, Thailand, Korea, Taiwan, India, Brazil and Mexico. Using competition law and aggressive foreign policy actions such as economic

⁵⁷ Sell, S. K. *Op cit*, p. 40.

⁵⁸ Lal, V. *Op. cit*, p. 97.

⁵⁹ Cheek, M. L. (2001). ‘The Limits of Informal Regulatory Co-operation in International Affairs: A Review of the Global Intellectual Property Regime’, *The George Washington International Law Review*, 33 (2), p. 282.

sanctions, the pressure went on developing countries to address their lack of IP protection.⁶⁰

(A) IPRs: Impacts on Developing States

Opponents of TRIPS claim the piracy accusations were harmful to developing states' attempts to compete in global markets and their ability to obtain technology transfers based on reciprocal obligations aimed at economic development. While copying needed to be addressed at a legal level, Patel (1996) considered the US trade response to piracy resembled 'cutting butter with a sledge-hammer'. Penalties for piracy attract a high monetary and economic price often to those who can least afford to pay. Such penalties show the determination of the owners and controllers of IP assets to guard their intellectual "resources and derive benefits from monopolistic use" rather than adhere to reciprocal knowledge exchange.⁶¹ Burrows (2002) sees some irony in the piracy criticisms levelled at developing states:

Many of the products made in the industrial world, almost all its food crops and a high percentage of its medicines have originated in plant and animal germplasm taken from the developing world. First knowledge of the material and how to use it was stolen, and later the material itself was taken. For all this, they said, barely a cent of royalties had been paid.⁶²

And Monbiot (2002) points to the egregious position that most corporations and states owe their foundation, enormous wealth and power to exemptions from IP, especially patents. Economic growth, investment and research in the Netherlands, Switzerland and the US in the early 19th century was assisted by international trade at a time when IPRs were largely non-existent and imitations were widespread, while today's corporations argue strenuously for strong IP protection as a prerequisite for research, development, innovation and trade.

⁶⁰ Halbert, D. (2003). *Weaving Webs of Ownership: Intellectual Property in an Information Age* [unpublished Ph.D], retrieved 2 September, 2003: www.futures.hawaii.edu/dissertation/chapter5.html, pp. 2-4.

⁶¹ Patel, S. J. (1996). 'Can the IPR System Serve the Interests of Indigenous Knowledge?' in S. B. Brush and D. Stabinsky (eds), *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights*, p. 308.

⁶² Burrows, B. (2002). 'Conquest by Patents', *New Internationalist*, 349, (September), p. 23.

These were the firms:

that raised the drawbridge after entering the castle. When it suits the rich countries to impose free trade, they do so. When it suits them to impose protectionism, they argue that this is the only way to development. But, woe betide, the poor nation that seeks to apply the lessons of the past.⁶³

Effectively, innovating entrepreneurs in many less developed states seeking to enter markets had the rungs of reciprocity on which they could compete, removed.⁶⁴ Private pro-IP activists, such as Jack Valenti, President and CEO of the Motion Picture Association of America (MPAA), lobbied hard from 1992 for Section 301 (and 'Super' 301) of the US Trade Act to be applied indiscriminately to prevent the negative effect of piracy on American business.⁶⁵ The chemical and food conglomerates also sought strengthened rights to protect their markets from piracy instead of seeking benefit-sharing through reciprocal trade. Criticism continues to be levelled at the MPAA and other powerful associations and trade lobby groups linked to the WTO who seek even stronger and lengthier IP regulations over ideas. These lobby groups readily advance US government trade policy that strong IPRs have a corollary in economic growth strategies and market liberalisation.

In 2002 the MPAA reported the loss of billions of dollars of profit each year from piracy but a British documentary team countered these claims of loss by maintaining that restrictive, protectionist policies brought by AOL/Time Warner, News International/Fox and Vivendi/Universal/UIP against rights abusers prevented IP rights such as copyright from being returned to the public domain. These policies thus ensured that the entertainment giants had a steady and highly profitable income from royalties that was effectively closing down the

⁶³ Monbiot, G. (2002). 'Patent Nonsense from the World's Corporate Giants', *Guardian Weekly*, April 11-17, p. 20. The aniline dye process patented in Britain in 1859 was 'borrowed' by Swiss company Ciba who soon outstripped its British counterpart. Mergers and acquisitions have resulted in Ciba joining Sandoz to form Novartis. The later has now merged with Zeneca to form into Syngenta. In 1995 Novartis was one of the companies that successfully lobbied for the European Convention allowing companies to patent genes and develop terminator seeds.

⁶⁴ Maskus, K. E. and Reichman, J. H. *Op cit*, p.283.

⁶⁵ Drahos, P. with (sic) Braithwaite, J. (2002). *Information Feudalism Who Owns the Knowledge Economy?* pp. 80-81. An informative discussion on the issues surrounding section 301 of the US Trade Act is offered by these authors.

reciprocal basis on which knowledge benefits humanity. European bureaucrats recently lobbied to have the artistic copyright of H.G. Wells *The War of the Worlds* extended for a further 15 years. Their successful claim brought condemnation from documentary makers who made the case that authors have an inalienable moral right to 'light their taper' from great works which benefit from being returned to the public domain. In their view, extensions to copyright threaten the public domain; in addition they claim that, "every time we authors make a contract with a studio, we assign away this so-called inalienable right and pass it on to a corporate owner".⁶⁶

To Sell (1995) and Hoekman and Kostecki (1995) Section 301 of the US Trade Act and 'Super' 301 (which created an inventory of unfair practices in other countries, listing them as a 'Priority Foreign Country' to be watched) has been used to force countries to alter their IP laws to reflect compliance with US regulations.⁶⁷ In 1998 Paraguay was one of seventeen countries listed by the USTR for threatening US intellectual property interests with large-scale piracy and in 2000 thirty-nine countries were placed on the watch list. As Cheek (2001) notes, US trading partners are frequently cited on the watch list, although Canada is not mentioned very often, and the EU invokes its own set of trade laws that it brings to bear on violators of IP law regularly using legal means to act against counterfeiting and other IP infringements.⁶⁸

TRIPS assisted by trade laws have enabled the US Patent Office to become gatekeeper over the world's largest market in patents making them, in Hutton's (2002) view: "de facto up-holders of all advances in the information age".⁶⁹ To achieve benefits from the exchange of knowledge, gain access to foreign direct investment and foster economic development the less-developed states have often relinquished ownership rights over aspects of their knowledge and goods

⁶⁶ Cox, A. (2002). 'But Who Are The Real Pirates'? *Guardian Weekly*, 27 May, p. 14.

⁶⁷ Hoekman, B. and Kostecki, M. (1995). *The Political Economy of the World Trading System: From GATT to the WTO*, pp. 138-139. For a similar discussion see also Sell, S. K. (1995). 'Intellectual Property Protection and Anti-Trust in the Developing World: Crisis, Coercion and Choice', *International Organization*, 49 (2).

⁶⁸ Cheek, M. L. (2001). *Op cit*, p. 14.

⁶⁹ Hutton, W. (2002). *The World We're In*, p. 203.

to foreign companies and strong states in order to advance their economies. For many less developed states this has resulted in them “receiving concessions for the industries of yesterday, while the resources and technologies of tomorrow remain in the hands of the developed states”.⁷⁰ Further, in a post-TRIPS world where IP standards are being re-negotiated and strengthened in many areas by commercial contracts, IP has been taken to another level of bargaining in bilateral trade agreements. This is particularly noticeable in US and EU bilateral agreements with states it has targeted as pirates. About the impact on TRIPS of strengthening rights through bilateral agreements, Hudson said: “I think there is a fear that bilateral trade negotiations, including TRIPS-plus provisions may jeopardise the TRIPS articles”. In answer to a question that the increasing importance attached to bilateral arrangements might require reforming TRIPS, Hudson replied: “I do not see a fundamental reform of TRIPS as being likely in the short term (next three years), basically because the powerful players, especially the USA, would not stand for it”.⁷¹ For TRIPS to remain viable will require greater efforts by states to promote multilateral negotiations although this appears to have become extraneous to bilateral and private contracts brokered between states and groups to trade in knowledge. This next section analyses the implications of bilateral agreements on IP and trade in terms of reciprocal outcomes.

(B) Bilateral Agreements

Bilateral agreements have become increasingly used as an effective means of attaining compliance for all manner of competitive trade practices including intellectual property. The shift in emphasis to bilateral bargaining followed the US decision to withdraw its membership from UNESCO in 1984 coinciding with the rational economic policies taking hold in Anglo-American states. No longer obligated to recognise its duty under this charter to act in a reciprocal manner toward its trading competitors the US, along with the EU, could act punitively.

⁷⁰ May, C. (2000). *A Global Political Economy of Intellectual Property: The New Enclosures?* p. 88.

⁷¹ E-mail communication with A. Hudson, House of Commons, UK. 17 November, 2003. This followed an informal introduction in May 2003 at 7 Millbank, London. All comments noted are Hudson’s personal answers and do not reflect the views of the UK Government’s International Development Committee.

To Drahos and Braithwaite (2002): “this was just the kind of hard-nosed approach the intellectual property lobby wanted to import into bilateral negotiations [sanctions against] ‘pirate’ states”.⁷² Immediately following TRIPS the US was rigorous in seeking IP compliance from rising industrial states such as Korea, Brazil and India which were competing with the US in the area of goods and IP services. Bilateral bargaining typically follows prior multilateral agreement with new deals premised on the notion that standards be raised yet again induced by a range of concessions on matters such as agriculture and intellectual property.⁷³ Stevenson of the NZ Ministry of Economic Development drew attention to the way TRIPS operates as a baseline of minimum standards with bilaterals tending to add layers of obligations over and above those standards.⁷⁴

Layers of obligations may induce levels of coercion and impede reciprocity in the bargaining process as Braithwaite and Drahos suggest. Taking an example from Africa these authors show the different forms pressure can take and, how, when applied as demands, can diminish reciprocal trade. Effectively, the “US can credibly threaten African competitors with trade sanctions, foreign aid withdrawal, investment flight and refusal to transfer technology. The African state cannot credibly threaten the US with any of these things”.⁷⁵ Where WTO rules do not measure up to its preferred course of action the US either disregards the regulations and pays the price, or forges agreements that better reflect its national IP interests. The USTR openly report that bilateral negotiations conducted over a period of years have resulted in substantive trade agreements that contain extensive enforceable IP conditions. For instance, in 1992 an IP agreement the US signed with Taiwan was strengthened the following year by additional articles covering copyright and trademarks. By 1999 the US had signed bilateral investment agreements containing IP clauses with forty-two

⁷² Drahos, P. with Braithwaite, J. *Op cit*, p. 85.

⁷³ *Ibid*, pp. 86-99.

⁷⁴ Interview with C. Stevenson, Ministry of Economic Development, Wellington, 15 December, 2003.

⁷⁵ Drahos, P. with Braithwaite, J. (2002). *Op cit*, pp. 191-192.

developing countries, East European countries and republics from the CIS.⁷⁶ Woods (2002) notes of the free trade agreement the US signed with Jordan in October, 2001:

In bilateral negotiations, the US has shown its capacity to achieve its own goals with very little compromise. The US-Jordan agreement includes provisions on intellectual property rights protection, trade and the environment, labour and electronic commerce, and side letters concerning marketing approval for pharmaceutical products, and trade in services. In essence, the Jordan-US trade agreement sets an example of how the US can achieve its trade goals without recourse to multilateral institutions.⁷⁷

With bilateral agreements the reciprocal obligations between the private grant and public reward for intellectual property come under pressure from the competitive demands of trade and the commercial aims of the developed states to shift away from multilateralism. Therefore, while the rhetoric of trade liberalisation and multilateralism emphasises the importance of free markets and open societies, concerted efforts have been made by the strong states in particular, to re-regulate and strengthen IP assisting powerful corporations to claim ownership and control of knowledge in pursuit of profit which has induced a new phase of protectionism. To Drahos and Braithwaite (2002):

Old protectionism was about keeping your rival's goods out of your domestic market. New protectionism in the knowledge economy [is] about securing a monopoly privilege in an intangible asset and keeping your rivals out of world markets. But that mean[s] persuading your rivals to play by rules recognising your 'right' to the asset.⁷⁸

By advancing trade liberalisation while at the same time instituting bilateral trade agreements Anglo-American states have made the case for the re-regulation of trade in knowledge watertight. This has been accomplished with appeals of economic progress rather than reciprocity.⁷⁹ For the developing states and, in particular the least developed states, there are implications for democratic outcomes in the moves away from multilateral forums, where there is strength in

⁷⁶ Cheek, M. L. (2001). *Op cit.* p. 14.

⁷⁷ Woods, N. (2002). 'The Role of Institutions', in D. Held and A. McGrew, (eds), *Governing Globalization: Power, Authority and Global Governance*, p. 39.

⁷⁸ Drahos, P. with Braithwaite, J. (2002). *Op cit.*, p. 87.

⁷⁹ Gill, S. (2002). *Op cit.*, p. 77.

numbers, to bilateral arrangements. While TRIPS multilateral obligations still need to be considered, bilateral agreements may impede the fair use of IP. According to Connolly-Stone from the NZ Ministry of Economic Development, issues of legal interpretation arise because bilaterals “limit the flexibility they might want to use under TRIPS”. As an example Connolly-Stone cites US bilateral demands as problematic for developing states reflected in distinctions between US laws on plant variety rights and farmers breeding rights in developing states which come into conflict. Bilateral arrangements between different jurisdictions can also have repercussions for TK in developing states.⁸⁰ The implications for developing states, based on arguments in this section, suggest that bilaterals can reduce opportunities to cultivate greater reciprocal benefit from trade than is the case under multilateralism.

IV. A Deficit in Reciprocity and Democracy

Arguments so far have made the case that the re-regulation of IP has significantly defaulted on trade reciprocity. The proprietary use of knowledge resources and the strengthening of rights have seen strong states benefit exponentially from the consolidation of IP ownership. This has brought with it implications for democratic participation requiring we redefine our political ideas of development and self-interested trade agendas. Lal (2002) observes:

Nothing is more spectacularly global than the *formal framework* of knowledge which has bequeathed to every corner of the globe a universal and supposedly tested verifiable recipe for development, technological progress, successful management and democracy.⁸¹

The lack of reciprocity evident in the procedural and substantive regulatory framework of intellectual property has been made particularly potent in trade law. As regulations for the operation of TRIPS are achieved through “bargains struck between states” it is necessary to address how decision-making is influenced at the global level supported by special interests.⁸² To action TRIPS the executive branch of member governments entered into binding international

⁸⁰ Interview with K. Connolly-Stone, Ministry of Economic Development, Wellington, 15 December, 2003.

⁸¹ Lal, V. *Op cit*, p. 123. Italics in original.

⁸² Sell, S. K. *Op cit*, p. 40.

obligations designed to transcend successive political administrations. These regulatory agreements and their substantive clauses tie parties to “international law regardless of domestic resistance to such policies”.⁸³

Proponents are quick to argue that agreement in the WTO on issues of IP was reached constitutionally through the consensus of all its members. However, as Legrain (2002) argues, the Marrakesh treaty (that created the WTO) does not have the democratic ring of ‘we the people’ but begins with ‘The Parties to this Agreement’. As a legal contract there is no appeal to constitutional or democratic values.⁸⁴ Public expression about what is being negotiated by each state is not always made clear to national citizens for a variety of reasons, including commercial secrets and trade sensitivity. Thus, one can argue that the public’s right to scrutinise governments at the domestic level is effectively detached by a consensus that has contract and other legal procedures underpinning its status.⁸⁵

Problems relating to democratic procedure readily arise in rule-making because states are not always clearly aware of what they want to achieve in terms of their decision-making objectives, nor are they consistent with the role they see themselves playing in the process. Many developing states fell into this category at the time TRIPS was being established under Uruguay bargaining processes. However, as Lynch from the NZ Ministry of Foreign Affairs and Trade suggests, developing states’ interests are increasingly being met and there are good case histories of weak states ending up in a stronger trading position following bargaining.⁸⁶ Political bargaining on trade matters tied to IP varies in intensity and in many cases is likely to be set up to involve *quid pro quo* outcomes. In certain areas these can be politically irreconcilable with democratic processes. For example, the specific requirements of one party to an agreement are often not met because power differentials in the relationship compromise reciprocal

⁸³ McLean, J. (2001). ‘Government to State: Globalization, Regulation, and Governments as Legal Persons’. *Indiana Journal of Global Legal Studies*, 10 (173), p. 183.

⁸⁴ Legrain, P. (2002). *Open World: The Truth about Globalisation*, p. 197.

⁸⁵ *Ibid.*

⁸⁶ Interview with T. Lynch, Ministry of Foreign Affairs and Trade, Wellington, 15 December, 2003.

outcomes. Unequal and non-reciprocal procedures come in many forms and may arise from domestic incapacity including a lack of skilled negotiating staff or people available to represent key interests at the negotiating table at the right time in sufficient numbers. As Hutton (2000) comments, under some capitalist systems all manner of reciprocal obligations underpin the privilege of being a property holder while in other systems “complete autonomy and sovereignty” characterise propertied relations.⁸⁷ In contrast to government Sell notes that business is generally highly organised and pro-active: “corporate agents are aware of what they want, can articulate it to themselves and others, and have organised in order to get it”.⁸⁸ Corporations have made it their priority to lobby state support for higher levels of IP protection and make foreign investment into new markets a bargaining priority without necessarily giving ground on such things as technology transfers or anti-trust laws. Business is also keen that government does not restrain its activities unduly or undermine rights to intellectual property already accumulated.⁸⁹

The impact of a global regime for IP and the lack of political will toward enlarging the democratic capacity of rule-making through reciprocity, have produced deleterious results. The tenuous hold with which regulatory agreements adhere to democratic principles, especially in terms of developing state interests such as access to pharmaceuticals (discussed in chapter nine), negates the idea that a political community working for democracy exists at the level of global legal political decision-making. Mclean (2001) explains:

Because there is no necessary connection between statehood and democracy, the dominance of the international agreement as a regulatory instrument achieves even greater significance for developing countries. There is no general endorsement of a principle of democracy in international law In the mid-1980s only about a third of all the countries of the world could be described as democratic Even in the absence of any basis for a state’s authority in terms of the will of the

⁸⁷ Hutton, W. (2000). ‘Anthony Giddens and Will Hutton in Conversation’, in W. Hutton and A. Giddens (eds), *On the Edge Living With Global Capitalism*, p. 12.

⁸⁸ Sell, S. K. *Op cit*, p. 43.

⁸⁹ Barry Jones, R. J. (2000). *The World Turned Upside Down*, p. 6.

people, international law grants a state sufficient juristic personality to enter commitments binding into the future.⁹⁰

Certain conditions are necessary for democratic bargaining to take place when sovereign states enter the process of rule making. However, TRIPS, and much of the post-TRIPS implementation phase, has not followed these standard norms of procedural rule-making to reach agreement leaving reciprocity in the wake of economic coercion. Following TRIPS, and in terms of conditions to ensure greater representation of all parties to agreements, especially given the proclivity of states to engage in bilateral agreements, Drahos and Braithwaite (2002) offer direction for achieving democratic outcomes. In the first place, there has to be representation from all parties to the process at the negotiating table and while this does not always result in the attainment of equivalence, or guarantee equal participation at every stage of the process, it remains an important pre-condition of democratic negotiation. Second, all those involved at the table must be fully informed about the consequences or potential outcomes of any decision-making. Third, one party must not coerce the others meaning the condition of non-domination must be followed as the use of coercion undermines the whole procedure of engaging in negotiations.⁹¹ Because the re-regulation of intellectual property demanded deference to the commercial values of competition and market acquisition the requirements of democratic procedure were substituted by overtly coercive policy-making which acted against reciprocity and impacted on the ability of the least powerful states to gain traction against the more omnipotent forces of the powerful states.

For scholars such as May (2000), Boyle (2002) and Drahos and Braithwaite (2002), the reality of the globally-shaped IP rules are indicative of inequalities arising from a concentration of knowledge resources coercively bargained through the trade imperatives of powerful states. The mandate of the WTO and its central focus on trade liberalisation has failed to deliver the socially enhanced outcomes of reciprocity based on the foundation stones of equivalence and market access.

⁹⁰ McLean, J. *Op cit*, p. 182.

⁹¹ Drahos, P. with Braithwaite, J. *Op cit*, pp. 14-15.

The breakdown of the Seattle trade talks in 1999 and subsequent failures at Cancun, as noted earlier, is rooted in problems of democratic participation, unequal trade practices and a lack of reciprocity. Even the pro-free trade proponents reluctantly admit to the failure to establish a more democratic forum:

In Seattle, WTO Director-General Mike Moore and US Trade Representative Charlene Barshefsky, the co-chairs of the Ministerial Meeting, made a concerted, good faith effort to broaden the participation of delegations in the negotiations. Their goal was to keep Green Rooms to a minimum. But developing country delegations, in particular, had difficulty covering all of the working groups, and as the Ministerial week proceeded and agreements remained elusive, the temptation to pull together smaller groups of countries for harder bargaining – Green Rooms – in other words, understandably grew. In communiqués, released toward the end of the week, large groupings of African and Latin American countries denounced what they described as the Ministerial’s exclusive and non-democratic negotiating structure.⁹²

For states with weak political and economic infrastructures, the trade-related nature of bargaining over IP issues remains an impediment to active participation because of extenuating circumstances relating to multiple deprivations including poverty and civil unrest. While extending trade is a vital component of developing states’ attempts at wealth creation and economic independence, the political problems associated with rules of trade established by coercive self-interest do not support reciprocal outcomes. Urgent attention is required in global forums to address the concerns of the weakest states over trade laws that hinder the opening up of economies to outside markets and set in place walls of protectionism from tariffs and subsidisation. While the egregious harm to weak states from trade protectionism and economic impediments might eventually find its way to the WTO where rulings have gone in favour of the least advantaged, the capability of the developing world to invest in and procure IPRs for knowledge development has been isolated by coercive bargaining that has frequently cast aside reciprocity in favour of profit motives and monopoly competition. For Saul (1993) the 1990s, in particular, represented a stage whereby

⁹² Sutherland, P. Sewell, J. and Weiner, D. (2001). ‘Challenges facing the WTO and Policies to Address Global Governance’, in G. P. Sampson (ed), *The Role of the World Trade Organization in Global Governance*, pp. 87-88.

concentrations of economic power and pseudo-rational arguments of scarcity, market competition and profitability culminated in a growing obsession with IP and how it could generate profit. Economic rationality drove the commercialisation of ideas to new utilitarian levels where “thought, of which the intellect is an element, became merely property”.⁹³ Certainly the information age made knowledge distinctive in economic terms by simultaneously de-nationalising the state through rationalisation, and re-nationalising it through regulatory practices allied to expanding global trading practices.

V. Conclusion

This chapter began with the historical justifications of knowledge as property and compared 19th century international trading industries with 20th century transformations to knowledge under globalising trade. The impact of trade rules has been examined in the context of IP and markets for new technologies demonstrated by global economic competition evident in a variety of techniques to own and control knowledge in the interests of the predominant Anglo-American states with the support of corporate power. While the regulatory changes to property rights have contributed to the establishment of wide-ranging economic rewards for many, the uneven spread of internet and related technologies and a concentrated patent market around business communications reveals that the flow of ideas is dominated by the domestic interests of the wealthy states whose capacity to restrict access to knowledge has intensified around the creation of monopolies in order to retain ownership in private hands. The significant economic expansion of IP into areas such as telecommunications and business processes attest to the changing social structure of knowledge where monopoly serves scarcity and the pricing of ideas.

The creation of knowledge as property has been accelerated by the transformation of goods-producing societies toward knowledge societies and, as May (2002) observes, the legal benefits for owners of knowledge and information

⁹³ Saul, J. R. (1993). *Voltaire's Bastards: The Dictatorship of Reason in the West*, p. 281.

have also taken a new turn characterised by rights to “charge rent for use; to receive compensation for loss; and to receive payment for transfer”.⁹⁴ This chapter concludes that reciprocity cannot be fully realised under entrenched market-led policies, particularly when put under pressure by the predominance of bilateral agreements that stand alongside extensive trade protection mechanisms. The multilateralism that TRIPS aspired to shifted in the post-implementation phase of TRIPS providing a vehicle for strengthening rights and monopoly competition consolidated by bilateralism as a significant form of trade collaboration. Collaboration associated with multilateral state trade has fallen into disrepute, replaced increasingly by tacit, if not coordinated support for collusion between strong states and corporations around the trade in IP. The lack of robust institutional machinery at the global level to ameliorate strong state power, coupled with a lack of leadership to inspire political will that could contribute to knowledge empowerment and cooperation does not bode well for reciprocal trade. If the political goals that genuinely work toward freeing up trade and reducing protectionist policies are absent the normative contribution of reciprocity to the sort of productive knowledge base that can best establish equivalence in trade relations between states cannot be made. The difficulty of attaining reciprocity in terms of intellectual rights at the global level lies in the highly competitive putative structure produced by market rationalism that has placed limits on access to knowledge by altering the boundaries of reciprocity toward concentrated forms of ownership and control.

As outlined in chapter two, reciprocity requires mutual benefits, fair trade and proportionate justice which are the supporting normative rungs upon which obligations to knowledge as a public good are realised and which mitigate against conflict — potential and real — assisted by qualifications to restructure the distortions that impede the delivery of knowledge. Working towards an assessment of the sorts of conditions necessary to achieve reciprocity informs arguments in the next two chapters which examine the impact of rule-making

⁹⁴ May, C. (2002). *The Information Society: A Sceptical View*, p. 162.

authorities in relation to indigenous populations. Since the 1990s IP regulations have become the subject of bargains around heritage rights opening TK up to more intense competitive trade rules. This poses both opportunities and threats to indigenous peoples' intellectual and cultural property and introduces issues around the protection and enforcement of creativity as a means of upholding social and cultural norms and respecting reciprocity.

CHAPTER SEVEN

TRADITIONAL KNOWLEDGE AND RECIPROCITY

The next two chapters analyse the political implications for the holders of TK alongside efforts to recognise and protect items of social and cultural significance. Indigenous responses to recognising and protecting TK through IPRs are varied and complex but reveal a commitment to collective ideals and reciprocal obligations. Cultural pluralism adds immeasurably to the complexity of TK and IP. The assorted status of people within and between geographical communities and state boundaries that inform responses to IPRs adds to the complexity. As the main stakeholders of cultural traditions indigenous groups are (or ought to be) the key decision-makers about the maintenance and use of their knowledge resources, and the principle beneficiaries of rights to those resources. Competitive markets for cultural items raise questions about rights and collective obligations, the distribution of benefits and rewards from commercial investment in TK and exploitation in terms of the value of IPRs to adequately protect items. In addition, the regulatory impact of controls and the implications for reciprocal outcomes of fairness and justice also impacts upon TK when knowledge is made property, as argued in the previous chapter.

For indigenous and minority peoples, protecting TK and enforcing legal rights over resources has political implications because many of the rules and norms associated with cultural rights are not found in law but in protocols and social understandings of knowledge. This has not deterred law-makers from institutionalising regulations that impact on the lives and interests of diverse groups. Identifying how IP regulations give rise to political implications and impact on the normative possibilities of TK governance is developed in this chapter. The political implications of governance are important not only because “normative work on cultural rights is difficult to structure”,¹ as Levy (1997)

¹ Levy, J. T. (1997). 'Classifying Cultural Rights', in I. Shapiro and W. Kymlicka (eds), *Ethnicity and Group Rights*, p. 22.

contends, but also because, as Coxhead argues, indigenous rights and the IP system are often in conflict with one another and under IP law, “when you talk about protecting knowledge this is based on a whole different ideology and that is part of the problem”.²

Equally important is the consideration that TRIPS offers no specific procedures for recognising and protecting collectively-held knowledge, with legislation around its use the prerogative of groups and member states under the harmonising rules of the WTO. Nonetheless, TRIPS has an enormous impact on TK in terms of the delivery of IP protection and the policies associated with the application of trade rules and regulations. While TRIPS is silent, several important treaties, conventions, declarations and codes containing principles and guidelines inform the use of collective items. These include the Mataatua Declaration, the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture, and the International Union for the Protection of Plant Varieties, which are central to indigenous claims for respect and reciprocity toward heritage. In addition, a number of key organisations add weight to legal interpretations of the above including WIPO, UNESCO, UNCTAD and the TRIPS Council.³

With these considerations in mind this chapter begins by defining what constitutes the uniqueness of TK. Second, it examines areas of TK exploitation and indigenous resistance, setting out problems associated with commercialisation and the debates that inform TK use. Section two examines aspects of TRIPS and legislation governing plants, genetic resources, biotechnology and databases and considers the political implications of legal initiatives for reciprocity. In section three the potential for a framework treaty on TK is assessed with the arguments for protecting group knowledge further

² Interview with C. Coxhead, Law School, Waikato University, 1 December, 2003.

³ Weeraworawit, W. (2003). ‘International Legal protection for Genetic Resources, Traditional Knowledge and Folklore: Challenges for the Intellectual Property System’, in C. Bellmann, G. Dutfield. and R. Melendez-Ortiz (eds), *Trading in Knowledge: Development Perspectives on TRIPS and Sustainability*, p. 158.

identified in section four. Finally, an evaluation is made of the relationship between TK and reciprocity.

I. Traditional Knowledge

For Canadian anthropologist Martha Johnson, the uniqueness of TK is characterised by time-honoured inter-generational practices represented in knowledge built up by groups of people living in close contact with nature inclusive of a “system of classification, a set of empirical observations about the local environment, and a system of self-management that governs resource use”.⁴ For traditional cultures customary law adds to collective understandings of knowledge based on reciprocal values. The resources that sustain the physical and spiritual life within communities “cannot be sold, altered or manipulated without grave potential consequences to the essence of that life form and, in turn, to all life forms within its ecosystem and beyond”.⁵ Intrinsic to collective group actions related to the sharing of TK are beliefs and customs about plants, animals, food sources and medicinal practices assigned by folklore and other cultural factors. These are sustained by the many social obligations steeped in oral traditions endorsed by custodial rights and stewardship over “music, dance and other performing arts; history and mythology; designs and symbols; and traditional handicrafts and artworks”.⁶

Accordingly, indigenous groups bring very different concepts of property to the whole debate on intellectual rights involving the inalienability of collective values that may limit what can be considered as property.⁷ For many groups, ideas are protected by protocols which give them heritage status and require prior group consultation before they can be exchanged. Very often, approval

⁴ Johnson, M. (1992). ‘Research on Traditional Environmental Knowledge: Its Development and its Role’, in M. Johnson (ed), *Lore: Capturing Traditional Environmental Knowledge*, pp. 3-4.

⁵ Carmen, A. and Saldamando, A. (1999). ‘Plant Plunder, Genes and Sneakers: Can Intellectual Property Be Theft’? *UN Chronicle*, 36 (1), p. 28.

⁶ Dutfield, G. (2002). ‘Protecting Traditional Knowledge and Folklore: A Review of Progress in Diplomacy and Policy Formation’, UNCTAD/ICTSD Capacity-Building Project on IPRs and Sustainable Development, p. 10.

⁷ von Lewinski, S. (ed), (2004). *Indigenous Heritage and Intellectual Property Genetic Resources, Traditional Knowledge and Folklore*, p. 3.

from a shaman or head person who has guardianship of items and resources is required before use may be granted. Guardianship is distinct from entrenching things in law. For example, Dodd describes how guardianship is intrinsic to cultural preservation steeped in lore whereas “the law has the capacity to change things ... the big problem with the law [is] it can be changed, it can be taken away”.⁸ Understanding the context of TK and its inter-relationship with lore is important to cultural considerations and the norms of reciprocity that underpin its use.

Dutfield (2002) offers inclusive and exclusive categories denoting indigenous peoples’ TK relationships that are worthy of note. The inclusive view includes a wide variety of knowledge possessed and used by all. Accordingly, reciprocal exchange between groups takes place relatively freely under certain rules of admission and excludability conditional on cultural practices and socio-economic considerations. The exclusive view sees knowledge-holders as tribal populations standing outside “the cultural mainstream of the country whose material cultures are assumed to have changed relatively little over the centuries or even millennium”.⁹

Here, reciprocity is based more firmly on long-standing customary traditions. Discerning who the knowledge stake-holders are in either model can be difficult and elusive, as Dutfield (2002) explains:

TK-holding individuals, groups and communities may be members of culturally-distinct tribal peoples as well as traditional rural communities that are not necessarily removed from the cultural mainstream of a country. TK- holding societies may inhabit areas of both the developing and developed world, although they are more likely to be found in culturally (and biologically) diverse developing countries where indigenous groups continue to – in the terminology of the Convention on Biological Diversity – embody traditional lifestyles. But while TK holders tend to inhabit rural areas including very remote ones, members of such peoples and communities may live in urban areas yet continue to hold TK. TK may also be held and used by individuals in urbanised and

⁸ Interview with M. Dodd, School of Maori and Pacific Studies, University of Waikato, 1 December, 2003.

⁹ Dutfield, G. *Op cit*, p. 11.

westernised societies that have no other connection with societies from which the TK may have originated.¹⁰

For many indigenous communities the reciprocal value of TK and the existence of conditions under which items are exchanged are intrinsic to the collective production and belief systems of the group and relate to the continuity of community relations. In contrast, reciprocal obligations under the highly formalised, individualistic, legal requirements embodied in IP appeal to trade imperatives steeped in competition and instrumental factors. While these differences are ideological, as Coxhead explained, traditions are not always immutable with groups able to develop business frameworks that work successfully within the parameters of fixed traditions while utilising the instrumental rules that guide contemporary commercial exchange. However, this has not occurred without significant resistance to exploitation led by concerns about the value of IP and its impact upon the livelihood and social interactions of diverse indigenous peoples and minority cultures.

(A) Areas of Exploitation and Resistance

Smith and Ward (2000) note that many indigenous people turned to IPRs as a way to assert rights and autonomy.¹¹ IPRs represented a mainstream approach to achieve development agendas, advance technological transfers and ameliorate the loss of property from colonial experiences. According to Dodd, the application of western-based protection rights for TK is not altogether desirable raising the spectre of becoming a legal means of establishing control over cultural items on the one hand, while working at suppressing forms of grievance, on the other.¹² To others, by submerging TK into a single assimilation experience, “many distinct populations whose experiences under imperialism had been

¹⁰ Dutfield, G. *Ibid.* Dutfield notes that indigenous knowledge is also used as an expression for knowledge which has local connections to populations that include indigenous and non-indigenous people made up of various “occupational groups, such as traditional farmers, pastoralists, fishers and nomads whose knowledge is linked to a specific place, and is likely to be based on a long period of occupancy spanning several generations”, p. 12.

¹¹ Smith, C. and Ward, G. K. (2000). (eds), *Indigenous Cultures in an Interconnected World*, p. 14.

¹² Interview with M. Dodd, *Loc cit.*

vastly different" were made one despite the great variety of human experience and livelihood irrespective of geographical location and governing practices.¹³

The failure to recognise diversity offers no reciprocal solutions to the realities of power without a substantive critique of the sources of unequal power. On this Smith (1999) writes:

For indigenous communities it is not just that they are blamed for their own failures, but that it is also communicated to them explicitly or implicitly that they themselves have no solution to their own problems This environment provides an absolutely no-win position and sets up the conditions for nurturing deep resentment and radical resistance from indigenous groups.¹⁴

The post-colonial era gave political impetus to the efforts of indigenous people to preserve their traditions and community status against commercial misappropriation amid other pressures. When indigenous and other national resistance movements rose up against colonisation they were viewed as both betraying European thinking by setting the colonised apart from their oppressors and, ironically, as homage to progress through domination and control, on which the European powers had earlier prided themselves.¹⁵ Indeed, the European states only vaguely understood the contradictory impact of post-colonial development processes "which pointed to a different epistemic framework, and held out the possibility of a dissenting and emancipatory politics of knowledge".¹⁶

Ushering in reciprocal obligations and justice considerations of fairness and equality toward knowledge was for many indigenous people and social activists a necessary action integral to self-determination and tied to miscarriages of justice in terms of knowledge exploitation that needed defending by dissention. For Munshi (2004), a dissenting framework evolved from resistance to western models of economic growth and development as the hegemonic reins of capital

¹³ Smith, L. T. (1999). *Decolonizing Methodologies Research and Indigenous People*, p. 6.

¹⁴ *Ibid*, p. 92.

¹⁵ Lal, V. *Op cit*, p.52.

¹⁶ *Ibid*.

tightened and legitimised controls over trading markets and high technology goods where publics not seen as having ‘strategic’ value were “marginalised or ignored”.¹⁷ Resistance has been spearheaded by those populations separated from their social and cultural heritage as the impact of trade integration and IP intensified around the commercial demand for knowledge resources.

Gaining recognition for knowledge and the diversity of knowledge resources is consistent with giving people scope within state and institutional structures to “recognise, enjoy, maintain, disseminate and preserve knowledge”.¹⁸ Arriving at reciprocal understandings of IPRs in relation to the position of TK is primarily focused through a western lens of both property and law and poses a conundrum when cultural values are not recognised or respected. In many areas indigenous communities are pressured by those versed in western trade law to commercialise their intangible and tangible resources. Cases have been documented when this has resulted in resources being handed over to commercial prospectors without due return to locals. Pretorius (2002) reports how in the 1970s more than 27.2 tons of a shrub, *Maytenus buchananii*, used by the Digo communities in the Shimba Hills area of Kenya to treat cancerous conditions, was harvested and tested by the US National Cancer Institute (NCI) for a component to treat pancreatic cancer. “All the material collected was traded without the consent of the Digo, neither was there sufficient recognition of their knowledge of the plant and its medicinal properties”.¹⁹

The same scenario has been repeated in many parts of the globe as Lor and Britz (2004) point out: “Today bio-prospectors are visiting rural communities, making friends with the ‘locals’, questioning them about their use of plants in traditional medicines, and taking samples back to the North where the active constituents

¹⁷ Munshi, D. (2004). ‘Postcolonial Theory and Public Relations’, in R. L Heath (ed), *Encyclopaedia of Public Relations*, p. 631.

¹⁸ Coombe, R. J. (1999). ‘Culture: Anthropology’s Old Vice or International Law’s New Virtue’, Proceedings to the Annual Meeting of American Society of International Law. Washington, p. 2.

¹⁹ Pretorius, W. (2002). ‘TRIPS and Developing Countries: How level is the Playing Field?’ in P. Drahos and R. Mayne (eds), *Global Intellectual Property Rights Knowledge, Access and Development*, p. 186.

are isolated in the laboratory and then patented".²⁰ In 1999 Carmen and Saldamando estimated "total world-sales of products derived from indigenous peoples' traditional knowledge, medicines, plants and technical expertise at \$50 billion".²¹ According to Kawell (2002) local indigenous people are targeted by bio-prospectors to reveal their tangible and intangible knowledge because they are expert sources of the most viable plants, seeds and genes for biotechnology purposes:

It has been estimated that by consulting indigenous peoples, bio-prospectors can increase the success rates in trials of plants being tested for possible medical use from one in 10,000 samples to one in two.²²

Shiva reveals how ancient herbal remedies and a multitude of other cultural knowledge resources have been appropriated from India without due diligence, royalty payments, or any form of reciprocity, in the pursuit of profit and private wealth.²³ Similarly, the Maya people of Central America have experienced land rights abuses and losses from the exploitation of plants and seeds. In one instance, an active backlash against such blatant practices resulted in the US government quitting a biodiversity project worth \$2.5 million to explore the medicinal plants of the people in this region.²⁴ The appropriation²⁵ or misappropriation of TK allied to the commercialisation of selected botanical resources has left a woeful economic and cultural legacy for large numbers of people in traditionally-based societies. In the late 19th century Nietzsche

²⁰ Lor, P. J. and Britz, J. (2004). 'Knowledge Production, International Information Flows and Intellectual Property: An African Perspective', Paper Presented at the Association of African Universities DATAD Workshop on Intellectual Property, Governance, Dissemination and Funding Strategies. February 19-20, Accra, Ghana, p. 16.

²¹ Carmen, A. and Saldamando, A. (1999). 'Plant Plunder, Genes and Sneakers: Can Intellectual Property Be Theft? *UN Chronicle*, 36 (1), p. 28.

²² Kawell, J. (2002). 'Who Owns Knowledge: Report on Science and Technology', *NACLA Report on the Americas*, 35 (5), p. 17.

²³ Shiva, V. (2001). *Protect or Plunder: Understanding Intellectual Property Rights*, p. 122.

²⁴ Godrej, D. (2002). 'Things You Should Know About Patents on Life'. *New Internationalist*, 349, p. 12. See also: Zerda-Sarimento, A. and Forero-Pineda, C. (2002). 'Intellectual Property Rights over Ethnic Communities Knowledge', *International Social Sciences Journal*, 171, p. 107, and comments on patents issued in 1986, 1989 and 1992 to commercial bio-prospectors for a powder extracted from the toasted bark of the 'skin tree' or tepezcohuite. Traditionally this raw product had been used by the Maya to treat skin bruises, while today, the Maya must compete with the commercial interests who hold the IP on this product preventing them from attaining access to their medicinal heritage.

²⁵ Appropriation may be categorised as "a mode of cultural engagement dependent on an ability to separate a given object or design from its cultural milieu for the purposes of its employment in a different one". Shand, P. (2002). 'Scenes From the Colonial Catwalk: Cultural Appropriation, Intellectual Property Rights and Fashion', *Cultural Analysis*, (3), p. 52.

considered reciprocity had fallen into misuse and deteriorated, by virtue of its utilitarian treatment, into a “piece of gross vulgarity” and had become the “lust for power, whether by means of arms, trade, commerce or colonisation”.²⁶ The proposition of this study that the principle of reciprocity has been divested of its normative and practical value and become vacuous is germane to political arguments being developed in relation to the implications for knowledge access and dissemination arising from an adherence to market values over social considerations that eschews the importance of knowledge to the maintenance of communities.

The expropriation²⁷ of indigenous peoples’ land and decades of environmental ruin from the extractive industries has done much to cause social fractures in the knowledge systems of numerous traditional communities. Deleterious results and a woeful legacy from expropriation has implications for tangible property but this defies separation from intangible property violations given both are deeply interconnected as Smith and Ward (2000) make clear: “for indigenous peoples, cultural, physical property and intellectual property are part of the same integrated system, they are both aspects of a living heritage”.²⁸ It is estimated that the cultural impact of knowledge misappropriation affects approximately 350 million²⁹ indigenous persons worldwide spanning some 5,000 indigenous groups in more than 70 countries.³⁰ Across this spectrum, communities express alarm at the rate of misappropriation of intellectual heritage, especially through patent rights. For large numbers of people the very idea of private property and the patenting of ideas for profit is anathema to their social and cultural

²⁶ Nietzsche, F. (1967). (ed), *Will to Power*, pp. 489, 384, 386.

²⁷ Institutional expropriation is distinct from stealing property for personal gain. Instead, as Frid explains, it constitutes state-mandated exploitation processes that may come from looting cultural property in wartime. In addition, it can be applied to the sanctioned journeys and explorations that resulted in colonisation, and the plundering of resources and cultural artefacts. For the purposes of this research, the term includes the contemporary cultural expropriation of flora and fauna by corporates intent on commercial profit from the biodiversity of indigenous communities’ knowledge. Frid, A. (1998). ‘The Common Heritage Doctrine and the Treatment of Cultural Property: History, Theory, and Practice’, retrieved, 27 August, 2002: www.urop.uci.edu/journal98/AlexFrid/Body1.html, p. 2.

²⁸ Smith, C. and Ward, G. K. *Op cit*, p. 10.

²⁹ *Ibid*, p. 2. Approximately 350 million peoples identify as indigenous making up 6% of the world’s population.

³⁰ Dani, L. (2002). ‘Opportunities and Threats to Indigenous Cultures’. Paper Presented at the Preservation of Ancient Cultures and the Globalisation Scenario, 22-24 November, University of Waikato, Hamilton, New Zealand, p. 4.

existence.³¹ The gulf of misunderstanding is nowhere wider than the gap which “frames the clash between indigenous and non-indigenous cultures made more apparent than ever over the issue of cultural and intellectual property rights”.³²

TK abuses are highly political and pose an on-going source of conflict that crosses cultural and social boundaries in both the North and South. While it is naïve to suggest that it is only those outside indigenous cultures that can be accused of misappropriating intellectual resources, there are many instances of social disruption and break down of trust between people. For example, in Zimbabwe’s Chaminikire Village, Ambuya Esther is a member of the Shona people, a traditional group who believe that only those healers who have access to the ancestors can control the full repertoire of traditional medicinal knowledge. She relayed how she shared some of her traditional medicinal knowledge with scientists from the University of Zimbabwe only to find that they were going to make medicinal capsules using her expert knowledge. This sharing of her knowledge gave rise to fears that the spirits and ancestors — *svikiro* — would not release the *mishonga* (magic medicine) next time and her continuous efforts to “wield, narrate, innovate, negotiate, and create the power of medicinal plants” through customary practices would be jeopardised.³³

At times the debate on TK has the character of a contest between the ideas of the past and those of the present. While it is outside the research framework of this thesis to discuss the particularities of cultural practices in traditional societies, it is important to explicate the political manifestations of commercialisation in relation to TK and IP. Alongside this are issues central to this study, related to the impact on knowledge-holding societies arising from the strengthening of IP rights and how rules affect reciprocity. Thus far the discussion has outlined the concerns indigenous peoples have and efforts to politicise protection to realise

³¹ Vaver, D. (1999). ‘Intellectual Property: Where’s the World Going’, *Oxford Intellectual Property Research Centre*, retrieved 12 July, 2002: www.oiprc.ox.ac.uk/Seminar0199.html, p. 1.

³² Smith, C. and Ward, G. K. *Op cit*, p. 11.

³³ Frommer, C. (2003). ‘Protecting Traditional Knowledge in Zimbabwe: Traditional Medicinal Knowledge’, retrieved 20 May, 2004: www.culturalsurvival.org/publications/csq-article.cfm?id=17298, p. 4.

the needs of different communities in the context of diverse habitats and cultural expressions. There are also political and economic issues for those seeking to commercialise knowledge resources within local communities. To redress the harm of misappropriation and raise the profile of recognition and preservation new initiatives are underway to protect forms of knowledge from further abuse. For example, in India developments are underway to document local TK to protect the original contributors of knowledge through biodiversity registers set up as PBRs (People's Biodiversity Registers). To Utkarsh (2003) the protection of IP in this manner is directed at conservation and the sustainable utilisation of knowledge practices.³⁴ Such initiatives require collaboration between groups of locals and administrative levels of political organisation which may not be viable or suitable to all communities.

On several levels communities are confronting threats to their diversity and TK by mobilising group action and instructing parliamentary delegations and non-governmental organisations to assist with raising the profile of recognition and protection in major regional and international forums. At the national level many indigenous communities have collectively "regrouped, learned from past experiences, and mobilised strategically around new alliances. The elders, the women and various dissenting voices within indigenous communities maintain a collective memory and critical conscience of past experiences" that coincides with efforts to make concerns heard at the global level.³⁵ Efforts by indigenous groups to highlight the socio-political tensions between trade and IP law are on-going given salience and direction through the imposition of strengthened rights that infringe upon social and material needs. In response, the original holders and creators of knowledge seek equal access to knowledge to counter the vagaries of competitive markets, which prevents dissemination, railing against the strengthening of IP around forms of knowledge vital to their livelihoods. In the next section features of TRIPS and mechanisms of governance are examined.

³⁴ Utkarsh, G. (2003). 'Documentation of Traditional Knowledge: People's Biodiversity Registers', in C. Bellmann, G. Dutfield and R. Melendez-Ortiz (eds), *Trading in Knowledge*, p. 190.

³⁵ Smith, L. T. *Op cit*, p. 98.

(II) TRIPS and TK Governing Regulations

While there is limited scope within TRIPS to protect TK, and the political will is often lacking to institute reciprocal obligations of justice and fairness, there is growing support for global mechanisms to enforce protection in a more comprehensive manner. As there is no unified legal protection that deals with all aspects of TK, a series of rules and regulations (as noted on page 217) in different jurisdictions have been employed to assist decisions on what communities endowed with bio-diverse resources need to do in order to protect their resources. The question remains however, whether IPRs are the best mechanisms for controlling and enforcing rules for protecting TK in the interests of indigenous stake-holders. Certainly, for the owners and users of IP who have already established patent and other controls over traditional resources there is a reluctance to submit to any additional agreement that might compromise their ability to innovate and create new forms of knowledge which many have been able to achieve under the present regime with relatively few impediments. For these reasons, amongst others, it is vital that traditional communities themselves decide the forms of governance best suited to manage the diverse resources in their collective keeping. This next section examines how IP has been implemented so far in governing structures with the purpose of developing equitable benefit-sharing. An analysis of steps toward a possible new international framework for TK and the implications of this for reciprocity are also discussed.

(A) Features of IP Recognition and Protection

In 1957 the innovative and informal know-how practices of indigenous peoples came under the protective umbrella of an integrated labour-based legal framework. Regulatory standards were formulated under the *Convention Concerning the Protection and Integration of Indigenous Peoples and Other Tribal and*

Sub-Tribal Populations in Independent Countries, also known as ILO 107.³⁶ According to Halewood (1999) a lack of parliamentary consultation with TK organisations and communities at the national level, and the patronising appeals of international ILO 107 was evident in its articles. For example, the emphasis in the convention on social and economic development was underscored by an opaque reference to “the possibility of replacing the values and institutions of the aforementioned populations with, ‘appropriate substitutes’”.³⁷ These ‘appropriate substitutes’ were never formally defined implying that they were mere window-dressing. While the covenant recognised that groups had the right of ownership to their traditional land collectively, as Halewood (1999) argues, this was negated by failures to implement processes to uphold those rights, and an absence of reciprocity that worked against “respecting, valuing, protecting and promoting indigenous and tribal peoples’ knowledge and innovation”.³⁸ In sum, legislating for IPRs to cover aspects of TK was notable for being introduced without a great deal of consultation or discussion, and for placing “IP firmly on the international political agenda”.³⁹ Subsequent national development strategies in many states aimed at “improving artistic values and particular modes of cultural expression” through IP have not always been well received by TK-holding communities who believe that many initiatives worked more effectively at magnifying ill-gotten modernisation gains than allowing scope for indigenous groups to determine how their TK could be recognised and preserved.⁴⁰

Throughout the 1970s and early 1980s, government officials and NGOs working in the interests of TK stake-holders, challenged the lack of reciprocity and Euro-centric approach evident in ILO 107 towards indigenous populations. Indigenous issues and IPRs verified in various international labour, human rights and

³⁶ Halewood, M. (1999). ‘Indigenous and Local Knowledge in International Law: A Preface to *Sui Generis* Intellectual Property Protection’, *McGill Law Journal*, 44, p. 966.

³⁷ *Ibid.*

³⁸ *Ibid.*

³⁹ See Stenson, A. J. and Gray, T. S. (1999). ‘An Autonomy-based Justification for Intellectual Property Rights of Indigenous Communities’, *Environmental Ethics*, 21 (2), p 178.

⁴⁰ Halewood, M. *Op cit*, p. 967.

environmental agreements were recalled to the UN agenda again in 1983 when UNESCO met with WIPO and initiated an 'expert group' to enter into discussions on protecting 'folklore' with the intention of laying the groundwork for new domestic regulations on plant variety rights. In 1992 ILO 169 replaced ILO 107 formally recognising that knowledge accumulated over centuries by indigenous people could be protected as a form of IP but, as Sahai (2003) notes, only fourteen countries ratified the new convention that had much to say about legal rights to land and physical resources and the role of indigenous groups in planning projects that affect them, but little about safeguards for reciprocating rights to knowledge.⁴¹

One New Zealand scientist noted with concern the collusion between European and US bureaucrats and business interests; "when things got tough an American businessman would stand up and say, 'American business will not stand for this', and all the rest would withdraw. I mean they were in complete awe showing how close business and government is in the US".⁴² That closeness had consequences for the model provisions that came out in 1984 which did not become legally binding instruments at the international level and only acted as recommendations for member-states at the national level. Nonetheless, Halewood considers they were significant for promoting the idea that "communal inter-generational intellectual contributions" could attract IP protection.⁴³ Again, in the early 1990s, an IPR World Forum convened by WIPO and UNESCO discussed how interpretations of folklore could be effectively dealt with under the existing law. A language shift from folklore to TK had long been mooted with WIPO agreeing that "expressions of folklore are a subset of, and be included within, the notion of 'traditional knowledge'".⁴⁴ Blakeney (1999) saw this seemingly subtle change as altering the conceptual discourse on IP toward a

⁴¹ Sahai, S. (2003). 'Indigenous Knowledge and its Protection in India', in C. Bellmann, G. Dutfield and R. Melendez-Ortiz (eds), *Trading in Knowledge: Development Perspectives on TRIPS, Trade and Sustainability*, p. 169.

⁴² Interview with J. Lancashire, Wellington, 9 December 2002.

⁴³ Halewood, M. *Op cit*, p. 968.

⁴⁴ See WIPO, (2001). 'Intellectual Property Needs and Expectations of Traditional Knowledge Holders', *WIPO Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge (1998-1999)*, Geneva: WIPO, p. 25.

broadening of rights over TK that began to have an impact on copyright and other forms of IP. Thereafter:

Folklore was typically discussed in copyright and copyright-plus terms. Traditional knowledge would be broad enough to embrace the traditional knowledge of plants and animals in medical treatment and food. Under these circumstances the discourse shifted from the environs of copyright to those of patent law and biodiversity rights.⁴⁵

The Rio de Janeiro Earth Summit of 1992 brought another decisive rule-based step toward protecting the world's diverse biological resources by linking biodiversity to biotechnology⁴⁶ and to IPRs through mechanisms for the conservation and sustainable use of plants, animals, and all manner of ecological and genetic material. Following that summit a number of concerned individuals met in Italy in March 1993 to formulate a statement of agency that encapsulated the value of cultural rights to the practitioners of TK. The Bellagio Declaration laid out the need to expand and recognise the public domain as a protective device against laws constructed around a "paradigm that is selectively blind to the scientific and artistic contributions of many of the world's cultures".⁴⁷ The Declaration sought IP protection based around concepts of fair use and compulsory licensing over knowledge resources. Recognition was sought for those who did not fit the model of the individual as the solitary author and original creator of works, thereby reconciling collectives as, "custodians of tribal culture and medicinal knowledge, collective groups practising traditional artistic and musical forms or peasant cultivars of valuable seed varieties".⁴⁸

⁴⁵ Blakeney, M. (1999). 'Intellectual Property in the Dreamtime - Protecting the Cultural Creativity of Indigenous Peoples', *Queen Mary Intellectual Property Research Institute, Queen Mary and Westfield College, University of London*, retrieved, 1 August, 2002: www.oiprc.ox.ac.uk/EJWP119.html, p. 2. Halewood (1999), notes that a consensus on the definitive interpretation of folklore was not readily accepted in the discussion following TRIPS, with an indigenous Australian representative at a UNESCO forum in 1997 expressing a preference for the term indigenous cultural and IP as an adequate measure to broaden the narrower concept of folklore within TRIPS. *Op cit*, p. 968.

⁴⁶ Dutfield offers an explanation of the term biotechnology coined by an early 20th century Hungarian agricultural engineer who included within the meaning of the word "all such work by which products are produced from raw materials with the aid of living organisms". Dutfield, G. (2003a). *Intellectual Property Rights and the Life Science Industries: A Twentieth Century History*, p. 135.

⁴⁷ Bellagio Declaration. (1993). 'Cultural Agency/Cultural Authority: Politics and Poetics of Intellectual Property in the Post-Colonial Era', Statement at the Bellagio Conference, 11 March, Italy.

⁴⁸ *Ibid.*

In June 1993, following the Bellagio Declaration, the first international conference for indigenous people held in Whakatane, Aotearoa/New Zealand adopted the Mataatua Declaration (discussed further in chapter eight). Later that year a UN Working Group on Indigenous Populations (WGIP) chaired by Erica-Irene Daes eased the way for greater dialogue on TK concerns.⁴⁹ Daes had earlier coined the term 'indigenous cultural and intellectual property' which opened up communications between indigenous network groups and governments to secure intellectual and cultural rights. The expert influence is evident in Article 29 of the draft document:

Indigenous Peoples are entitled to the recognition of the full ownership, control and protection of their cultural and intellectual property ... they have the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic resources, seeds, medicines, knowledge and the properties of fauna and flora, oral traditions, literature, design and visual and performing arts.⁵⁰

The move toward recognising and protecting indigenous peoples' knowledge stemming from the Rio Summit, the Bellagio Declaration and the Mataatua Declaration gained momentum culminating in 1993 in The Convention on Biological Diversity. This next section looks at the impact of this legislation in terms of protection around bio-diversity but, in particular, at the increasing political significance of patent applications that impact upon the knowledge of indigenous peoples. Following on from this is an examination of the impact of regulatory changes covering plants, genetic resources food and agriculture.

⁴⁹ The Working Group was an off-shoot of the Sub-Commission on the Prevention of Discrimination and Protection of Minorities, which in turn functioned under the Commission on Human Rights for the United Nations. See, Te Puni Kokiri (1994). 'Mana Tangata Draft Declaration on the Rights of Indigenous Peoples in 1993 Background and Discussion on Key Issues: An Explanatory Document', Te Puni Kokiri/ Ministry of Māori Development, p. 6.

⁵⁰ Erica-Irene Daes followed up the issue of cultural and intellectual property rights in a report to the United Nations entitled, 'Study on Cultural and Intellectual Property of Indigenous Peoples' document number E/CN4/Sub.2/1993/28. The 1993 draft document is presented in the following publication, (1994). 'Mana Tangata Draft Declaration on the Rights of Indigenous Peoples Background and Discussion on Key Issues: An Explanatory Document', Te Puni Kokiri/ Ministry of Māori Development, p. 15.

(B) The Convention on Biological Diversity (CBD): Compliance and Controversy

The CBD is significant for recognising custodial rights over genetic and other resources conditional upon the exercise of state sovereignty in various articles seeking “to preserve and maintain the knowledge, innovations and practices of indigenous and local communities”.⁵¹ The convention laid down four key objectives: (i) to conserve biological diversity, (ii) to promote the sustainable use of its components, (iii) to engage in the fair and equitable sharing of technological benefits arising out of the use of genetic resources, and (iv) to recognise that technologies are sometimes the subject of patents and other IP rights that must be protected.⁵² As an avenue to seek compensation for the misappropriation of collective property the Convention initiated what seemed like viable foundations for reciprocal exchange given that it recognised the ever-increasing misappropriation of genetic resources through biotechnology strategies “being developed in the research laboratories of the industrialised world controlled and financed by transnational organisations”.⁵³

However, the intentions outlined in the CBD continued to be undermined by the concept of an IPRs’ marketplace “intended to create legally enforceable monopolies so that an individual or corporation could derive exclusive economic benefit from certain practical innovations or ‘physical’ inventions for a period of years”.⁵⁴ A significant number of corporations including Monsanto were influential enough to exploit the marketplace for knowledge resulting in IP being used strategically to tie people into dependent relationships rather than collaborative partnerships.⁵⁵ Brush (1993) identifies three main avenues that have

⁵¹ Dhar, B. (2003). ‘The Convention on Biological Diversity and the TRIPS Agreement: Compatibility or Conflict?’ in C. Bellmann, G. Dutfield, and R. Melendez-Ortiz, *Op cit*, p. 77.

⁵² Dutfield, G. (2003a). *Op cit*, p. 213. The life-science industries who deal in gene research, chemicals, pharmaceuticals, seeds and cosmetics were not pleased with the convention or the way IP was structured under the CBD and were able to persuade the US administration not to sign it. As Dutfield notes, the US became a signatory a few years later, but “remains one of the few countries in the world not to ratify it”, p. 214.

⁵³ The discussion in this section will not pursue the anomalies in each of the CBD articles suffice to say that this is well documented by Dutfield (2003a) and Dhar, B. (2003). *Op cit*, p. 79.

⁵⁴ Carmen, A. and Saldamando, A. *Op cit*, p. 29.

⁵⁵ Interview with C. Arup, Victoria Law School Melbourne, Australia, 19 December, 2003.

been pursued to make biological knowledge the subject of IP grants. First are the entrepreneurs seeking to exploit the fact that indigenous people are the expert holders of knowledge in the use of tangible resources related to foodstuffs and, intangible resources including the medicinal properties' of plants and animals. Second are the bio-prospectors who take without compensation the intangible knowledge of indigenous people to enable them to pinpoint more ideas and locate collections of plants that make the selection and screening of biological resources more rapid and fruitful. Finally, the bio-prospectors depend on indigenous communities to maintain and conserve these biological resources for subsequent use.⁵⁶ Watal (2001) notes:

Research-based industries have found it profitable to screen natural resources such as soil samples, marine waters, insects, tropical plants and genes in developing countries. Some feel that compared to the conventional system of screening millions of synthesized chemicals, bio-prospecting, especially when it is based on traditional knowledge, may cut costs of pharmaceutical research and development by half.⁵⁷

The CBD did give attention to conditions of access to plants and genetic resources and their sustainable use under state sovereignty, but it has also been criticised for assisting, rather than protecting, the appropriation of TK thus divesting benefit-sharing of its potential for genuine reciprocity. Peterson (2001) refers to benefit-sharing as a pseudo-legal concept and political charter for advocating market-led development strategies. Such criticism is based on observations about uneven compensatory returns whereby indigenous peoples' intellectual contributions are abrogated to the "large and wealthy public or private organisations' bio-prospecting endeavours".⁵⁸ By keeping commercial contracts private, which companies are able to do under IP law as trade secrets, knowledge can be brought and sold at low prices and a modest share of the

⁵⁶ Brush, S. B. (1993). 'Indigenous Knowledge of Biological Resources and Intellectual Property Rights: The Role of Anthropology', *American Anthropologist*, 95 (3), p. 660.

⁵⁷ Watal, J. (2001). *Intellectual Property rights in the WTO and Developing Countries*, p. 170.

⁵⁸ Peterson, K. (2001). 'Benefit Sharing for All? Bio-prospecting NGOs, Intellectual Property Rights, New Governmentalities', *Political and Legal Anthropology Review*, 25 (1), p. 78.

royalties given back to TK stakeholders.⁵⁹ Burrows (2002) reports how one commentator at a trade forum conference in 1992, where discussions on biotechnology IP and commercial activity by companies based in the US, Europe and Japan were being held, complained that it was near impossible to obtain a patent on any form of life “because of ethics and other irrational considerations”.⁶⁰ Discussion on how these resources might be valued through ethical frames of reference are often inhibited by an overriding emphasis on commercial activity with ethics and reciprocal exchange formula or remuneration an anathema to opportunities for business to compete and expand. Consequently, indigenous people are less than enthusiastic about the CBD and often critical of the way it works. Halewood (1999) gives two further key reasons for their dissatisfaction: “the inclusion of a disclaimer in article 1 (3) that the use of the word ‘peoples’ in the document should not be construed as supporting movements for self-determination in international law; and, a general lack of support for substantive territorial rights”.⁶¹ As a part of reciprocal exchange, justice rights, human rights, and sovereign rights, let alone IPRs, knowledge-holding groups continue to demand “that when profits are gained through bio-prospecting the benefits and technologies developed should be shared equally with the original suppliers of genetic resources or traditional knowledge”.⁶²

Some firms make reciprocal relations a practice for guiding commercial relations between themselves and the communities that supply their businesses with knowledge and raw materials. Pretorius (2002) cites Shaman Botanicals and the Body Shop⁶³ as companies that have “developed mechanisms for returning some of the benefits from the commercialisation of medicinal plants and traditional knowledge to the indigenous people”.⁶⁴ However, in her analysis of Shaman

⁵⁹ Zerda-Sarimento, A. and Forero-Pineda, C. *Op cit*, p. 106. Critics say this agreement has not halted problems with deforestation or protected genetic resources.

⁶⁰ Burrows, B. 2002, ‘Conquest by Patents’, *New Internationalist*, 349 (September), p. 22.

⁶¹ Halewood, M. *Op cit*, p. 970.

⁶² Watal, J. *Op cit*, p. 171.

⁶³ Anita Roddick, Founder and Co-chair of the Body Shop showed a commitment to eliminating corporate controls and furthering fair trade by funding protest banners at the Seattle WTO talks while at the same time participating in ‘teach-ins’ and speeches on globalisation at forum meetings. See Roddick, A. (2000). ‘Sleepless in Seattle’. *New Internationalist*, (322), pp. 20-22.

⁶⁴ Pretorius, W. *Op cit*, p. 186.

Botanicals and its NGO affiliate, the Healing Forest Conservancy, Peterson (2001) finds anomalies in their 'information purpose and priorities' and makes three critical observations covering the way legislation plays into corporate hands: (i) interests such as logging, oil exploration, agriculture or cattle ranching are not named as contributors to rainforest destruction; (ii) indigenous people are seen as 'libraries of information' able to assist in bio-prospecting for intangible resources and drug development; and (iii) Third World states are often blamed for poor management and governance, while international political and economic constraints such as structural adjustment policies, the upkeep of export economies, debt and loan responsibilities are expunged.⁶⁵

On the question of whether IPRs ought to be held over TK, Monagle (2001) is clear that wherever discussion of this takes place the agenda must be set and the debates driven by indigenous and local communities themselves, not by commercial interests, and that they must reflect the "different circumstances of countries at different levels of development".⁶⁶ The fact that "TRIPS is silent on TK, and makes no reference to the CBD"⁶⁷ is problematic in terms of establishing reciprocity, and finding agreement on how IP can be managed and squared with community efforts to have traditional resources protected at both local and international levels. The concerns of national delegations in monitoring the CBD articles are related largely to the issues outlined above. Criticism continues to be voiced by indigenous and non-indigenous people in NGOs that reforms to patent laws or plant breeders' rights are not achievable within the current arrangements of the CBD. One of the reasons for this, Dutfield (2003) notes, is due to the predominance of civil servants from environmental ministries, who meet to discuss IP and TRIPS under the umbrella of sustainability and food security, often having little direct contact with trade ministry counterparts where WTO

⁶⁵ Peterson, K. *Op cit*, p. 82. Peterson also undertakes a thorough and illuminating discussion on Shaman's compensation efforts that while philanthropic, firmly locate the company in the market for future 'sustainable' harvests of particular plants and organisms.

⁶⁶ Monagle, C. (2001). 'Biodiversity and Intellectual Property Rights: Reviewing Property Rights in Light of the Objectives of the Convention on Biological Diversity', Discussion Paper WWF, CIEL World Wide Fund for Nature and the Centre for International Environmental Law, p. 15

⁶⁷ Dutfield, G. (2002). *Op cit*, p. 6.

standards are set and enforced.⁶⁸ The neo-liberal model set up by Anglo-American governments for departments, ministries and institutions to compete with one another has resulted in a decrease in reciprocity and collaboration and an increase in competition between organisations and national groupings. This situation has implications for institutional management, governance, and particularly, for forms of exchange between agents to further reciprocity in the interests of social and cultural welfare.

(C) Plants, Genetic Resources, Food and Agriculture

Biodiversity and biotechnology have major implications for food security, the sustainability of agricultural practices and the control of genetic resources for traditional and local communities. Living organisms were excluded from US patent laws until 1934 when an extension to the *Paris Convention for the Protection of Industrial Policy* recognised breeding efforts in asexually reproducing flowers.⁶⁹ As IP laws expanded to accommodate markets for new plant and seed varieties the pressure on TK-holders to open their resources to commercial activity increased. The expansion of the seed industry in the 1960s gave rights to breeders to graft and create hybrids assisting corporations' efforts to produce and market large volumes of food and crops. Since the International Convention for the Protection of New Varieties of Plants (UPOV) became law in 1968, revisions have been introduced with the most significant version in 1991 extending protection, adding novelty clauses and giving national governments rights to provide patent protection for plant varieties.⁷⁰

By the time TRIPS was implemented, the developed states had engineered national trade-offs to gain access to international markets including securing patent rights for plants and animals in return for recognition of TK. Arup was critical of the objectives behind these forms of trade-offs that work at protecting

⁶⁸ Dutfield, G. (2003a). *Op cit*, p. 214.

⁶⁹ Halewood, M. *Op cit*, p. 961.

⁷⁰ Dutfield, G. (2003b). 'Introduction: Intellectual Property, Trade and Sustainable Development: Mounting Controversy', in C. Bellmann, G. Dutfield and R. Melendez-Ortiz (eds), *Op cit*, pp. 10-11.

powerful interests over developing state interests.⁷¹ Clearly, the structurally weak states face challenges obtaining reciprocal outcomes with post-TRIPS agreements showing that IP had a role not only to act as an organising and negotiating tool but as a trade protective mechanism and exclusionary device.⁷² Indeed, the seed system in West and Central Africa illustrates how the reciprocal exchange of genetic material and related information by indigenous farmers has contributed over a number of decades to the development of new varieties that benefited people in the developed world far more extensively than people in developing states. In addition, IP rights, negotiated and organised by lawyers in the North for corporations, were advantaged by the lack of protection and enforcement mechanisms existing in the South and which could therefore be commercialised with impunity.

The social repercussions of efforts to strengthen rights around the application of IP over TK are deeply felt by local communities but, until recently, received little consideration in public debates in and between states and groups. Instead, much of the push for IPRs was normalised under the banner of development which proved detrimental to the lives of many. For example, the genetically modified crops (with European and American patents and patents pending on any new pipeline technologies) introduced to Africa from US and Asian research laboratories in the 1970s proved ill suited to regional growing patterns and the dietary tastes of the people. According to Niangado and Kebe (2003), this brought home to breeders (operating on the continent) the importance to peoples' health of local varieties, leading them also to wonder "who is entitled to the plant variety certificates if the indigenous farmers also contribute to developing new varieties".⁷³ The value of property rights is questionable when most people live in communities making incomes of US \$1 a day. There is also anxiety about placing IPRs on genetic material and other forms of knowledge

⁷¹ Interview with C. Arup, *Loc cit*,

⁷² Arup, C. (2000). *The New World Trade Organization Agreements Globalizing Law Through Services and Intellectual Property*, p. 219.

⁷³ Niangado, O. and Kebe, D. (2003). 'The Implications of Intellectual Property for Agricultural Research and Seed production in West and Central Africa', in C. Bellmann, G. Dutfield and R. Melendez-Ortiz (eds), *Op cit*, p. 132.

when remuneration and the question of how indigenous food supplies can be preserved by these rights has not been resolved at the national level.⁷⁴ Grass-roots activists, human rights groups and consumer groups remain opposed to controls held by the massive seed and ancillary industries. The latter's aggressive approach to IP ownership often breaches farmers' rights violated in interpretations of Article 27.3(b) of TRIPS where states are granted the right to protect "plant varieties either by patents or an effective *sui generis* system".⁷⁵

The tension between the extension of patents and the protection of plants and food crops grows more complex as the mercurial rise of an ethno-botanical knowledge sector expands to include information encoded in genetic resources. The authors of a 2001 World Wide Fund for Nature and Centre for International Environmental Law discussion paper spelt out the need for more appropriate *sui generis* systems to protect plant varieties. While it was granted that TRIPS provides flexibility for individual member-states of the WTO to create what are deemed 'effective' *sui generis* systems, in reality UPOV 91, as a current benchmark for legal application, notably "limits farmers' rights, and disrupts the traditional practice of saving and exchanging seed".⁷⁶ As Dutfield (2003) observes, while suspicion by breeders about patenting rights over seeds and crops exists "there is little sign that PBRs [Plant Breeders' Rights] will become indistinguishable from patent rights in terms of the exclusivity provided".⁷⁷ Plant breeders' rights and the role of patents in protection are critical to the human food chain and to integrating genome technologies and merging these with database collections. Thus, there is anxiety amongst people and organisations as IP extends its reach into areas of human knowledge critical to the social and cultural lives of the people tied to the resources of production and consumption.

⁷⁴ *Ibid.*, pp. 132-133.

⁷⁵ Sell, S. K. (2002). 'Intellectual Property Rights', in D. Held and A. McGrew (eds), *Governing Globalization Power, Authority and Global Governance*, pp. 180-181.

⁷⁶ Monagle, C. *Op cit*, p. 15. Monagle reports that these organisations contend that "patents may increase the risk of misappropriation of traditional knowledge. There is also concern that existing IPRs fail to provide positive incentives for local and indigenous communities to preserve and, if they wish, to capitalise on their traditional knowledge Patents are largely inappropriate to protect traditional knowledge: they are often expensive and difficult to access, and are unable to safeguard traditional knowledge that is often communally held and passed on through generations", p. 13.

⁷⁷ Dutfield, G. (2003a). *Op cit*, p. 192.

(D) Assessing the Impact of Biotechnology and Databases on TK

The US Supreme Court ruling in 1980 in favour of allowing patents over bacterium widened the scope of patent law to include DNA molecules and technologies for gene-splicing.⁷⁸ The impact of molecular biology and IPRs is discussed further in chapter nine but in terms of indigenous group knowledge, the granting of patents over genetically-engineered bacteria has resulted in a paradigmatic change advancing the commercialisation of knowledge. This change launched the biotechnology industry and altered the status of ‘products of nature’ by making biologically based products the subject of IPRs. To Peterson (2001) it “redefined, and in many cases, generated controversy over what counts as life and knowledge, who counts as authors, and what counts as ownership within property regimes”.⁷⁹ There are strong correlations between food, agriculture, biological material and the application of IPRs. As has been argued, while the use of biological knowledge for commercial purposes is not particularly new, it is only recently that research centred on the potential to attract patents and copyright have increased. Along with this, as Lancashire says, is a focus on marketing and gaining extensions to patents for “licensing rather than concentrating on the innovation end”.⁸⁰ The development of biological resources that have the capacity to generate income through IP rather than applied for production heralds a new era in commercialisation with wide-ranging implications for reciprocity, nature and human life.

The globalisation of IP and ownership rights over biological resources under development gives private industrial firms the power to break the biodiversity chain that historically has linked and sustained communities to a resource base.⁸¹ Monsanto and other leading agro-chemical conglomerates that call themselves ‘life sciences’ industries are in the business of commercialising new technologies from research into stem cells and genetic codes, and are focused on gaining

⁷⁸ Kelves, D. J. (2002). ‘Of Mice and Money: The Story of the World’s first Animal Patent’, *Daedalus*, 131 (2), p. 79.

⁷⁹ Peterson, K. *Op cit*, p. 79.

⁸⁰ Interview with J. Lancashire, *Loc cit*.

⁸¹ Dawkins, K. (1999). ‘Intellectual Property Rights and the Privatization of Life’, *Foreign Policy in Focus*, 4, (4), www.fpif.org/briefs/vol4/v4n04tra.html, p. 1.

economic advantage from genetic engineering developed by the cross breeding of human and animal cells, plants, and seeds.⁸² The “industrial countries ... own 97% of the world’s patents — but it is the developing countries that account for 90% of the world’s biological resources on which many of the patents depend”.⁸³ Legal interpretations of IP play a large part in how biodiversity is both protected and exploited. The University of Wisconsin confirmed in 2000 that it had no plans to share profits with the indigenous people that initially discovered and took care of a plant from which researchers have isolated a protein that has a sweetening power 500 times greater than sugar. The source of this protein, an indigenous African berry plant, has been used by the people of the region for centuries and is now protected by patents obtained in the US and Europe.⁸⁴ Scientists argued on legal terms that the product developed from the soapberry is not the same product as the original nature provided and therefore does not legally obviate a need for compensation or royalty payments.

Many indigenous communities have responded to this form of misappropriation by vigorously asserting farmer’s privilege rights and making provisions for compulsory licensing.⁸⁵ Some cases of indigenous knowledge misappropriation have been overturned by court rulings. Countless others remain unchallenged because of the difficulties of overturning a patent.⁸⁶ As the public profile of TK is raised and exploitation is documented, governments are pressured into addressing community concerns about TK resources. As a result the legal system is becoming more involved in interpreting and assessing cases revealing attitudinal changes are afoot and that not all contracts are entirely one-sided. For example, Tarzian (2000) reports that the University of Illinois used letters of intention and employed contracts disclosing share percentages of royalties that

⁸² Dutfield, G. (2003a). *Op cit*, pp. 147-154.

⁸³ Godrej, D. *Op cit*, p. 9.

⁸⁴ Zerda-Sarimento, A. and Forero-Pineda, C. *Op cit*, p. 107. Some research proponents argue in support of patents believing indigenous people will still have use of their knowledge and access to the resource. What they cannot do is set up a pharmaceutical or food company and benefit from the knowledge until the expiry of the patent in around 20 years. This reasoning does not take into account depletion from over mining of the ethno-botanical resource or the fact that a patent might be continued for much longer than the 20 year period by a novelty re-application.

⁸⁵ Arup, C. *Op cit*, p. 215.

⁸⁶ Monagle, C. *Op cit*, p. 6.

allowed use rights to go to the indigenous community, medicine man, shaman or member of the community.⁸⁷ Yet frequently, as Arup (2004) observes, the position of TK is compromised when “left to contract and the market, as the US has been recommending, and it is doubtful whether these traditional resources can sufficiently control access to secure rights and royalties”.⁸⁸ Consequently, much ill-will remains between commercial traders and indigenous people where the main destinations for patent registration are the wealthy states and regions of Japan, Europe and the US.

The TRIPS Agreement has been instrumental in opening the spill-way to a raft of patent applications on life and to an increase in incidents of bio-piracy. Khor (2002) quotes figures that “patents are pending or have been granted by 40 patent authorities worldwide on over 500,000 genes and partial gene sequences in living organisms. Of these there are over 9,000 patents pending or granted involving 161,195 whole or partial human genes”.⁸⁹ Some particularly difficult human rights issues arise for indigenous groups, and indeed for all populations, as research developments such as the 1991 Human Genome Diversity Project (HGDP) expand into areas of life apart from nature and natural existence. Research into the genetic predisposition of the Tongan population to diabetes was undertaken by an Australian genetic research company whose research and setting up of a database on their blood was condemned as culturally abhorrent. The ethical basis for the research was never discussed by government through an open forum.⁹⁰ The fact that diabetes is a disease attributable to social and economic conditions and requires health prevention measures to curb its risks appeared lost to government and science. Rather than improving living standards and investing in infrastructure programmes for health advice, government gave *carte blanche* for research into the population as a cohort to contribute toward scientific research through the application of biological

⁸⁷ Zerda-Sarimento, A. and Forero-Pineda, C. *Op cit*, p. 106.

⁸⁸ Arup, C. (2004). ‘TRIPs: Across the Global Field of Intellectual Property’, *European Intellectual Property Review*, (1), p. 11.

⁸⁹ Khor, M. (2002). ‘Rethinking Intellectual Property Rights and TRIPS’, in P. Drahos and R. Mayne (eds), *Global Intellectual Property Rights: Knowledge, Access and Development*, p. 208.

⁹⁰ Senituli, L. (2002). ‘The Gene Hunters: Patents on Life’, *New Internationalist*, 349 (September), p. 20.

techniques. In the wake of this and many other cases, IPRs have become an issue for signatory groups to the Declaration of Indigenous Peoples of the Western Hemisphere Regarding the Human Genome Diversity Project, who have denounced certain practices. The Amazanga Institute and other parties to the declaration: “Denounce and identify the instruments of IPRs and the apparatus of informed consent as tools of legalised western deception and threat”.⁹¹

Advances in computer technologies have assisted with the burgeoning industries built around the assembly and compilation of gene information for storage and supply. In response to demands for electronic libraries and knowledge dissemination, property right protection for databases has increased. To Daes (2001), the World Bank’s promotion of a global database of indigenous knowledge and the development of an African prototype represents an appalling anachronism. She questions how disclosing indigenous peoples’ sacred or confidential knowledge to the global public domain is an action to guarantee its protection. The lack of cyberspace governance procedures that allows commercial exploitation by corporations and vested state interests to be conducted over all manner of human knowledge and information undermines the arguments of proponents who insist knowledge databases deter corporations from seeking patents by revealing notice of prior art. This is problematic for two main reasons: first, indigenous peoples are able to bring prior art claims to their heritage regardless of whether or not they had previously disclosed the contents of their knowledge, and second, setting up global databases fails to overcome the more critical issues indigenous peoples face from the theft of their TK and the difficulties in challenging such actions in national courts, particularly when disputes traverse state boundaries. In Daes’ view, “if the World Bank, the European Patent Office or the World Intellectual Property office is serious about supporting the legal interest of indigenous peoples, they should help pay for

⁹¹ Douglas, L. ‘Why the Human Genome Diversity Project is Problematic for the Indigenous Community’, retrieved 8 July, 2004: www.homepages.wmich.edu/~bstraigh/AN490/LIZ.htm. Information on the Amazanga Institute and the Declaration above is also covered in *Cultural Survival Quarterly*, (1996), Summer, p. 63.

legal services, and not only build databases".⁹² Future research is necessary on the legality of database creation to monitor ethical concerns and evaluate reciprocal obligations around knowledge use. Certainly, legal services in IP and educational opportunities are pressing considerations for developing states and weak states to keep infrastructures abreast of major developments in IP and trade law. In addition, the numerous human rights issues being raised under the umbrella of IPRs require informed understandings of the law and indigenous experts capable of interpreting legal articles for their communities.

III. Preparations for a Framework Treaty

The conceptual shift in the discussion on IP protection for indigenous groups came with suggestions that *sui generis* solutions had application to TK, with both Simpson (1997) and Daes (1997) committed to the approach that it was "inappropriate subdividing the heritage of indigenous peoples as this would imply giving different levels of protection to different elements of heritage".⁹³ WIPO responded to concerns over the lack of reciprocity post-TRIPS and the CBD's failure to make technology transfers a reality by undertaking nine fact finding missions (FFMs) between 1998 and 1999 to identify and explore the views of current IP knowledge-holders and assess the needs of new beneficiaries entering the WTO trading system (the FFM findings are discussed again in chapter eight in relation to Aotearoa/New Zealand's experience with WIPO). They looked at national initiatives and reported on current and future possibilities for knowledge innovation.⁹⁴ To (2003), the FFM was prescient coming in the pre-and post-Seattle period where the voices of NGOs and their

⁹² Daes, E. I. (2001). 'Intellectual Property and Indigenous Peoples', Paper Presented at the American Society of International Law, p. 4.

⁹³ *Ibid*, pp. 1-2.

⁹⁴ WIPO, (2000). 'Intellectual Property and traditional Knowledge', retrieved, 16 April, 2003: www.wipo.int/globalissues/tk/report/final. The FFMs were carried out in the following areas: South Pacific, (Australia, New Zealand, Fiji and Papua New Guinea); South Asia (Bangladesh, India and Sri Lanka); Southern and Eastern Africa (Uganda, United Republic of Tanzania, Namibia, and South Africa); North America (United States of America and Canada); West Africa (Nigeria, Mali Ghana and Senegal); The Arab Countries (Oman, Qatar, Egypt and Tunisia); South America (Peru and Bolivia); and Central America (Guatemala, Panama), The Caribbean, (Trinidad and Tobago, Guyana and Jamaica). Government officials, research institutes, NGOs, museums, community organisations, village councils and stakeholders of traditional knowledge were consulted. See report for full details: 'Intellectual Property Needs and Expectations of Traditional Knowledge Holders WIPO Report on Fact Finding Missions (1998-1999)'. WIPO, April 2001, Geneva, Switzerland.

concerns for indigenous rights were attracting greater attention from government officials.⁹⁵ Public debate on biotechnology practices, the use of indigenous flora and fauna for pharmaceutical purposes and the patenting of life forms intensified, bringing the issue of IP and the plight of TK stake-holders, including farmers and peasant groups, to a new level. Sell (2002) reports:

Opposition groups are constructing 'the problem' in a different way by appealing to a competing set of rights and duties in the context of intellectual property. Farmers' rights, the rights of indigenous peoples and their knowledge, and rights to essential medicines challenge the claims of property holders who advocate the high protectionist norms embodied in TRIPs.⁹⁶

The scope and direction of IPRs were debated by leaders of the developing world at the first South Summit in Havana in 2000, and the difficulties of establishing reciprocal rewards and benefits for struggling economies through technological knowledge transfers were highlighted. Sub-Saharan Africa was cited as a region requiring immediate priority given its very limited access to computer technologies.⁹⁷ Summit participants called for collective action to preserve and protect the knowledge and diversity of resources fundamental to wealth creation and development given the homogenising threat to national and local cultures and languages posed by globalisation.⁹⁸ The Havana Declaration laid down the groundwork for recognising and acting against practices affecting the capacity of indigenous communities to express, own and control their intellectual resources. Patent rights were most at issue for the distortions they caused for knowledge access, ownership rights and a lack of reciprocity.

To Daes (2001), the new challenge was to "strengthen the trans-boundary jurisdictions of national courts to enforce private international law, and ensure international respect for the customary IP laws of indigenous people as a matter

⁹⁵ Drahos, P. (2003). 'When the Weak Bargain with the Strong', Law Programme Research School of Social Sciences, Australia National University, Canberra, p. 24.

⁹⁶ Sell, S. K. *Op cit*, p.180.

⁹⁷ Roque, the Cuban Foreign Minister, issued a statement at Havana critiquing trade protection policies and the imposition of a neo-liberal emphasis on structural adjustment programmes that had led to growing economic disparities between the rich and poor states. Roque, F. (2000). 'South Summit Opens in Havana'. *Worker's Daily Internet Edition*, retrieved 8 April, 2005: www.rcpblm.org.uk.

⁹⁸ Harper, T. N. (2002). 'Empire, Disapora and the Languages of Globalism 1850-1914', in A. G. Hopkins (ed), *Globalization in World History*, p. 141.

of choice of law".⁹⁹ A 2001 UNCTAD conference called for new international forms of *sui generis* law to protect indigenous resources.¹⁰⁰ The model law, subsequently unveiled by Dr Kamal Puri at a UNESCO Pacific sponsored meeting in New Caledonia, recognised the uniqueness and diversity of the people in the Pacific region. Modelled on an African equivalent, Puri proposed that the consent from TK-holders be required before commercialisation could proceed and that tribal authorities have the power to deal with subsequent disputes.¹⁰¹ Two model laws in the Pacific, one for expressions of culture and one covering TK and biological resources, for the first time brought together indigenous concerns and IP law (many Pacific countries lacked IP law), in governance mechanisms. The model law had input from the New Zealand and Australian governments. To Mead, a participant in the negotiations, the establishment of a reciprocal and co-operative relationship was made difficult by a level of patrimony that in her view transmitted into racism:

There is a level of racism that's hard to explain until you've experienced it. All the processes were in place. The arguments were there, the integrity of the research was there, the processes were there. Every milestone that you could use to identify with good policy development was there. At the end of the day it came down to no, we don't like that, we don't like it – that's not good, and their rationale was that it lacked intelligence, it lacked integrity, so you have to say after you've seen this a few times, that this is racism.¹⁰²

The suggested racism may also be explained as an assertion of power by governments and UNESCO to maintain control by downplaying social and cultural factors in order to lend support to commercial and political considerations. The evidence that while there was support and recognition from the region's major states that *sui generis* legal directions needed to come from indigenous people, once negotiations were underway significant tensions emerged between governments and indigenous groups with "governments saying we know better".¹⁰³ There are political reasons for this, linked ultimately

⁹⁹ Daes, E. I. *Op cit*, p. 11.

¹⁰⁰ Monagle, C. *Op cit*, p. 15.

¹⁰¹ *The Economist*, (2002). 'Intellectual Property: Patently Problematic', September, 14-20, pp. 67-68.

¹⁰² Interview with A. Mead, Victoria University of Wellington, 16 December, 2003.

¹⁰³ *Ibid.*

to trade and legal interests with the addition that each state decides the extent of protection over resources often resulting in minority rights being treated shabbily.¹⁰⁴ Not only are minority groups dependent on cooperation and reciprocity at the national level but, Drahos (2004) claims, at the regional and international level the success of any law or enforcement mechanisms for protecting knowledge is incumbent upon, and profoundly related to, a “harmonious and cooperative relationship between indigenous groups and national governments”.¹⁰⁵

Applications for intellectual rights remain difficult for less-developed states struggling to meet the harmonised IPR rulings that lay the framework for domestic protection measures in the first instance, and intensify as tensions between strong and weak states and diverse indigenous communities in the developed and developing world come up against challenges to integrate IP systems that conform to contemporary global competitive trade standards. The progressive integration of TK into global regulatory frames of IP governance, predicated on exclusive monopoly rights, represents a critical stage in the quest for indigenous rights. Indeed, a 2002 report in the United Kingdom on IPRs notes that a single *sui generis* system at the domestic level may not be flexible enough to adequately meet local needs.¹⁰⁶ Dixon and Greenhalgh (2002) argue: “a key need is to establish means for valuing such knowledge appropriately and for providing payments and other incentives so that such resources are exploited efficiently and fairly”.¹⁰⁷ This argument was echoed at a workshop held at Oxford in 2003, set up to review the 2002 World Summit on Indigenous Peoples and Sustainable Development, in strong criticisms of the World Bank for its

¹⁰⁴ Jacobsen, V. (2001). ‘Plants People and Property’. Paper Presented at the Annual Conference of the New Zealand Association of Economists, 27-29 June, Christchurch, New Zealand, p. 8.

¹⁰⁵ Drahos, P. (2004). ‘Toward an International Framework for the Protection of Traditional Group Knowledge and Practice’, Geneva, UNCTAD-Commonwealth Secretariat Workshop on elements of National Sui Generis systems for the Preservation, Protection and Promotion of Traditional knowledge, Innovations and Practices and Options for an International Framework, p. 26.

¹⁰⁶ Dixon, P. and Greenhalgh, C. (2002). ‘The Economics of Intellectual Property: A Review to Identify Themes for Future Research’, *Oxford: Nuffield College, Oxford Intellectual Property Research Centre*, p. 50.

¹⁰⁷ *Ibid.*

support of the extractive industries which were damaging the social and ecological structures of forest communities.¹⁰⁸

Participants drew attention to the problems that continue to frustrate efforts to achieve reciprocity, to lessen the impact of resource depletion on the lives of people, to deal with corporations who violate indigenous rights, and to address corruption and poor governance at the domestic level which contributes to the legal and political marginalisation of minority populations.¹⁰⁹ The issues surrounding physical property, culture and the environment are bound up with proprietary rights and the globalisation of IP in a multitude of ways. Those who oppose the continuing regulation of IP in a post-TRIPS world see the legal enclosure of rights as continuing the strategies of disempowerment of previous decades in new manifestations of imperialism as was noted earlier.¹¹⁰ These are some of the political issues commonly voiced by indigenous groups standing alongside spiritual and customary law practices as concerns that require recognition and wider debate before a framework treaty can be formulated and implemented.

IV. Protecting Group Knowledge

For Arup (2004) a number of key areas associated with the legal and operational scope of TK through IPRs need further identification including “local customs, market-place transactions, national legislation, administrative and judicial rulings, bilateral and regional agreements between governments, transnational epistemic advocacy, regulatory networks, and official international organisations and treaties”.¹¹¹ Each has implications for efforts to conceptualise and formulate a treaty framework, effective for enforcing protection of TK through a global agency, without compromising already existing national *sui generis* law. In his 2004 draft paper, written at the request of the Commonwealth Secretariat, Drahos

¹⁰⁸ The TebTebba Peoples’ Foundation and Programme. (2003). ‘Indigenous Peoples, Extractive Industries and the World Bank’, retrieved 16 May 2003:

www.forestpeoples.gn.apc.org/Briefings/Private%20sector/eir_ip_declaration_apr03_eng.htm. p. 1.

¹⁰⁹ *Ibid*,

¹¹⁰ For a full discussion on neo-imperialism and IPRs, see Drahos, P. with Braithwaite, J. (2002). *Op cit*,

¹¹¹ Arup, C. *Op cit*, p. 8.

presents a number of proposals for developing an international enforcement pyramid. The framework principles in the CBD and elsewhere set standards for IP and TK but, he argues, agreement on enforcement is needed for dealing with the problems of linking TK to IP. He considers “the time is probably right for an open-ended and pragmatic approach to be taken” to coordinate other actors.¹¹² Foremost among proposals for providing protection mechanisms for traditional group knowledge practices (TGKP) are state cooperative enforcement procedures carried out through international treaty obligations constructed as a Global Bio-Collecting Society (GBS).¹¹³ The GBS could monitor inappropriate patent applications and oppose a patent on behalf of groups unable to do so; “on other occasions, it may provide information to patent offices, indigenous groups or civil society actors that may then in turn take appropriate action”.¹¹⁴

The practicalities of establishing a single agency to enforce regulatory standards has developed slowly as parties to international forum meetings have discussed the misappropriation of traditional intellectual resources, the plunder of physical resources, and attempts to resist corporate ownership and control of both old and new forms of knowledge.¹¹⁵ Efforts to form the basis of the coordination pyramid while responding to the many diverse knowledge recognition and preservation aims is a major issue. Other issues concern the reality that neither reciprocity, as a public good concept, nor TRIPS has made fairness a central facet of concessions. Instead, prompted by commercial and strong state interests, sanctions and other retaliatory trade measures have been used to force countries to comply with proprietary knowledge efforts. The principle of reciprocity does have a role in an enforcement treaty because it is integral to how states conduct their behaviour toward one another in a cooperative manner to moderate the more coercive practices of unequal trade.

¹¹² In 2000 WIPO set up an Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) to discuss and offer practical proposals for benefit-sharing. Drahos, P. *Op cit*, p. 33.

¹¹³ *Ibid*, pp. 7, 43, 46.

¹¹⁴ *Ibid*, p. 43.

¹¹⁵ Kawell, J. *Op cit*, p.15.

As outlined in chapter two, reciprocity is a fundamental principle guiding the conduct of international relations, and while it has been seen to work quite effectively in IP, evidenced by copyright agreements between states, Drahos sees a relatively limited role for reciprocity in the context of traditional group knowledge practices because these are not globalised as, for example, the semiconductor chip industry is, and where reciprocity spear-headed market access involving a small group of wealthy countries.¹¹⁶ If national treatment and mutual recognition are more likely to become core values underpinning a TGKP pyramid, as Drahos suggests, this should not mean that the normative focus on reciprocity loses its position as moral lore. Instead, reciprocity, with its obligations of fairness and moral respect toward group knowledge, needs closer attention. This is all the more pressing as private contracts, memorandums of understanding, database construction and bilateral trade arrangements challenge the multilateral foundation of TRIPS, and reveal a tendency to eclipse democratic governance under the influence of powerful states and private agencies. Reciprocity needs to be given greater consideration in any international effort to reach agreement on enforcement models for TK and IP because of its relevance in terms of reparation, for good being received for good, and for the mutual exchange of benefits as identified in chapter two as necessary to justice and fairness. Maximising benefits and reducing social costs are vital elements in any proposals for TK primarily because an over-arching emphasis on economic competition has damaged the public good character of IPRs.

Maskus and Reichman (2004) are drawn to the conclusion that an immediate moratorium is required on international IP standard setting until it becomes clearer “how a transnational market for knowledge goods should ultimately be structured”.¹¹⁷ This position has a great deal of merit, although, finding support from states, the WTO and powerful private agencies to apply a moratorium is difficult. The unavoidable link between TK and the global corporations who rely

¹¹⁶Drahos, P. *Op cit*, p. 30.

¹¹⁷ Maskus, K. E. and Reichman, J. H. (2004). ‘The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods’, *Journal of International Economic Law*, 7 (2), p. 319.

so much on TK for a range of commercial enterprises would be almost impossible to control through a moratorium. For Kuruk (2004), a strong case is made for reciprocity in terms of negotiating concessions between TK and IP as an alternative to a single international institutional agreement:

The adoption of a comprehensive international scheme universally applicable to all traditional knowledge may not be feasible at this stage, and bilateral agreements reflecting cooperation between states on key matters of interest and concluded on the basis of reciprocity may offer better solutions for now.¹¹⁸

The establishment of regional agencies, comprised of representatives of national organisations, could assist greatly by giving groups an avenue to respond to the “unique priorities of the region”, as well as realigning negotiating power so it is not just the strong that benefit.¹¹⁹ Since commercial imperatives lie behind arguments validating the establishment of IP over TK, regional agencies could provide a conduit for interested parties to pursue claims and would be well placed to indicate “where particular types of protected works of TK are found and any restrictions that may exist regarding their commercial exploitation”.¹²⁰ In a post-TRIPS setting, where the WTO and WIPO are paradoxically involved in strengthening IP rights whilst engaging in the rhetoric of free trade, TK has become pivotal to both accumulative and exploitative processes. The strengthening of rights and standard setting at the international level is juxtaposed against problems of commercial exploitation which in some instances are now being worked through by cooperative rather than competitive means. Many of the parties involved have not been responsible in the past for questioning the social and cultural value of TK signalling that a new era in the politics of indigenous peoples’ rights is developing.

¹¹⁸ Kuruk, P. (2004). ‘Bridging the Gap between Traditional Knowledge and Intellectual Property Rights: Is Reciprocity an Answer?’ *Journal of World Intellectual Property*, 7 (3), p. 444.

¹¹⁹ *Ibid*,

¹²⁰ Kuruk suggests that the agency be the authorised protector of group knowledge and the disseminator of information and database knowledge to libraries and other interested parties in traditional knowledge use-countries to simplify the process of obtaining authenticity. *Ibid*, p. 446.

V. Conclusion

It is generally assumed that the law delivers fairness and equity and, in the case of IPRs, offers rewards based on reciprocity where creators are protected under a time-frame in return for originality and novelty to expand knowledge. For TK, as noted above, TRIPS has nothing substantive to say about defining most heritage items. Instead, as part of the public domain, it leaves procedural matters to the defence of IP law generally. Thus, in some jurisdictions TK has attracted protection under trade secrets, copyright and patents. For others there is widespread scepticism about the value of IP and in some cases a distrust of databases set up to protect cultural items that have traditionally been transmitted orally. Clearly, the impetus toward surrounding TK with ever more strengthened forms of IP, especially patents, has a corollary in trade competition where the creation of new and expanding markets for intellectual ideas covering indigenous designs, techniques, medical treatments and traditional methods — those used by indigenous cultures for centuries — are being exploited on a global scale as the new raw materials of commerce.

The arguments advanced in this chapter have illuminated the critical impact of unequal trade and the dimensions of the commercial intrusion of IP rights into the area of TK without prior approval. For the most part this has occurred without consultation and agreement from the communities who have relied upon such knowledge for their physical and spiritual sustenance, and ought to be owed due respect for its use should they choose to disclose it to others. If, as this study seeks to establish, exploitation has implications for the character of knowledge itself in its social and cultural settings, then doubts and questions arise as to the use of western law to meet the needs of indigenous communities seeking to protect their resources. A more promising direction relating to the needs expressed by indigenous groups is for consent through recognition and collaboration through mutual agreement based on reciprocal principles in conjunction with customary law practices that integrate democratic values consistent with trade hospitality.

This normative path to redress commercial misappropriation presupposes the rights of indigenous groups to their work pre-empting intrusions from outside without the full permission or cooperation from TK stakeholders. Achieving this would require reconciling the needs and wants of diverse communities and their different authorities with significant interests in TK before complementary solutions could be worked through. The diverse nature of TK around the globe suggests that regional approaches set up by indigenous groupings might offer the most hopeful route for protecting and enforcing knowledge claims based on reciprocity balanced by acceptable contracts to the various parties to any agreement. The African proposal discussed by Kuruk (2004) has merit because it does not necessarily seek to create more national law. Instead, it desires actions that make recognition and enforcement relevant, consistent with policies to seek redress if fair and equivalent technology transfers are not forthcoming. Rather than sanctions and negative trade outcomes, reciprocity becomes an important element and significant principle for guiding bargaining and negotiations, and for making fairness and equivalence count, in addition to establishing the foundations of financial and technical exchange. More importantly, it needs to be reiterated that corrupt political power inhibits reciprocity, creates dissension amongst marginalised groups, and ultimately can give rise to conflict.

The threads of this chapter are drawn together to form the basis of a broad set of conclusions about the nature of TK, the emergence of declarations and legal rules for the recognition and preservation of TK and the scope of reciprocity to ensure fair and equivalent outcomes. First, TK stake-holders often lack the capital, technological or organisational resources to compete with corporations and the regulatory demands of strong states in open market competition thus compromising their capacity to obtain mutually agreed reciprocal benefit-sharing outcomes. Second, sufficient substantive directives already exist in numerous agreements, as outlined at the beginning of this chapter, to cover key areas where TK is at risk from misappropriation; however, it is the implementation of

agreements and the political will to evaluate progress and make reforms where necessary which presents a significant problem for those seeking recognition and protection. In addition, the failure of key states to ratify existing agreements forecloses on the transparency and disclosure necessary for TK to be adequately recognised and protected. Third, there is a need to counter the dominant form of economic alliance where state power and corporate capital concentrates through monopolies the use of TK for proprietary purposes without leaving 'as good and enough for others', which as has been confirmed in interviews, poses a threat to reciprocal outcomes. The next chapter looks specifically at aspects of Maori knowledge examining the political debates and determinations surrounding national *sui generis* protection for various forms of knowledge. It offers another dimension to the debate on reciprocity by discussing substantive moves, within a specific national setting, of the impact of TRIPS and post-TRIPS deliberations.

CHAPTER EIGHT

RECIPROCITY AND ASPECTS OF MAORI KNOWLEDGE ¹

The place of knowledge in Maori culture² is reflected in Mead's saying *Toi te kupu, toi te whenua, toi te mana* - knowledge is the word, knowledge is the land, and knowledge gives dignity.³ In relation to Maori, knowledge and reciprocity form part of a fundamental set of values encapsulated by the term *tau utuutu* – the act of giving back or replacing what you take or receive.⁴ Reciprocity, defined in chapter two as the glue that binds social relations, has added meaning in terms of Maori understandings. For example, reciprocity is not something that necessarily returns an immediate social, cultural or economic value to Maori. Rather reciprocity, and its association with giving and receiving, entails amongst other things, diverse tribal protocols that equate to long-term social and cultural forms of exchange which can cut across time and generations before any return or benefit is realised. As with many indigenous communities, Maori knowledge and reciprocal understandings of exchange are deeply entrenched in cultural and spiritual systems of customary law. Known collectively as *tikanga* Maori, customary laws involve group norms and traditions based on diversity and a mosaic of opinions and thought governing knowledge preservation and exchange rewards.

Reciprocity for Maori is, nonetheless, conducive to “sharing resources with incomers, under arrangements that involve an ongoing commitment to mutually

¹ The decision to focus on aspects of Maori knowledge and IPRs Aotearoa/New Zealand is linked to on-going political debate around the use of cultural items of collective social significance becoming marketable objects through commercialisation. Advances in technologies, and the use of plants, artifacts and other cultural forms of knowledge for proprietary purposes stimulated national debate on the relevance of IP to TK in this country during the 1980s and 1990s mirroring international debates about the adequacy of IPRs to deliver recognition and protection under current market conditions.

² Maori tribal and sub-tribal social groupings derive identity from *waka, whanau, hapu and iwi*. *Waka* is the canoe denoting the arrival in Aotearoa of respective tribes. *Whanau* is the basic social unit including family and extended family. *Hapu* consists of larger village communities. Most Maori claim lineage relationships to several hapu and frequent references are made to hapu as a sub-tribe. While the connections between hapu and iwi are complex and interconnected, *iwi* is commonly translated as a tribal group identifiable through wider regional or district kin-based relations and these span tribal, pan-tribal and urban groupings. See The Law Commission, (2001). 'Maori Custom and Values in New Zealand Law', p. 42.

³ Mead, S. M. (1997). *Landmarks, Bridges and Visions*, p. 1.

⁴ Harmsworth, G. (2002). 'Indigenous concepts, values and knowledge for sustainable development: New Zealand case studies', Paper Presented at the 7th Joint Conference: Preservation of Ancient Cultures and the Globalization Scenario. School of Maori and Pacific Development and International Centre for Cultural Studies (ICCS) India, 22-24 November, University of Waikato, Hamilton New Zealand, p. 4.

beneficial and reciprocal outcomes".⁵ However, while reciprocity is entirely possible under *tikanga* Maori, the ownership and alienation of tangible and intangible land and goods remains unacceptable under customary practices. Thus, it has been *tikanga* Maori which has given tribal groups avenues to seek recognition and protection over traditional and contemporary forms of knowledge in consultation with Treaty of Waitangi articles.⁶

The discussion that follows seeks to address the vexed political issue of how the local need for knowledge retention meets the demands of national development and global IP law. While one recent national *sui generis* law — the Maori trademark *Toi iho*⁷ — goes some way to protecting new ideas the political challenge remains that much tribal heritage falls under a cloak of economic activity. These activities are tied to trade imperatives and TRIPS standards and, as Coxhead says, elaborating on comments made in chapter seven, the current system will not protect “what Maori want in terms of the collective nature of historical knowledge, and I don’t know if Maori actually want knowledge protected now and forever”.⁸ For Maori, as for other indigenous groups, property rights over ideas and the protection of TK has political implications brought about by tensions between individual rights and collective responsibilities. Jacobsen claims tensions stem from bringing together the benefits of IP protection as individual rights with collective notions of ownership

⁵ Charters, C. and Erueti, A. (2007). *Maori Property Rights and the Foreshore and Seabed: The Last Frontier*, p. 33.

⁶ The Treaty of Waitangi (TOW) was forged between a majority of Maori tribal chiefs and the British Crown. Prior to the signing, two copies of the same treaty circulated simultaneously - a Maori version and a translated English copy. Most of the chiefs signed the Maori version. The interpretation and meaning of key concepts were lost in translation, particularly in Articles 1 and 2. In Article 1 a problem arose in the English interpretation of the term *te kawanatanga katoa* or sovereign power whereby the crown deemed Maori had ceded the right of governorship to Queen Victoria. The context of governorship was unfamiliar to Maori at the time of signing with the signatories never believing they had let go of their *tino rangatiratanga* or sovereignty and self-rule. In Article 2, *te tino rangatiratanga*, or self-determination over *taonga* or bequeathed treasures, was already vested in the chiefly authority that tribes, by virtue of their status as *tangata whenua* (people of the land) had the intrinsic right to manage their own affairs allowing *pakeha* (European or non-Maori) to govern themselves. See Kawharu, I. H. (ed), (1989). *Waitangi Maori and Pakeha Perspectives of the Treaty of Waitangi*, for an informative discussion and a cross section of views on the treaty. See also Durie, M. (1998). ‘Mana Tiriti Application of the Treaty of Waitangi’. *The Politics of Maori Self-determination*, pp. 175-185.

⁷ The establishment of *toi iho* (or the Maori trademark) in 2002 involved a number of governmental and non-governmental agencies including the Intellectual Property Office of New Zealand operating as the business unit of the Ministry of Economic Development, Te Puni Kokiri overseeing Maori development and, Creative New Zealand as the agency under which *toi iho* operates. These government agencies and Maori groups successfully established the *sui generis* law to protect the unique cultural heritage of individual Maori artists and designers, and established ancillary trademarks which include facility for business co-production.

⁸ Interview with C. Coxhead, Faculty of Law, University of Waikato, Hamilton. December 13, 2003.

to retain knowledge and prevent theft by misappropriation. As she explained: “knowledge that is held in common is fine until the opportunity to profit arises ... it means people have to look both ways, to the individual and the collective for protection. While there are lots of people and mechanisms within organisations to keep knowledge safe, the concerns are about how this is to be done”.⁹ Keeping knowledge safe becomes a socio-political issue related not only to recognition, but also to the sort of protection required for cultural items, the limitations of private rights to adequately secure protection, enforcement conditions, and the flexibility of IP law to recognise and fulfil the diverse interests of collective groups. These considerations form part of the core discussions in this chapter between IP, Maori knowledge and reciprocity.

The recovery of treasures and cultural heritage, including plants, animals, and artefacts appropriated during the colonial period has been assisted by reciprocal values recognising the significance of items to groups whilst acknowledging ownership. While there is some agreement between tribes and government about the necessity of rights to prevent further cultural heritage exploitation a number of commentators including Jackson (1992), Smith (1998), Mead (2002) and Solomon (2000) document a number of new cases of knowledge misappropriation carried out by groups and organisations without the express permission, recognition of ownership and customary rights, or forms of reciprocity. Simultaneously, tribal groups are seeking protection and entrepreneurial ways to manage and commercialise their cultural and intellectual resources in key areas of the economy such as cultural tourism, art and design, information technology and biotechnology. In offering direction on how a constructive dialogue could be conducted around the concerns of indigenous knowledge holders, Mead (2002) notes that intellectual property laws are of relevance to Maori even if they are not perfect in their current form.¹⁰

⁹ Interview with V. Jacobsen, Treasury, Wellington, 11 December, 2003.

¹⁰ Mead, A. (2002). ‘Understanding Maori Intellectual Property Rights’, *The Inaugural Maori Legal Forum*, retrieved 13 November, 2003: www.conferenz.co.nz/library/m/mead_aroaha.html, p.

This chapter brings to the debate on reciprocity and the way intellectual rights are governed an analysis of interviews with government and non-governmental officials, academics, and others involved in IP and knowledge issues in Aotearoa/New Zealand. Of particular relevance to the empirical enquiries are discussions and arguments related to reciprocity based on equity and fairness as established in chapter two and demonstrated elsewhere. Indeed, it is hard to assert that reciprocal exchange should not be valued owing to exploitation that makes national recognition for the protection of *taonga*¹¹ (bequeathed treasures) and *matauranga* (Maori knowledge) vital.¹²

At one level, the competitive economic and legal institutional framework of IPRs is seen by Maori scholars such as Smith (1997) as incompatible with *tikanga*¹³ posing a direct challenge to *kaupapa* Maori¹⁴ (Maori way of doing things) by displacing the cultural autonomy and *kaitiaki* (guardianship) values of TK holders. At another level, groups and leaders within tribal areas are developing ways to incorporate *tikanga* and revitalise customary law in order to reconcile the use of TK with economic self-determination and link these with IP. Reciprocity is integral to those efforts, but needs fuller explication within debates on IP and TK. For instance, Maori business practices incorporating new technologies and organisational frameworks have been established (discussed in section VI), based on collective protocols. These come in response to the domestic implications of global IP re-regulation to ensure that knowledge is respected and accommodated in many key areas of the economy. In Coxhead's view, Maori are committed to collective recognition for TK and united in their concern that Maori knowledge ought not to be exploited by non-Maori. However, questions need to be asked when it is Maori who exploit Maori knowledge on an individual basis. For

¹¹ See chapter 19, 'The Nature of Taonga', for a full discussion on the derivation and use of *taonga* and its link to art in: Mead, S. M. *Op cit*, pp. 179-189.

¹² The Law Commission, *Op cit*, p. 29. In this paper distinctions are made between a knowledge-base or ideal of *tikanga*, (*Te matauranga*) and the practice of *tikanga* or customary law.

¹³ *Ibid*, pp. 2-3. "The closest Maori equivalent to concepts of law and custom is *tikanga*". *Tikanga* is a dynamic and flexible part of social and cultural practices that connect the past with the present.

¹⁴ A *Kaupapa* Maori approach to research and development has been extensively documented by Smith, G. (1997). *The Development of Kaupapa Maori: Theory and Praxis*, Unpublished Doctoral Thesis, Auckland University. See also Smith, L. T. (1999) *Decolonizing Methodologies Research and Indigenous People*. For additional information on field research protocol see Te Momo, F. *Stories From the Field: Developing Practical Research Methods in Maori Communities*, retrieved 14 January, 2004: www.devnet.org.nz/conf2002/papeTeMomofiona.pdf.

example, a bikini designed for a fashion show using a *koru* (spiral pattern) attracted criticism from Maori “until they actually found that it was a Maori designer and the debate stopped. I think there needs to be discussion on these matters and Maori haven’t had that. It’s moral and ethical questions that need addressing”.¹⁵ Reciprocity, as outlined in previous chapters, is an important part of these considerations, forming a basis for the beginning of this chapter which establishes connections between aspects of Maori knowledge defined by cultural identifications and unique social understandings of knowledge characterised by spiritual and reciprocal dimensions. Section two explores measures to resist appropriation and institute legal jurisdictions for development purposes. Government and non-governmental responses to IP are linked to issues around TK and lead in to section three where the impact of WIPO’s fact-finding mission is analysed in terms of the recognition and protection of TK. Section four draws attention to developments in the knowledge economy and examines *sui generis* law. Section five explores new technologies and the role of *tikanga* in determining understandings of TK, followed in section six, by a business framework for Maori knowledge to meet the needs of local communities. Legal and customary rights issues are discussed prior to the concluding remarks.

I. *Matauranga* Maori and Reciprocity

Maori knowledge systems, patterned on long standing traditions connected to *whakapapa* (genealogy), have for centuries governed how groups managed and sustained their resources. As Coxhead (2003), explains: “centuries-old patterns of protection and *tikanga* underpinned Maori creativity and innovations long before patents, copyright or trademarks had a commercial value”.¹⁶ The term *taonga tuku iho* encapsulates the inherent value and spirit of the treasures that are bequeathed down through the generations. For Jackson (1998), “such knowledge covers all areas of life, from science to spirituality, from medicine to music, from history to handcrafts, from astronomy to art”.¹⁷ The social and cultural value of

¹⁵ Interview with C. Coxhead, *Loc cit.*

¹⁶ *Ibid.*

¹⁷ Jackson, M. (1998). ‘Research and the Colonization of Maori Knowledge’, Proceedings of Te Oru Rangahau Maori Research and Development Conference, School of Maori Studies, Massey University, 7-9 July, Palmerston North, New Zealand, p. 72.

knowledge upheld by the *tangata whenua* (people of the land) centres on diverse use and expertise based around inter-generational ties reciprocated between ancestors and the land. Reciprocity between groups involves the transfer of *tikanga* or the gifting of treasures, ideas and knowledge through protocols and ceremonies linking the past to the future.

Important spiritual ties exist between *tikanga* and cultural and intellectual heritage. Solomon (2000) identifies the reciprocal ties of *tikanga* as deeply interconnected with the natural world through a direct *whakapapa* or genealogical line to the land through “*Papatuanuku*, the Earth Mother; to the sea and marine creatures by the ancestor *Tangaroa*; to the forest and all its inhabitants through *Tane Mahuta*, and to the heavens and all of the celestial domain through an ancestral Sky Father, *Ranginui*”.¹⁸ Before any resource is used “ritual obligations of reciprocity and respect are observed balanced against the right to use and exploit”.¹⁹ Hirini Mead (2000) notes the importance of *tikanga* in ceremonies and in daily life:

Tikanga are linked to the past and that is one of the reasons why they are valued so highly by the people. They do link us to the ancestors, to their knowledge base and to their wisdom. What we have today is a rich heritage that requires nurturing, awakening sometimes, adapting to our world and developing further for the next generations.²⁰

For many Maori cultural heritage and intellectual knowledge are characterised by bundles of reciprocal relationships that tie individuals to distinct localities. TK and multiple customary practices are organised around prescribed local sites and regional *marae* (meeting houses), burial grounds and *pa* (villages). The spiritual and socio-cultural affiliations of tribal and sub-tribal communities are unique and identifiable through locations specific to the traditional communities who settled

¹⁸ Solomon, M. (2000). ‘Intellectual Property Rights and Indigenous Peoples’ Rights and Obligations’. *Inmotion Magazine*, 12-14 May, retrieved 26 November, 2003: www.inmotionmagazine.com/ra01/ms2html, p. 2.

¹⁹ Solomon, M. and Watson, L. (2001). ‘The Waitangi Tribunal and the Maori Claim to their Cultural and Heritage Rights Property’, *Cultural Survival Quarterly: World Report on the Rights of Indigenous Peoples and Ethnic Minorities*, 25 (4), p. 50.

²⁰ Mead, H. M. (2000). ‘The Nature of Tikanga’, Paper Presented at the *Mai i te Apa Hapara* Conference, August 11-13, Te Wananga o Raukawa, Otaki, Aotearoa/New Zealand. p. 16.

those areas²¹ with fisheries of prime importance to tribal groups around the sea, harbours and lakes, while others value mountains and forests. Contemporary urban Maori groups adopt cultural and political arguments for a share of regional economic resources.²² Much of the *taonga* held by respective *whanau*, *hapu* or *iwi* is protected by certain individuals. As Tapsell explains: “knowledge is held very carefully by certain people and family groups and often not told outside that circle with the protectors careful about who they impart their *taonga to*”.²³ Medicinal practices, art forms and the oral expression of ideas — what may be retained and what may be disseminated for wider use — often differs between tribes and sub-tribes, and is carefully apportioned amongst group members based on context and the protocols of reciprocity that underpin customary rights.

The handing on through oral traditions of intellectual and cultural practices is connected to *taonga*, *tikanga* and protocols or *kawa* integral to traditional heritage rights, and fundamental to cultural values recognised, protected and enjoyed in group interactions. Melbourne (2003) likens the chosen guardians of knowledge or *kaitiaki* and the extensive web of TK systems to the many strands that make up a vast woven cloak “where the different art forms make up the warp and weft”.²⁴ The multiple reciprocal dimensions linking the physical and spiritual environment are protected through *tapu* or *wairau*. *Tapu*, a form of governance offering protection and guiding principles based on a deep respect for sacredness through the identification of significant forms of knowledge, is accompanied by *mana* (power and authority) which gives potency to sacredness. While inanimate forms have *mauri* that denote their spiritual dimensions, traditional practices are founded on technical methods. These are related to knowledge-based ideas that saw the development of unique plant varieties, musical instruments with

²¹ Depending on geographical location and the resources in the area, tribes controlled and valued some resources over others. Some tribal groups also moved regularly between territorial areas to harvest food at suitable times. Mead, S. M. *Op cit*, p. 191.

²² Sullivan, A. (2001). ‘Maori Affairs and Public Policy’, in R. Miller (ed), *New Zealand Government and Politics*, p. 485.

²³ Interview with W. Tapsell, Hamilton, 13 December, 2003.

²⁴ Melbourne, S. (2003). ‘A Cultural Scenario: Value Systems and Traditions of the Musical Instrumental Tradition of Aotearoa’, Paper Presented at the 7th Joint Conference: Preservation of Ancient Cultures and the Globalization Scenario, School of Maori and Pacific Development and International Centre for Cultural Studies (ICCS) India, 22-24 November, Waikato University, Hamilton, New Zealand, p. 1.

distinctive sounds, artistic design, foods, medicines and artefacts.²⁵ As Durie (1998) notes:

The report of the Aboriginal Committee to Parliament in 1837 suggested that indigenous property rights existed over these resources, and that treaties ought to be signed with chiefs to give colonising powers some semblance of right when they occupied other people's territory.²⁶

Matauranga Maori, like other aspects of TK, grew from collective experiences and time-honoured reciprocal understandings of the link between the natural and super-natural world which stood apart from the individualistic, positivist approach represented by colonial power.²⁷ Jackson (1998) puts it this way: cultural survival became an imperative for Maori following colonisation "requiring that those from whom power is to be taken have to suspend their own faith, their own worth, their own goodness, their own sense of value and their own sense of knowledge".²⁸ This next section examines efforts to resist the appropriation of knowledge and looks at the establishment of legal processes.

II. Resisting Appropriation and Establishing Legal Pathways for Recognition and Protection

Reciprocity, like the law, is linked to a complex set of standards and protocols that determine conduct. For Dodd, resisting the appropriation of knowledge was especially difficult for Maori under colonial institutions with British conquest giving rise to conflict between the two notions of sovereignty (Maori and British) that came together and collided in 1840. Because there was only one interpretation of law contest was inevitable, and "that's why we couldn't move and become a viable equal ruler, because their [British] law is indivisible, [and] because it is paramount, there was no way in which we could enter the debate at

²⁵ King, M. (2003). *The Penguin History of New Zealand*, see especially chapter six 'Te Ao Maori', pp. 76-91.

²⁶ Durie, M. *Op cit*, p. 176.

²⁷ SciDevNet, Science and Development Network, 'Indigenous Knowledge', retrieved 14 October, 2003: www.scidev.net/dossiers/index.cfm?fuseaction=dossierfulltext&dossier=7, p. 2.

²⁸ Jackson, M. *Op cit*, p. 73.

all".²⁹ By the 1970s, political activists were consolidating campaigns to resist the institutionalisation of knowledge practices harmful to Maori and reclaim language and land. Efforts to recover rights over *matauranga* involved re-situating knowledge boundaries, retrieving resources, addressing grievances by raising the profile of the Treaty of Waitangi and requesting that governments honour the partnership arrangements set down in the Treaty.³⁰ These activities began a process toward new reciprocal legal jurisdictions by government and "recognition of the indigenous status of Maori with a particular relationship to the state based upon the rights of indigeneity".³¹

In 1975 the Waitangi Tribunal was set up to reconcile claims and recognise collective and individual property rights and cultural heritage. The Tribunal was charged with making non-binding recommendations to the Crown "relating to the practical application of the TOW and determining whether certain matters are inconsistent with those principles".³² In 1985 the Tribunal's brief was widened from land to other resources back-dating jurisdiction to 1840, thereby enabling *iwi* to begin their own development programmes by drawing on research and knowledge from a Maori perspective. Harmsworth comments:

Maori had very, very robust and comprehensive systems of knowledge transfer in place and this was set in their societal structures before 1840 and their structures were there to pass on knowledge, and as colonisation took place they rapidly faced an undermining of the whole culture right through to the 1970s. And it wasn't until really the 1970s-1980s when people started to move into the treaty claim process that people started to research their own knowledge again When the Maori Renaissance came in the 1960-70s, Maori realised that the big issue was that they had almost lost their language and following that that they were also losing other forms of knowledge.³³

²⁹ The colonial government followed the signing of the Treaty of Waitangi by placing legal restraints on tangible and intangible property based on Western common law and English customary title. The colonial government was quick to institutionalise property rights to accommodate the private interests of the growing settler population. Massive accumulation of Maori resources was carried out through dubious purchase contracts and confiscation procedures codified by land court jurisdictions. Comments made in an interview with M. Dodd, School of Maori and Pacific Development, University of Waikato, Hamilton, 1 December, 2003.

³⁰ Brownlie, I. (1992). 'Treaties and Indigenous Peoples', in F. M. Brookfield (ed), *The Robb Lectures: (1991): Group Rights and Self-Determination*, pp. 40-54.

³¹ Rata, E. (2000). *A Political Economy of Neo-tribal Capitalism*, p. 100.

³² Law Commission, *Op cit*, pp. 74-75.

³³ Interview with G. Harmsworth, University of Waikato, Hamilton. 25 November, 2003.

Solomon (2000) notes that counsel has frequently been able to argue for land compensation and redress for misappropriated intellectual and cultural items from a strong position of political justice based on research findings identified by Maori for Maori. The Maori cultural renaissance has brought into sharp relief issues of intellectual property rights, knowledge commercialisation and efforts to achieve an equivalence of benefits through reciprocity. While many claims for cultural and physical resources have been settled between the Crown and Maori there remain “over 800 claims ranging from lands, fisheries, forests, geothermal, language, radio spectrum, as well as Wai 262, commonly referred to as the indigenous flora and fauna claim”.³⁴ Many frustrations remain, particularly for those Maori whose knowledge continues to be used without authorisation, and has been eroded by commercial contracts, or for those awaiting decisions on resource ownership and control. The process has given rise to mixed responses from various parties and has not always been accompanied by informed coverage of the issues under consideration.

(A) The Mataatua Declaration and Beyond

In 1993, 150 indigenous representatives from 14 countries joined with the nine tribes of Mataatua in the Bay of Plenty in Aotearoa/New Zealand to convene the First International Conference on the Cultural and Intellectual Rights of Indigenous Peoples. In its preamble the Mataatua Declaration, developed from the conference, called on UN member-states to “adopt or strengthen appropriate policies and/or legal instruments that will protect indigenous intellectual and cultural property and provide rights to preserve customary and administrative systems and practices”.³⁵ The Declaration notes: “Indigenous Peoples are capable of managing their traditional knowledge themselves, and are willing to offer it to all humanity provided their fundamental rights to define and control this knowledge are protected by the international community”.³⁶ In a key point in the discussion on reciprocity supporting knowledge holders the report declares: “the

³⁴ Solomon, M. *Op cit*, p. 4.

³⁵ *The Mataatua Declaration* (1993), retrieved 3 July, 2004: www.users.ox.ac.uk/~wgtrr/mataatua.htm p.1.

³⁶ *Ibid.*

first beneficiaries of indigenous knowledge, cultural and intellectual property must be the direct descendents of such knowledge".³⁷

Maori autonomy, spear-headed by decades of domestic political activity and self-determining development strategies to recover knowledge, was given international impetus through the Mataatua Declaration and a number of other UN-led initiatives in support of indigenous rights. Yet, self-determination has been hard to achieve in the area of intangible knowledge. To Mead (2002), when self-determination and post-colonial issues of knowledge resource management come up in political discussions on intellectual and cultural property, agreement is often not forthcoming on the best way forward. Mead's work leads her to the conclusion that these two seemingly intractable problem areas have decision-makers "throwing up their hands in frustration. Where should they begin?" Three consistent reactions are then observable: "Status quo — outright dismissal of the legitimacy of this view — carry on as before. Paralysis — I don't understand and therefore I won't make a decision. Best intention — scoping reports and *hui*".³⁸ In the wake of the Mataatua Declaration, Parliament directed agencies dealing with IPRs to work towards having self-determination replaced by self-management.³⁹ Many Maori saw this as a dilution of terms. For some tribal groups, resolving ownership over knowledge resources by recognising rights to intangible property in the first instance, then getting government policy-makers, non-governmental organisations, and locals to devise solutions that benefit traditional stakeholders are critical in dealing with cultural heritage issues and IPRs. Recognition of knowledge is an important aspect of self-determination and a precedent to any legislative endeavours aimed at protection.

Legislating for cultural heritage and IP to be within Maori ownership and control is not without considerable political difficulties, not the least of which is resolving the legal parameters of outstanding land and resource claims. As one senior policy analyst, Te Haira-Hira, explained: "Only one person within *Te Puni*

³⁷ *Ibid.*

³⁸ Mead, A. *Op cit*, p. 1.

³⁹ 'Mana Tangata Draft Declaration on the Rights of Indigenous Peoples in 1993 Background and Discussion on Key Issues: An Explanatory Document', (1994). Te Puni Kokiri, pp. 11-12.

Kokiri is currently working on claims issues related to IPRs, and the agenda for self-determination and *tikanga* have not been worked through". Meanwhile, despite much effort towards interdepartmental agreement, the "policy mandate and feedback from government had not been ticked off by a particular Cabinet paper that recognises Maori have *tikanga* over their expressions". The result was: "This is an important issue but we don't take it too far because we don't have any Cabinet agreement".⁴⁰ For Mead today's problems arise because Maori are not always the primary beneficiaries of cultural assets with significant resources held exclusively outside Maori ownership and control compounded by the high demand locally, regionally and globally for Maori heritage items.⁴¹

Advancing protection proposals in the face of indeterminacy and a lack of conciliation between government and local communities makes it difficult to attain solutions. The wide difference between the idea of IP as individual rights and the collective values associated with Maori tribal and sub-tribal groups adds to the complexity. In a roundtable meeting in 2003⁴² one senior analyst noted the importance placed on IP issues by policy analysts in the Ministry of Economic Development⁴³ While progress appeared to have been achieved in terms of co-ordination between agencies, again the process of government sign-offs and consultation was awaited. As Stevenson observed:

Timing is a little out at the moment. It looks as though we will be setting up some form of traditional knowledge programme, but exactly how extensive that will be and how much it involves other agencies is dependent on consultation processes we need to have before we apply policy development. But comparing that to how Maori are looking at protection we haven't been able to do that. We've had the odd conversation, but not face-to-face interviews. However, any group that would want to talk to us we would respond well, and from what we can tell Maori are looking at it both from a collective and individualistic perspective. I think some of the literature is misleading when it says that indigenous groups are all about the collective and subjective. Within any

⁴⁰ Interview with A. Haira-Te Hira, Te Puni Kokiri, Wellington, 9 December, 2002.

⁴¹ Mead, A. (2004). 'The Case for *Sui Generis* Protection for Maori Cultural and Intellectual Property', Conference Presentation, Maori Development and Intellectual Property Rights, Te Whare o Wananga Awanuiarangi Campus, August.

⁴² Group interview held at Ministry of Economic Development (MED), Wellington, 15 December 2003. Facilitator, C. Stevenson MED, K. O'Connell, P. Clark, and K. Connolly-Stone, (MED). T. Lynch and D. Perry. Ministry of Foreign Affairs and Trade (MFAT).

⁴³ Interview comment: C. Stevenson, *Op. cit.*

indigenous society there are a whole range of rights and IP can meet a lot of other objectives.⁴⁴

The process of reclaiming cultural and intellectual knowledge and setting new development agendas has been slow, partly because of the government's 'wait and see' policy tied to the volume and extent of claims presently before the Waitangi Tribunal. At the community level, however, significant efforts are being made to apply IPRs to knowledge that is held collectively through a range of rights, as Stevenson suggests, in order to gain protection before resources are lost. It is here that reciprocity between knowledge-holders and institutions and private contractors becomes important as will be discussed in section six. For now, at the domestic level there have been restraints on reaching agreement, as seen in the backlog of legal claims, and also problems in dealing with the complex linkages in international trade and the many private contracts that tie IP, cultural heritage rights and treaty obligations together for commercial purposes.

There is a political dimension to forwarding the debate on knowledge recognition and protection as Mead notes:

Maori are reliant on political will and there is a constant change of personnel working for government. We need consistency in putting in treaty reservations in international trade deals. By doing so, and there are precedents for this, we are making sure that our domestic IP laws don't breach Treaty of Waitangi responsibilities. We're embryonic especially in terms of work on genetic resources and the contracts that go with them.⁴⁵

Advancing the national situation politically together with the globalising and harmonising of international trade rules makes reaching agreement on reciprocal arrangements of benefit-sharing complicated. Alongside international mechanisms including the Mataatua Declaration which put diversity and site specific knowledge claims to the fore of international debates on TK there have been some wide-ranging claims for knowledge recognition and protection that

⁴⁴ *Ibid.*

⁴⁵ Interview with A. Mead, Victoria University of Wellington, 16 December, 2003.

illustrate how political IPRs and TK have become. Some of these claims are discussed in this next section.

(B) Wai 262, and Some Examples of Reclamation and Protection Claims

For many Maori a post-colonial world seems a chimera as IPRs are increasingly applied to various forms of TK without reciprocal agreement or the capacity, as Mead says, to put “dollar figures on how much money overall projects are worth, what the market rewards will be, and what the benefits are”.⁴⁶ IPRs are not just about the uneasy juxtaposition between individual and collective rights, or the differing perspectives about property use, ownership and control. To Mead, the contemporary structure of IP governance is “a second wave of colonisation, grabbing what few resources Maori retained after the first wave of colonisation left us landless and marginalised”.⁴⁷

One of the earliest and most significant claims against cultural and intellectual appropriation arose in 1988 when two women elders of the *Ngati Kuri* and *Te Rarawa* tribes discovered that a Japanese research institute had acquired a native cultivar of sweet potato or *kumara*, no longer obtainable in Aotearoa/New Zealand, and were using the species for scientific purposes. The cultivars were successfully returned to this country leading to the Northern tribal people joining four other claimants (*Ngati Wai*, *Ngati Kahungunu*, *Ngati Porou*, and *Ngati Koata*) to take their case for the “recognition of [the tribes] *tino rangatiratanga* (sovereignty) over *taonga*” to the Waitangi Tribunal for protection against further misappropriation.⁴⁸ The 1991 Wai 262 claim (the Tribunal’s 262nd case) is a landmark case focused on gaining “protection over cultural and intellectual heritage rights in relation to indigenous flora and fauna, and *Matauranga* or traditional knowledge, customs and practices, related to flora and fauna”.⁴⁹

⁴⁶ *Ibid.*

⁴⁷ Mead, A. (2002). *Op cit*, p. 1.

⁴⁸ Solomon, M. and Watson, L. *Op cit*, p. 46.

⁴⁹ Solomon, M. (2001). ‘The Wai 262 Claim by Six Maori Tribes’, *Inmotion Magazine*, retrieved October, 2, 2002: www.inmotionmagazine.com/nztrip/ms1.html, pp. 1-2.

Wai 262 has become a symbol of Maori resistance to appropriation attracting world-wide attention from other indigenous groups seeking similar redress. Solomon (2001) observes that the Crown did not provide funding support for the original claimants who brought the case before the Tribunal, where it remains, in contrast to Crown funding of \$4-5 million made available to the Royal Commission of Inquiry into Genetic Modification (RCGM), despite the Wai 262 claimants raising the very same issues that the RCGM are contending with, more than ten years earlier.⁵⁰ While funding might remain a problem for Wai 262 claimants left to pay large legal and administrative costs, there are signs according to Haira-Te Hira that, “claim delays have eased and things seemed to be going through a lot faster now than in the past decade”.⁵¹

Claims related to biodiversity and gene technology, currently being contested through the Tribunal, are taking time. To Stevenson “this is one of the areas where things might be perceived to be out of sync, where patenting over some of the new types of discovery and future application of IP is not known, raising a number of difficult ethical debates that are not just part of indigenous issues”.⁵² For many tribal groups the application of IP to genetic resources is rejected outright. A number of tribes including *Ngati Kahungunu* and *Ngai Tahu* are resisting IP rights over biotechnology on the basis of blatant breaches of *tikanga*. As Tipene-Matua observed, “the concerns Maori have regarding the mixing of genetic material between species is based on *tikanga* principles including that of *kaitiakitanga*. *Kaitiakitanga* places an obligation on Maori to maintain and protect the *mauri* of all other species”.⁵³ The *Tuoharetoa* tribe has challenged the right of a timber company to insert a marker gene into pine trees and, in another case, highlighting the issues surrounding biotechnology for Maori, Monsanto was prevented from field-testing genetically modified wheat at Lincoln in the South

⁵⁰ The Crown has resourced RCGM, sending along “policy advisors from the various government ministries – conservation, commerce, foreign affairs and trade, to the hearings while for [Wai 262 applicants] there has been no funding for research and administration costs which has come out of their own pockets.” It’s a show of bad faith according to Solomon. The report on Wai 262 and the Tribunal’s recommendations await release. In 2000 the draft report was already 700 pages long and five major on aspects of the claim had been commissioned. Solomon, M. *Ibid*, pp. 2-3, 5.

⁵¹ Interview with A. Haira-Te Hira. *Loc cit*.

⁵² Interview with C. Stevenson. *Loc cit*.

⁵³ Tipene-Matua, B. (2000). ‘A Maori Response to the Biogenetic Age’, *Designer Genes: The New Zealand Guide to the Issues and Facts about Genetic Engineering*, p. 101.

Island. Following consultation the *Ngai Tahu* tribe reversed its original decision to let the field trials go ahead and began to develop an anti-GM policy to cover all applications.⁵⁴ These examples demonstrate the political sensitivity toward commercialisation illustrated in cultural and ethical tensions within and between groups where the push for patents and other IP often goes beyond what communities are prepared to accept without reciprocal agreements and protection policies for TK in place.

In the entertainment goods market, penalties have been meted out to multinational companies in cases where heritage items, with spiritual and cultural significance to Maori, have been abused through inappropriate commercial use and a lack of recognition and reciprocity. In 2002 Maui Solomon challenged the Lego company, on behalf of three tribes, over the production of a range of action figure toys that used a mix of Maori and Polynesian words for the characters and story line on the grounds that “there had been no consultation or prior informed consent”.⁵⁵ The proposed court action highlighted the depth of feeling on trivialising and commercialising culture especially when words like *Tohunga* (priest) were used in the depiction of fantasy games. A Lego representative subsequently met with Maori groups and agreed to change some, but not all the wording, due to a completed production timeframe. Agreement was reached that the second generation toys would not include the most offensive words to Maori. It was also agreed that the company would, in future, comply with WIPO TK codes of conduct and guidance procedures on TK. The Lego fan website, BZPower, was also eventually closed by the service provider in response to repeated criticism of Lego by on-site users.⁵⁶ In 2003 the use of Maori images for private profit was challenged by Kingi Gilbert, a Maori IP campaigner, who complained of piracy and the inappropriate cultural use of symbols, language and characters by Sony over its use of chin tattoos on male Maori-like *taiaha* (club) wielding characters. Sony’s online advertising campaigns described the Play Station game as “set in an ancient Maori-inspired world of

⁵⁴ *Ibid*, p. 107.

⁵⁵ Griggs, K. (2002). ‘Lego Irks Maori Sympathizer’, *Wired News*, retrieved 26 November, 2003: www.wired.com/news/print/0,1294,56451.00.html, p.1.

⁵⁶ *Ibid*, p. 2.

swords and sorcerers. Strip to the waist and cover yourself in Maori-esque tattoos.”⁵⁷ The narrative and the imagery accompanying the game were deemed culturally offensive and in breach of the advancement of indigenous rights under international law as set out in the Mataatua Declaration and subsequent UN conventions.

The range of different examples discussed above represent a small part of an ongoing process to claim recognition for indigenous forms of knowledge. The cases demonstrate not only opposing views between individuals and firms about the value of cultural knowledge, symbols and artefacts, but also has the character of a contest between ownership rights over past knowledge assumed to be in the public domain and indigenous forms of knowledge that reside in collective ownership. As global markets expand and new ideas are sought for commercial adaptation there has been a tendency for firms to exploit indigenous forms of knowledge for profit without recognition or reciprocity. Computer modelling, as shown by the recent cases, adds another dimension to exploitation becoming both a source of information that allows access to unique cultural items from web sites and a tool for group activists to resist misappropriation as seen in the reference above to the campaign against Lego. Recognition of knowledge and its source is integral to reciprocity embodying fair use and justice with indications to the contrary reflecting a lack of respect for cultural identity. In addition, it reveals difficulties groups have in monitoring abuse, problems in reconciling the application of IPRs with protection around TK and difficulties in ensuring enforcement procedures which seem to work.

III. WIPO and the Fact Finding Mission (FFM)

In 1998 WIPO visited Aotearoa/New Zealand as part of its world-wide FFM to survey the views of TK holders, government officials, and other interested parties to identify indigenous needs and expectations regarding IPRs. In one case, *Te Puni Kokiri* attempted to engage participants involved in the application of TK

⁵⁷ Milne, J. (2003). ‘Video Game Giant under Attack for Use of Maori Imagery’, *Aotearoa Independent Media Centre*, retrieved 10 February, 2004: indymedia.org.nz/front.php3?article_id=6038&group=webcast, p. 1.

and IP in their research on WIPO's behalf but were met with confidentiality clauses precluding any dialogue between the parties. Haira-Te Hira explained: "we did have a good example, but they declined to participate because of commercial sensitivity" linked to their business processes.⁵⁸ WIPO's FFM report released in 2001 noted that some respondents viewed IP as "neither useful nor appropriate, while others were interested in testing the possible use of IP to protect traditional knowledge".⁵⁹ General agreement emerged that, in the short term, testing how IP and traditional knowledge might successfully be integrated was a viable proposition and that any such initiative required a bottom-up approach, involving direct consultation with TK stakeholders at the local and community level.

This position was noted at a TRIPS Council meeting in 2002 where New Zealand MFAT officials stated that it was important to consider and discuss a full range of options, including *sui generis* solutions for TK and that more work be done on this in conjunction with Maori: "New Zealand considers that the discussion of specific mechanisms to be implemented at the international level may be premature".⁶⁰ There was general agreement among those involved in dialogue with WIPO officials that any move toward an international agreement had negligible support until workable solutions for TK and IP had been resolved at national and local levels,⁶¹ a sentiment reiterated by Mead who sees little merit in establishing an international treaty until national and local solutions are worked through:

I'm totally opposed to an international treaty on TK. The cornerstone of the Mataatua Declaration is that knowledge is site specific and local and if you don't have the infrastructure at a local level to regulate access and provide — should I say benefit-sharing — then what is an international treaty going to do? ⁶²

⁵⁸ Interview with A. Haira-Te Hira. *Loc cit.*

⁵⁹ WIPO, (2001). 'Intellectual Property Needs and Expectations of Traditional Knowledge Holders', Geneva: WIPO, p. 72.

⁶⁰ Trade Negotiations Division. (2002). 'Intervention by NZ at the TRIPS Council Meeting', *Ministry of Foreign Affairs and Trade*.

retrieved 18 July 2004: www.mfat.govt.nz/foreign/tnd/wtonegotiations/tripsintellpropnegs.html, p. 4.

⁶¹ Raising local awareness, examining how the various aspects of matauranga would 'fit' with IP models, and training in IP for participants was considered necessary provisos if the bottom up approach was to have any chance of success. See WIPO, *Op cit*, pp. 71-72.

⁶² Interview with A. Mead. *Loc cit.*

Such comments suggest that another top-down treaty would not be in the best interests of indigenous people generally, or of Maori in particular, since the reciprocal advantages of the TK of collective groups had been worked through by indigenous delegates in arriving at the Maatataua Declaration which concluded that received codes needed respect not neglect. On another level, a degree of scepticism about WIPO's efforts to deal effectively with TK was expressed, based, in part, on earlier dealings with the organisation:

My first encounter with WIPO was in 1988 and at that time about five of us indigenous people went to talk about our indigenous concerns and IPRs. They wouldn't let us into the building. They said in quite black and white terms that WIPO was there for state parties, they do not talk to citizens. They wouldn't even let us in the door. As far as they were concerned issues were to be taken up with our government. A later change in leadership signalled a very powerful shift from the indigenous voice being totally marginalised and outside the processes to far more participation. At least now, states, through international agencies, have to deal with the issues. Having said that though, WIPO has now moved back to a point where they are no longer very helpful to us.⁶³

To Mead (2004), one part of the problem for groups seeking to establish a *kaupapa* vision, giving maximum protection for cultural heritage while ensuring increased opportunities for business to expand, lies in making sure that any response to IP reflects the reciprocal values that Maori uphold along with their collective and tribal grouping development priorities. Mandatory conditions must apply, including informed consent for use and benefit-sharing procedures to protect knowledge from exploitation.⁶⁴

In the post-implementation phase of TRIPS, the commercialisation of TK has attracted a higher profile, at both the domestic and international levels, than protection, this despite WIPO having instituted some major changes that emphasise how TK might be better protected through mechanisms that inform and make understandable the 'nuts and bolts' of IPR law. The need remains for

⁶³ *Ibid.*

⁶⁴ Mead, A. (2004). *Op cit*, p. 1.

legal details to be more 'user-friendly' and accessible to local communities, a sentiment which came in part from the inter-governmental committee (IGC) formed by WIPO in 2000 as it attempted to address the problems facing TK holders by providing a documentation toolkit for managing intellectual and cultural heritage. It was proposed that TK subject matter be openly recorded and recognised in the International Patent Classification system.⁶⁵ In turn, a database has been set up of contractual provisions relating to IP and genetic resources, offering inventories of prior art applications in patent law to denote where protection has been granted. However, WIPO stopped short of committing to a full international treaty on TK in 2003 although it has been active in feeding information into Regional Focus Action Groups with the aim of ensuring that countries considering, or seeking to become members of the WTO, have their IP legislation at a level that is compliant with TRIPS requirements.⁶⁶

IV. Reciprocity in Aotearoa/New Zealand's Knowledge Economy

Following its election in 1999, the Labour-led government under Prime Minister Helen Clark outlined plans for the creation of a knowledge economy achieved, in part, through reciprocity and collaborative decision-making between the creative agencies and the state. The rationale behind supporting the arts through state funding lay with the government's desire to mould a vibrant cultural marketplace to accompany an enlarged commercial trade and marketing strategy aimed at business development for a knowledge economy. The organisation Creative New Zealand supported by strategic parliamentary leadership, private individual patronage and commercial funds, co-ordinated the effort.

John Barnett, CEO of South Pacific Pictures, implored government and non-governmental groups to begin thinking about what culture, originality and creative innovation meant in terms of a knowledge economy, and how a

⁶⁵ Drahos, P. (2004). 'Toward an International Framework for the Protection of Traditional Group Knowledge and Practice', Geneva: UNCTAD-Commonwealth Secretariat Workshop on elements of National Sui Generis systems for the Preservation, Protection and Promotion of Traditional knowledge, Innovations and Practices and Options for an International Framework, p. 12.

⁶⁶*The Lancet*, (2003). 'WIPO Steps up Action on Traditional Knowledge', retrieved 10 October, 2003: SciDevNet, www.scidev.net/News/index.cfm, p. 1. By 2004 WIPO was reviewing the nature and scope of regional bilateral cooperation and working toward an IP developmental agenda based on policies in support of economic, social and cultural access to TK.

workforce and industry might emerge that would nurture a cultural vision for the country. Newman reports:

While there is significant government and opposition thinking about the knowledge economy strategy and talk about creativity, culture and innovation ... there was virtually no mention of art or the cultural industries, how this workforce might be constructed or what role they might play in the economy The omission of culture was not deliberate. It's just not understood how much culture holds all the bits of our identity together. For the past 150 years we've been happy to accept other people's ideas.⁶⁷

Even less debate was given to the issue of IPRs, yet behind the scenes groups and institutions were quickly realising the commercial potential available through the arts and culture from the establishment of IP portfolios, not only to protect the rights of performers but also as an asset base and incentive for foreign direct investment into the economy. For Maori, the representation of cultural traditions relayed to national and international audiences has not always been based on *tikanga* principles, collaborative, or indeed, reciprocal understandings of fair exchange. Neither has recognition always been given to the historical uniqueness of *matauranga* Maori. Rather, a narrow view of culture and *mataruanga* Maori characterised by reductionist commercialised symbols and practices persists. In the launch of a magazine dedicated to Maori tourism in 2003, one writer commented on the manner in which tribes have been represented for years by a single iconic product and image: *kai* (food) and *kapa haka* (dance).

For too long now Maori have been seen as a unique marketing symbol and image of New Zealand tourism, yet Maori have been offered little recognition or benefit The analogy of the past was that Maori were merely the passengers in the back of the bus. Today, Maori own the bus - and the company.⁶⁸

Tribal groups have actively sought to change IP legislation in order to participate in, and benefit from, a cultural economy where TK is respected. Shand (2002) comments on attitudinal changes: "In 2002 we may observe that objects are being

⁶⁷ The commercialisation of knowledge and information through developments in computer software, digital formats, genetic engineering and other new technologies has also been a key aspect of the drive toward creating a knowledge economy and the use of IP frameworks has developed accordingly to protect trading interests. Newman, K. (1999). 'Cultural Confidence Required', retrieved 18 July, 2002: www.wordworx.co.nz/cultconfidence.html+haka+and+intellectual+property&hl=en&ie=UTF-8, p. 1.

⁶⁸ Birt, C. (2003). 'Maori Tourism Embarking on a Journey to Claim its Own Destiny', *The Voice of Maori Tourism*, www.poutama.co.nz/panui/TMTOTALResall.pdf, retrieved 14 July 2004, p. 1.

returned, ideologies are being respected, permission is being sought — just not enough and too infrequently”.⁶⁹ This slow progress towards recognising the social and cultural importance of reciprocity has been part of a sequence of political events and economic actions. The establishment of the Maori trademark, discussed in this next section, characterises efforts to address reciprocal outcomes by government with the support non-governmental bodies.

(A) Toi Iho

Maori groups made it known to FFM that the trademark system was an area of concern “because it was not their system”.⁷⁰ By 2000 New Zealand Government officials had reported back to WIPO that it was proceeding with changes to trademark law. The proposed changes aimed at expunging names and symbols culturally offensive to Maori and refusing registration to marks that infringed cultural respect and common decency. While there was disagreement over whether some of these names and symbols could be revoked, the Maori Advisory Group sought “absolute ground for refusal to register a trademark likely to offend a significant section of the community including Maori”.⁷¹ The area of trademarks was a good place for groups to begin seeking recognition and enforcement through law for the protection and preservation of *matauranga* in the first instance because trademarks had a higher public profile than other IPR, and also because many participants – Maori and non-Maori alike – were seeking brand identification for all manner of artefacts and other products to meet commercial standards in the cultural economy.

As outlined above, the Trademarks Act 2002 set out *sui generis* law for a Maori trademark to identify and protect quality, authentic artefacts and cultural designs. In part, this legislation was a response by government to meet continuing concerns of traditionally-based artisans that work was being pirated

⁶⁹ Shand, P. (2002). ‘Scenes from the Colonial Catwalk: Cultural Appropriation, Intellectual Property Rights, and Fashion’, *Cultural Analysis*, 3, p. 52.

⁷⁰ The concerns emerged from a meeting held between WIPO and the Ministry of Commerce, the Office of Treaty Settlements, Creative New Zealand, the Crown Law Office, the Ministry of Foreign Affairs and Trade, the Office of the Prime Minister and the Ministry of Cultural Affairs, Wellington, New Zealand, June 19 1998. WIPO, (2001). ‘Intellectual Property Needs and Expectations of Traditional Knowledge Holders’. Geneva: WIPO, p. 72.

⁷¹ *Ibid*, p. 74.

by others without due reward. *Creative New Zealand* and its Maori Arts Board arm, *Te Waka Toi*, established the trademark symbol *toi iho* in full recognition that piracy is not just a problem for indigenous artists, but that this symbol would signify integrity and a commitment to Maori creative development. An analyst at MED believes *toi iho* is a huge step toward recognition: “technically it has not been a big ask to add to the law, and internationally, the symbol been put ‘out there’ as something bright, and positive, and forward-thinking”.⁷² Another policy analyst commented that the consultation process that had gone on before *toi iho* took effect had been very useful in terms of improving government-Maori business relations at *hapu* and *iwi* level: “And at least within our team of government advisors, there was more of an acceptance that *hapu*-based type consultation was in need of expansion”.⁷³

In the debate on IPRs and protection of TK, *toi iho* has been useful for practising artisans. As Te Arawa artist and retailer June Grant commented:

We are tired of people acquiring what is actually ours and, as an artist, I would never dream of using other peoples’ cultural icons and designs. The Maori made mark is about integrity both for the artist and the person wanting to buy authentic high quality art.⁷⁴

Not all agree with *sui generis* law of this type. One critic of the government’s proposals for spending tax-payers money on the arts, especially on cultural identity, commented: “Only time will tell whether definitions of quality and what constitutes Maori art will have been captured by a few”.⁷⁵ This view fails to grasp the commitment to integrity that this branding offers to Maori in terms of recognition, preservation and protection over aspects of TK. Nor does it acknowledge that the symbol offers legitimate artists, licensed to use the mark as a standard of excellence not merely as a logo, to derive a living from their work. The commercial profile and tourist dollars generated for the country as a whole

⁷² Interview with K. Connolly-Stone, Auckland, 14 November, 2002.

⁷³ Interview with P. Clark, *Loc cit.*

⁷⁴ *News*. (2002). ‘The Maori Made Mark: Much More than a Logo’, January, *News*, retrieved 2 July, 2002: www.creativenz.govt.nz/news/_private/newsitem.phtml?=17, p. 1.

⁷⁵ Reid, M. (2002). ‘Clark had no Mandate to Spend our Taxes on Arts’, *New Zealand Herald*, February 14, Dialogue, A 13.

from foreign exchange earnings through the recognition of originality and authenticity is also ignored.

Toi iho offers an illustration of cultural identification derived through *sui generis* legislation covering aspects of business which involve those Maori knowledge systems recognising and protecting tourism, fashion, art, design, food and plants. The niche markets identified for commercial opportunities could stretch beyond trademarks to other forms of IP that have application to cultural property. While commercialisation has benefits, for many Maori the economic competition establishes the importance of reciprocity where patents and copyright are subject to *sui generis* law. Reciprocity is also critical where trade secrets involve exclusive contract clauses with the potential to restrict access and are contrary to the wishes of local communities. Control and ownership of knowledge resources, especially in biodiversity, gene technologies and databases, is closely related to ethical problems of control and ownership that have implications for *tikanga*.

V. Tikanga in Areas of New Technology

In 1999, Kamira expressed concern about the lack of IP protection and appreciation of Maori knowledge interests claiming that in terms of indigenous protection: “government documents reveal a serious lack of consideration and Maori remain passive participants in information technology”.⁷⁶ Maori groups have since built *tikanga* into commercial frameworks for technological development to ensure that they are no longer the last to benefit from new knowledge technologies. Many Maori are acutely concerned that as forms of TK and ideas move rapidly into the commercial world they are frequently pirated and lost to the original knowledge holders because of a lack of protection and enforcement mechanisms. The value of reciprocal understandings between knowledge-holding people and the environment nurturing TK may be deflected by business opportunists seeking to profit from its use. In 2003 Mead observed the burden exerted on TK through the bind of IP:

⁷⁶ Kamira, R. (1999). ‘Intellectual Property Rights and Genetic Material’, *Indigenous Peoples and the Law*, retrieved 10 February, 2004: kennett.co.nz/law/indigenous/1999/38.html, p. 1.

The entrepreneur understands what the traditional knowledge is worth. However, often the older person who has been bought up with it thinks it's just sort of natural — so talking about it is nothing new. To share it is fine, but to have taken away and used in a commercial sense really is a generation away — a step away — from what the originator really intended it to be used as.⁷⁷

Generational factors are important as are the perceptions different groups hold about the significance of particular knowledge forms. For Jacobsen, tension commonly arises between “people who seek out plant variety rights or property rights more generally as being more sort of greedy as against the more pragmatic people saying we need to protect our ability to disseminate this in a given way, and the way to do that is to own it, for if its free someone else will seek to get it”.⁷⁸ Within TK frameworks Tipene-Matua believes it is critical that cultural values underpin any application of IP for there to be any chance of success.⁷⁹ Solomon (2000) agrees that any application of IP must be balanced against whether or not the system is suitable to the TK stakeholders.⁸⁰

In 2001, Solomon and Watson set down a ten point framework to guide the protection of Maori customary and intellectual heritage rights with six of the points especially worthy of note: Maori should be the primary developers of a system that upholds the *tinu rangatiratanga* of *hapu* and *iwi* while giving recognition to the strong relationship between *taonga* and cultural heritage; tribal differences are accommodated by flexible protocols based on appropriate *tikanga* that enable individual and collective internal issues to be reconciled; protocols are established for outsiders seeking access to knowledge and *taonga*; mandatory infringement notices apply for failure to gain informed consent and sanctions and penalties create a deterrent; compensation is granted where it is due; and legislation is created to guard protocols and guide protective mechanisms.⁸¹

⁷⁷ Interview with A. Mead, *Loc cit*.

⁷⁸ Interview with V. Jacobsen, Treasury, Wellington, 27 November, 2002.

⁷⁹ Tipene-Matua, B. *Op cit*, p. 97.

⁸⁰ Solomon, M. *Op cit*, p. 8.

⁸¹ Solomon, M. and Watson, L. *Op cit*, p. 50.

It is evident that tribal authorities are seeking to capitalise on their commercial investments and the application of IP is a significant aspect of proprietary relationships. Rata (2000) notes that as land, waterways and other physical resources are being commercialised through Maori incorporations and fishing contracts, cultural and spiritual ideas are finding a place in commodity production.⁸² At a 2000 conference, Kamira set out a support template for tribes and sub-tribes as first beneficiaries, outlining the risks and opportunities in the field of information technology. Kamira alerted *iwi* to policy gaps in ethics and privacy law which made it urgent that protection mechanisms for controlling intellectual and cultural property be formulated including defining, developing and promoting IP around *kaitiakitanga* and *tino rangatiratanga*.⁸³ The cultural resource frameworks outlined above have application in guiding those dealing with TK issues. For example, a Ministry for the Environment web site provides information and has developed a forum for dialogue to assist *iwi* to undertake their responsibilities as *kaitiaki*. By using *kaitiaki* through open source software, reciprocal values of fair use, benefit-sharing and rewards are observed, complemented by agreed cultural protocols so that users feel comfortable with the site's construction and management. Despite concern that TK might be compromised by open source access to the database: "Overall there was an acknowledgement of the huge potential economic value of the knowledge that will be kept on the web site and the concern that others will exploit the knowledge without returning any benefits to those who generated it".⁸⁴ In contrast to the point made in chapter seven by Daes that WIPO should support legal services to support infrastructures rather than build databases, the experience for Maori suggests that appropriate mechanisms of protection endorsed by local initiatives and validated by *hapu* or *iwi* control can result in the successful establishment and operation of databases leading to reciprocal benefits for owners and users.

⁸² Rata, E. *Op cit*, p. 107.

⁸³ Kamira, R. (2000). 'Since We Became Masters: Issues for Iwi in Information Technology', Flaxroots Technology Conference, retrieved 8 July, 2004: flaxroots.net.nz/2000/papers/2000-RobynKamira.html, pp. 1-4.

⁸⁴ Forbes, S. Hemi, M. Ford, G. and Ropiha, J. (2000). 'Cultural and Intellectual Property Report', Ministry for the Environment, (December), retrieved 3 October, 2003: kaitiaki.org.nz/matou/cip-rpt.shtml, p. 1.

Another major initiative in the 1990s saw scientists and geographers develop a cultural framework in conjunction with the *Ngati Porou* tribe to map the East Coast area and record and store knowledge using a geographical information system (GIS). The central concern revealed to the scientists in questionnaires was how the information was going to be used, and whether it was to be commercialised. A critical second step in the project was to determine whether local community methods existed to record and retain knowledge and, if they were already established, how they were being preserved so that knowledge was not disappearing. As Harmsworth, explained: “we were very, very aware that, especially in forms of traditional knowledge, there was a lot of knowledge that had already disappeared”.⁸⁵ The research was appropriate in cultural terms because it adhered to reciprocal considerations based on understandings that participants were not just giving knowledge without receiving recognition of its worth to the community, but that sharing involved collaborative efforts to preserve the intrinsic value of the local area knowledge systems. Further, a cultural heritage framework was applied to the methodology used to sort the knowledge. Harmsworth noted:

The first step was to determine whether the information was oral or if it was written down in any form. Secondly, before putting anything into the computer we had to assign a classification to the different forms of knowledge. There was certain highly sensitive knowledge that no-one should see, and there was other knowledge that was in the public domain. Thirdly, sorting this out affected the way we constructed our database and information system and determined the manner in which we assigned IP. There were also lots of types of information that remained within the structure of the tribe.⁸⁶

Such awareness of, and preparedness to, develop TK within the parameters of strict guidelines augers well under this programme for the preservation of traditional resources.

VI. A Framework for Maori Branding: Business and *Matauranga*

Managing IP to advance commercial opportunities has been further advanced in a draft IPR framework and plan for Maori business, aimed at establishing ways

⁸⁵ Interview with G. Harmsworth, *Loc cit.*

⁸⁶ *Ibid.*

in which competitive advantage can be achieved for Maori business through branding. Harmsworth's draft is based on a mainstream IP perspective,⁸⁷ and sets out a process for determining how companies that identify as Maori integrate their unique cultural and intellectual heritage into business practices. A central feature is what constitutes IP from a Maori perspective, with the research team asking respondents questions related to identity and ethnicity such as: "Does this mean having a Maori manager, a majority of staff that identify as Maori or Maori shareholders"?⁸⁸ The purpose of the branding project is to identify the types of business and different forms of knowledge and information existing at the local and national levels. Robust criteria are used to separate information types having historical and contemporary significance. Before assigning IP, or assessing if indeed IP is applicable, a central task is to determine the forms of knowledge in the public domain, together with the sensitivity and respect conferred on other forms of knowledge. The framework aims to provide maximum protection for TK while allowing groups to enhance their commercial opportunities and returns. The researchers operate within the parameters of appropriate Maori protocols and are sensitive to issues of knowledge ownership and the norms under which these can be maintained. The next section briefly outlines some of the entrepreneurial efforts being undertaken by Maori-led initiatives followed by a short discussion on the more contentious area of biodiversity and its impact on Maori. Section seven examines important issues relating to customary rights and cultural knowledge prior to concluding analyses.

(A) Entrepreneurship

Many commercial enterprises with significant Maori input regard their businesses as a sub-set of the national and global trade marketplaces by identifying their entrepreneurial skills in terms of ethnicity. The largest survey of indigenous entrepreneurship by an international organisation, the Global

⁸⁷ This project is able to be referred to in this thesis based on the generosity of Harmsworth who not only gave freely of his expertise and knowledge in interviews, but also graciously offered a copy of the draft framework which is used in this research.

⁸⁸ Interview with G. Harmsworth, *Loc cit.*

Entrepreneurship Monitor (GEM), released its findings in 2006 showing that Maori were the third most entrepreneurial indigenous group in the world behind Thailand and Venezuela.⁸⁹ GEM's initial report in 2004 showed entrepreneurial business activity for Maori entering business at 17.1% compared to 13.3% for non-Maori.⁹⁰ Maori entrepreneurship has elevated the use of indigenous designs for commercial gain using IP. In the fashion industry in particular, IPRs protect traditional patterns and designs on garments and offer royalty payments. One company negotiated the use of the koru as a symbol for a line of swimwear through a local *kaumatua*. Two GEM responses concerned how the design could be utilised in terms of "commercial viability and cultural respect. In recognition of this dual aim, part of the royalty from sales goes to a sub-tribe".⁹¹

In terms of TK commercialisation, the value of Maori protocols is vitally important in negotiations between TK holders in tribal regions, local people seeking employment through Maori Trusts, and other business interests involved in bio-prospecting, agri-business, cultural tourism and other ventures. Reciprocity is important in bringing TK resources and commercial projects together, seeking to ensure rural communities are economically viable, addressing issues of IPR and preserving TK resources through education about sustainable use. Most Maori trusts and incorporations are finding ways to deal with IP to the satisfaction of local communities. One example of this is the 2003 *Tuhoe Tuawhenua* Trust IP contract agreement with "Manaaki Whenua/Landcare Research and a pharmaceutical company to look at a variety of native mushrooms and other fungi unique to *Te Urewera* [region] to see what medicinal properties could be found".⁹² While the Trust was working on this project it also

⁸⁹ Frederick, H. (2006). 'Largest-Ever Survey of Indigenous Entrepreneurship', Babson College, retrieved 1, May, 2006:3.babson.edu/Newsroom/Releases/newzealandgem2005.cfm p. 1. Frederick is the principle author of GEM New Zealand and an innovation and entrepreneurship lecturer.

⁹⁰ Sringhall, L. (2004). 'Maori: The "Can-Do" Nation', 28 March, *Sunday Star Times*, Sunday Business, Section D, p. 1. Twenty-two countries were studied, and the number of entrepreneurs measured per hundred adults in the 18-64 age bracket, put New Zealand near the top of the list. The research showed that Maori women were more likely to look for opportunities to enter business than their male and *pakeha* counterparts. An extraordinary 83.1% of Maori women identified themselves as opportunity entrepreneurs compared with 30% of Maori males....Compared with their fellow New Zealanders, Maori rated more of their products and services as new and unfamiliar to the market doing more things that are innovative and outside the square.

⁹¹ Shand, P. *Op cit*, p. 71.

⁹² Lancaster, S. (2003). (ed), 'Landing a Research Project', *Employment Matters*, 14 (5), p. 9.

“negotiated a 10-year metal extraction contract — a major achievement after metal had been extracted for road construction and repairs from local Maori-owned land for 40 years without compensation”.⁹³ While such outcomes that work in the interests of locals are more readily found, the area of biodiversity and the bio-technologies associated with the life-science industries are among the most contentious for Maori impacting on the guardianship of TK and cultural values.

(B) Bio-diversity

Mead (1997) has commented on one notable case where a misunderstanding involving Maori communities led to local fragmentation over the commercialisation of gene technology. This occurred when Scottish-based firm PPL Therapeutics and their New Zealand partner Selbourne Biological Services were given government approval to field-trial transgenic rams by inserting them with human DNA. At the time, neighbouring Maori landowners, required by law to be consulted, were overlooked in the commercialisation process. According to Mead, “conditional consent was misrepresented by other Maori as being binding. As a result a Maori woman who had signed consent was forced to resign her tribal position because her action was perceived as giving approval without mandate”.⁹⁴ That experience led many Maori to become more vocal and organised in relation to cultural matters and ethical problem areas that directly affect their value systems with a number of strategies adopted by Maori anti-GE activists to highlight concerns including demonstrations, sit-ins, educational material and media presentations.⁹⁵ Hutchings (2002) observed: “As Maori we ask ourselves if it will always be a struggle to protect basic cultural rites, to maintain our belief systems in the midst of the craze for techno-industrial development”.⁹⁶

⁹³ *Ibid.*

⁹⁴ Mead, A. (1997). ‘Resisting the Gene Raiders’. *New Internationalist*, 293 (August), p. 4.

⁹⁵ Reynolds, P. (2002). ‘Property, Patents, or People’, retrieved 8 July, 2004: evista-theomai.unq.edu.ar/numero5/artreynolds5.htm, p. 4.

⁹⁶ Hutchings, J. (2002). ‘Decolonisation and Aotearoa – a pathway to right livelihood’, retrieved 8 July, 2004: www.swaraj.org/shikshantar/ls3_jessica.html, p. 3.

In written and oral submissions on genetic engineering put before the Royal Commission of Inquiry into Genetic Modification, a high level of Maori, and indeed Pakeha opposition, was evident. When the report was released in 2001, Simon Upton (ex-Member of Parliament) commented: “Maori had been listened to with exquisite politeness and cosmic tact and then basically passed by”.⁹⁷ Many Maori saw the RCGM’s Report as a document that paid lip-service to the protection of cultural, spiritual and intellectual values. This is summed up in Jackson’s (2001) observation that Maori were granted room for a ‘perspective’ that objectified culture reinforcing a perception that GE would ‘fit’ if a redefinition of *tikanga* as flexible and adaptive were applied to the TK.⁹⁸

The arguments around IP and GE have intensified and remain contentious as tensions between commercial prospects and the preservation of TK divide opinions between groups. At the same time, other areas of IP jurisdiction such as the Plant Varieties Act and patent laws highlight Maori concerns about the implications of the numerous Acts making reference to cultural and IP rights.⁹⁹ For Barclay (2005), it is not the domesticated store of plants and genetic resources developed and held by indigenous communities that is critical to understanding indigenous perspectives. Rather it is the chasm between IP and indigenous material illuminated when we talk “about what has been maintained in the wild under the guardianship of Indigenous peoples”.¹⁰⁰ Guardianship, as discussed in the next section, is integral to customary practices and fundamental to Maori claims for the inalienable right to exercise control over cultural knowledge in respect of IP. Customary rights and cultural practices exist in a symbiotic socio/legal relationship that has become part of the politicised debate around

⁹⁷ Jackson, M. (2001). ‘An Exquisite Politeness: the Royal Commission on Genetic Modification and the Redefining of the Treaty of Waitangi’, retrieved 8 July 2004: www.gene.ch/genetech/2001/Oct/msg00050.html, p 1. Jackson points out that not only did the RCGM’s Report on GM abrogate Maori rights under the Treaty of Waitangi, but concerns about who would control GM, coupled with an overall lack of information and time to make informed decisions about the nature and extent of GM and its effect on plants, people and property, made the report’s findings highly contentious .

⁹⁸ *Ibid*, p. 2.

⁹⁹ Shand, P. *Op cit*, pp. 47-88. Cultural and intellectual heritage is split between several jurisdictions that include property references, they are: the Antiquities Act, 1975; the Conservation Act, 1987; the Plant Varieties Rights Act, 1987 (currently under review); the Resource Management Act - 1991 and 1993. Then there are the IP acts including the Copyright Act, 1994; the Designs Act, 1953; the Fair Trading Act, 1986; the Patents Act, 1953 (currently under review); and the Trademarks Act 1953, 2002. pp. 60-61.

¹⁰⁰ Barclay, B. (2005). *Mana Tūturu Maori Treasures and Intellectual Property Rights*, p. 61.

IPRs unravelled for the purposes of this chapter to gain an understanding of the impact on indigenous knowledge from governance.

VII. Customary Rights and Cultural Knowledge

The extent to which customary rights are legally recognised by the state and able to be practised relies on judicial rulings. Customary rights have been excluded from some agreements between parliament and Maori groups. For example, in its full and final settlement for land grievances with the *Ngai Tahu* tribe, the government made no provision for customary rights.¹⁰¹ On the other hand, in recognising *kaitiaki* over the land, the customary rights over lake beds and foreshore (including Lake Taupo) do not infringe on the rights of all people to access those areas. A 2003 claim to exercise customary title over the foreshore and seabed by eight Marlborough *iwi* was appealed after the High Court ruled that the Maori Land Court did not have a judicial mandate to decide on coastline claims. The Appeal Court ruled that customary rights had not been extinguished and the Maori Land Court should rule on the case.

The Crown's case that common law ought to prevail over the foreshore and seabed was rejected, causing the Government to begin proceedings forthwith to establish Crown control and ownership of the foreshore and seabed securing access to the Queen's chain and beyond.¹⁰² The Government's highly controversial Foreshore and Seabed Bill was passed into law in late 2004, giving rise to many objections that, as Jackson (2003) wrote: "raise[s] major constitutional questions about *Te Tiriti o Waitangi* and the genuineness of the

¹⁰¹ Franks, S. (2004). 'Going Native: What Indigeneity Should Look Like In the Morning', Australasian Law Reform Agencies Conference, April, retrieved 8 July, 2004: www.act.org.nz/item.jsp?id=25530, p. 2.

¹⁰² The debate that preceded the legislation polarised views around those who supported the government's stance, and large numbers of Maori who believed customary practices should be upheld, and rights to the foreshore and seabed be retained by indigenous people and not on their behalf by the Crown. Political protests about the nature of the legislation mirrored the anguish felt in earlier historical grievances over land rights. *Hui* (meetings) were held prior to the adoption of the Bill and a *hiko* (a long march) to Parliament was followed by a key Maori Labour Member of Parliament, Tariana Turia's, resignation. She subsequently formed a new Maori political party successfully contesting the 2005 general election. Efforts by the Crown to extinguish customary rights challenges the reciprocal relationship existing between Parliament and Maori groups compromising the value of knowledge and rights of a cultural minority.

Crown's good faith" in terms of the rights of indigenous people to their land and resources.¹⁰³ Maui Solomon commented:

This issue is a watershed, and if, as it looks, minority rights are once again being disregarded by the legislative process, then, it will not enhance race relations in this country It is both IPRs and land that need to be sorted out, there are enormous issues and both tangible and intangible resources are at stake here.¹⁰⁴

Such legislative changes challenge indigenous control over collective resources and bring into focus private rights, rights to commercialise resources, and rights to intellectual property. The Foreshore and Seabed legislation issues are on-going and are of particular interest to governments and non-governmental groups deliberating on establishing an international treaty to protect and enforce cultural and intellectual rights. In the foreshore and seabed issue Maori did not call for 'ownership' but for the right to be recognised as the legitimate custodial guardians of the foreshore and seabed. It was not so much an issue of law but about Maori lore which ought to have been addressed within the customary rights debate.

Government may have been well advised to inquire into the feasibility of an institutional approach providing protocols based on reciprocity that would accommodate customary law into the field of common law. This would require being inventive, and perhaps reforming some of the Crown's more restrictive codes that operate within legislation such as the Resource Management Act and Local Body Act. The foreshore and seabed issue bears all the hallmarks of a reactive, short term approach. Suffice to say that the way government approached the legislation raises more questions than it answers making customary and guardianship rights far from resolved in the minds of many politicians and lay-people alike. These issues are not un-related to challenges in the area of private property rights where Maori have extensive interests in preserving collectively held land and resources using IP and common law. These

¹⁰³ Jackson, M. (2003). 'Like A Beached Whale: A Consideration of Proposed Crown Actions Over Maori Foreshore', retrieved 4 October, 2006: www.converge.org/nz/pma/title.html. p. 2.

¹⁰⁴ Interview with M. Solomon, Kawatea Chambers, Wellington, 15 December, 2003.

private property rights were contested when the *Potaka Marae* on the East Coast of the North Island sought to set up a fish farm on collectively-held land after being denied resource consent. The *hapu* would have gained IP protection for the development of a commercial resource and employed their local people (in an area of high unemployment) using customary methods for business purposes. The bureaucratic decision-making regarding this project could be accused of inhibiting grass-roots level development and tribal innovation, while also negating the 1998-1999 WIPO FFM report that reflected on the importance “for members of traditional communities and the informal IP community to learn about each other’s systems, and that the interfaces, similarities and differences between customary and modern legal systems requires understanding and management”.¹⁰⁵ Many Maori and non-Maori have called for the debate on customary rights and guardianship to be widened to educate and inform a wide public audience about the inter-relationship between cultural knowledge and intellectual property because it is important, for the sake of community cohesion, that locals understand what national and international recognition and protection entails and an appreciation of what constitutes fairness and justice in property debates.

Different approaches to IP and Maori Knowledge have been mooted in this chapter. In Jacobsen’s (2002) view, “the use of intellectual property rights that has been proposed as a solution [to Wai 262] is not wholly suitable for the protection of indigenous resources and knowledge”.¹⁰⁶ Instead, Jacobsen calls for a neo-institutional approach for TK based around indigenous models developed by indigenous people themselves, which as discussed, is already underway in many forms. New forms of property relations must offer protection mechanisms, have preservation conditions and need agreement clauses on reciprocity. Jacobsen suggests that “government needs to recognise that indigenous people are competent to manage their cultural and intellectual property and resources and

¹⁰⁵ WIPO, *Op cit*, p. 221.

¹⁰⁶ Jacobsen, V. (2002). ‘Plants, People and Property’, Paper Presented at the Annual Conference of the New Zealand Association of Economists, 27-29 June, Christchurch, New Zealand, pp. 1, 20.

affirm their property rights".¹⁰⁷ In the interim, Jacobsen contends that conditions for any neo-institutional approach to IP and any enforcement framework under development may be relatively limited and restricted. Not all Maori are in a position where they can enjoy exclusive property ownership rights.¹⁰⁸ Thus, progress is more likely to be achieved where Maori have exclusive ownership of land and sound management and governance structures to support and control the resources. Larger groups are more able to bear the benefits and costs of protecting *matauranga*, and if the knowledge has not already become part of the public domain, then it is more likely to be able to be protected. Strong customary and relatively homogeneous use and ownership principles within a community are more likely to determine success.¹⁰⁹ In 2003 Jacobsen acknowledged that further work, by Maori for Maori, was required on the effects of technological change and the globalisation of property rights, with IP agreements requiring more focussed attention.¹¹⁰

VIII. Conclusion

This analysis of intellectual property and aspects of Maori knowledge reveals that the processes and practices for protecting creativity have been slow to emerge under *sui generis* law, and that the development of regulations in a number of conventions in response to pressures in other key areas of Maori social and economic development have been *ad hoc*. While Treaty obligations guarantee Maori the right to exercise guardianship and decision-making rights over *taonga* to protect resources, successive governments have not adequately resolved guardianship and protection issues with legislation complementary to the importance of cultural knowledge to the civil society as a whole. The equivalent benefits and fair outcomes that underpin reciprocity are complementary to the legal mechanisms that can be instituted under IPRs, as seen in *toi iho*. However, the problem remains one of determining how rules are interpreted around intellectual and cultural knowledge in order that they serve Maori in terms of

¹⁰⁷ *Ibid*, p. 24.

¹⁰⁸ *Ibid*, pp. 1, 23.

¹⁰⁹ *Ibid*, p. 23.

¹¹⁰ Interview with V. Jacobsen. *Loc cit*.

recognition while not inhibiting Maori self-determination. This becomes an issue highlighted by the tensions between public and private demands for protection that has a corollary in the economic value of private rights, the repercussions of which will be demonstrated in the next chapter in terms of access to, and the dissemination of, knowledge.

As economic rights, IPRs enter the category of private goods and, by virtue of international rules, acquire value within a competitive trade structure. The private good category that dominates IPRs is shaped by commercial practices to obtain profit which, as has been illustrated, does not sit well with significant numbers of indigenous groups because much TK has collective and public good attributes as treasured items which requires social and cultural respect in terms of long-term protection and preservation, rather than the assignation of commercial value. TK and reciprocity are strengthened by heritage values and provide communities with the guardianship important to the maintenance of local livelihoods and the enhancement of people's lives within and across diverse communities. As guardians of TK Maori communities must decide for themselves what organisations or institutions best serve their needs for development, recognition and protection.

IPRs are a specialised legal area and the resources, personnel and education plans required to mount campaigns for preservation take time and need coordinated organisation. As new technological innovations press in upon traditional ways of doing things the issues around cultural and intellectual property inevitably become more highly politicised. In response, groups have developed robust arguments for the maintenance of customary law practices based around a Maori way of doing things where a denial of reciprocity is detrimental to communal interests. Included here is political lobbying for parliamentary rules to cover the recognition and protection of intellectual heritage items in order to make sure that the confiscation and wrong use of cultural symbols and knowledge is able to be adequately contested. This chapter has demonstrated where lines of argument developed from concerns about

patent applications in the early 1990s, when the issues were largely those of protecting flora and fauna, to the situation today, where genetic modification and the engineered commercialisation of human and animal genetic material brings the issue of traditional knowledge and lore into focus. For most groups the social role of guardianship and reciprocity cannot be reconciled with the commercial role of IP; for others IP poses few problems if based on *tikanga* and the benefits those values bring to peoples' understandings of their heritage.

Incorporating law and customary rights adds value to intellectual heritage items, and while recognising that IPRs and TK are mutually exclusive, there is evidence that indigenous businesses have become involved in following, and in a number of cases leading, scientific research that reconciles cultural and intellectual practices and so confronts ethical dilemmas as to the best way to proceed with guardianship and management. Many *iwi* and other groups are now the real beneficiaries of projects generating commercial returns from local resource development. Consequently, it is not a matter of separating laws and institutions to preserve cultural and IP because there is already recognition of Maori ways of doing things within the justice, health and welfare areas. Rather, it is critical that the emphasis on Maori initiatives integral to self-management be honoured, strengthened and fully respected in mainstream jurisdictions.

Dialogue between the Crown and Maori groups is needed on the issues of ownership, economic and social development to work out how *matauranga* Maori can be worked through *sui generis* law with wider public and private support. Piracy and privacy are but two aspects: the need to repair the regulatory tension between the TK and private economic rights caused by an over zealous predilection towards commercialising every aspect of intellectual and cultural knowledge is of at least equal importance. Moral and ethical considerations put responsibility on both government and knowledge stakeholders to recognise and protect resources. Reciprocity in a moral/normative sense is a form of redistributive justice and serves the dual purpose of cultural preservation and inclusiveness. Ethical and moral considerations founded on reciprocity are made

all the more urgent given the reach of the TRIPS Agreement into economic and social life. TRIPS' harmonisation regulations have significant implications for the future legislation at the national level with the present government indicating the importance attached to ensuring the country's IP laws meet the obligations laid out by the WTO. Reviewing legislation and bringing IP to the harmonised TRIPS standards requires a balance between the optimal demands of national knowledge holders and the economic value government puts on these rights. Although *Toi iho* shows that *sui generis* legislation can be made to safeguard TK, trademarks are generally far less contentious than patent rights where levels of contest arise over access and control. Government continues to discuss at the international level whether a framework agreement to protect knowledge and traditional practices is feasible.

A plethora of international conventions, declarations, agreements, protocols and mandates already guide the implementation of TK with a firm basis in reciprocal obligations of fairness and justice. More effort is needed to formulate mechanisms that are appropriate to the successful governance of IP as technology expands the horizon of what knowledge may legitimately and justifiably become property. This chapter has examined how reciprocity and IP can be interpreted in the context of different forms of Maori knowledge. The commercialisation of resources for trade, and the rapid codification of all forms of knowledge regardless of its social value to communities, impinges on efforts to preserve cultural property which remains a political problem under global integrating forces. This chapter has set down initiatives developed by Maori to protect resources, together with some of the political issues associated with these developments. The next chapter examines the political dimensions of changes in public and private authority in the context of knowledge commercialisation.

CHAPTER TEN

CLOSING THE RECIPROCITY GAP: CONCLUSIONS AND PROSPECTS FOR KNOWLEDGE

This study of the re-regulation of intellectual property has revealed a reciprocity gap in the governance and exchange of knowledge which has arisen from the failure of the TRIPS' governing framework to move beyond the context of re-regulatory trade rules and assert reciprocal norms consistent with the long-standing social foundation of IPRs as a public good. The normative context of this thesis that reciprocity is vital to the fair and equitable exchange of knowledge is supported in arguments that reciprocity has the capacity to transform unequal trade practices in the interest of democratic governance. Reciprocity, it is argued here, challenges the monopoly control manifest within the politically structured global trade framework of IP. By virtue of its public good grounding, reciprocity is complementary to social and economic institutions, and politically necessary to mitigate the powerful commercial concentration of knowledge ownership that TRIPS, and its post-implementation phase, represents.

In arguing for the normative value of reciprocity and its contribution to moral virtue, this research draws on Becker's comprehensive study of reciprocity, and his philosophical justifications and moral framework for social interactions between groups in societies. The moral virtue of reciprocity is one in which the human disposition to act and respond for good is mediated by balanced levels of social and political power. Reciprocity finds its virtue-theoretic mandate in notions of justice based on the common acceptance of equitable transactions to enhance and sustain the intrinsic social value of knowledge. Understanding how reciprocity can inform IPRs, and produce significantly different outcomes from policies and practices to govern knowledge, is integral to this political exploration of IP governance.

Reciprocity as a normative concept guiding public good practices is advanced in this research based on equity and civil rewards consistent with benefit-sharing. This concept of reciprocity has not been realised or practised in institutional procedures of

IPRs because the moral foundations of reciprocity are frequently overridden by power protagonists. Becker is firm in his contention that normative obligations diffuse power and are the crux of reciprocity, giving it a moral foundation and residence as a virtue. Reciprocity as a virtue can go beyond a 'feel good' factor to the practical idea that we ought to be morally disposed to tie reciprocity to deeply-held duties, obligations and rights. Reciprocity, then, is not merely symbolic of civil consensus, but requires political will and appropriate legal rules to ensure appropriate rewards and durable dispute settlement procedures. In this thesis, these become the vehicles for mutual exchange against threats and un-lawful actions of power that might conceivably disrupt justice and fairness resulting in negative consequences for governance. Alley's observations, as noted in chapter two, that within significant areas of international security, reciprocity is a principle in deep trouble has resonance in the arguments advanced in this thesis.¹

The conceptualisation of reciprocity developed in chapter two derives from virtue-theoretic arguments about the core value of normative principles to societies set down by philosophers, political scientists, legal scholars, economists and sociologists. The main hindrance in conceptualising reciprocity in international politics and trade, in particular, is the perceived moral ambiguity of establishing how benefits can be equitably distributed between competing states and other market competitors. While some scholars point to the ambiguity surrounding reciprocity (Keohane, 1986), others consider the conditions for inducing a semblance of equity between competing parties (Gouldner, 1960), and yet others note the political problems arising from state and institutional attempts to standardise fundamental beliefs about society and economy (Strange, 1996).

Why was this conceptualisation of reciprocity necessary to observations and understandings of IP governance and the public good features of knowledge? Reciprocity became relevant to political culture in historical efforts to create laws supported by normative frameworks to guide conduct between states. By the latter

¹ Chapter 2, fn. 12.

half of the 19th century reciprocity was an accepted moral principle to mediate interstate tensions foreshadowed by recognition that significant trade inequalities posed a threat to the international state system. For example, as outlined in chapter two, a framework of action based on reciprocal norms was instituted to dismantle protectionist policies and work toward greater levels of international co-operation between states. These steps were strengthened in 1947 with the consolidation of GATT multilateral rules aimed at expanding trade and lowering protectionist barriers and emphasised further in the 1974 US Trade Act. In subsequent years, efforts to encourage liberal trade growth had a negative impact on attempts to achieve trade equity as the strongest economies revealed a penchant for remaining highly protectionist, and the least advantaged in the global economy were persuaded to adopt an open markets policy. At the same time, reciprocity as a normative goal to forge sovereign equality faltered. As the evidence in chapters five and six show efforts to promote equal national treatment and make trade more open and free faced disruption from state-backed corporate ownership and control. By the end of the 1990s the uneasy juxtaposition between trade protectionism and trade liberalisation had severely compromised the normative roots of reciprocity as a means of attaining national harmony and international co-operation.

The normative position of reciprocity with its attendant conventions such as MFN status, mutual recognition and national treatment continued to be aimed at actions to induce trade integration. As global trade in knowledge technologies expanded, and states became more reliant on IP to remain competitive, expectations grew that similar standards could be applied to goods and services recognisable in agreements between one state and another. Yet setting common global standards for IP failed to secure significant trade advantages for the weakest states as trade protectionism became instrumentally linked to market competition usurping reciprocal obligations (Drahos and Braithwaite, 2002; Kuruk 2004). In short, the institutional practices and political policies that encompass sovereign equality, mutual recognition and MFN have become increasingly indistinct, a process confirmed by the enactment of TRIPS aimed at standardisation and successive initiatives to strengthen trade laws.

I. Establishing Reciprocity in Knowledge and Property

Several findings are made in the preceding chapters. First, TRIPS falls far short of the reciprocal provisions of adequate standards and guidelines to protect the availability of rights allowing scope for technological advancement. The implications of this are wide-ranging; not only did the Agreement represent a significant stage of historical development in IP rule-making by seeking to balance rights with obligations, but also in the strengthening of rights, which exerted a burden on the private protection of public access to knowledge through a harmonised approach to rule-making (as discussed in chapter five, section three). Other factors, unrelated to IP law, but closely associated with trade competition law, were influential in determining the scope of actions under which strong states pursued efforts toward a harmonised global agreement. Behind the USTR's efforts from the mid-1980s to expand the range of trade competition laws, including going beyond US 301 to Special 301 in the 1990s, were political and commercial strategies, which further safeguarded private investment, and assisted in tying IP to capital demands, prior to and during, the TRIPS implementation stage.

Evidence shows that competition law is consistent with the core features of economic rationalism invoked by state-backed international economic institutions collated and juxtaposed in the context of the comparative features of reciprocity and market competition set out in table 1, chapter two. Accompanying trade-related rules to re-regulate IP is the imposition of conformity (seen in harmonising standards) under the guise of multilateral consensus driven by trade-related compliance (enforcement mechanisms) that cut across jurisdictions to the detriment of reciprocity. Clearly, the irony of re-regulation and its impact on reciprocity is seen in the political demands of private authority for knowledge ownership and control, and the paradox, that while public law creates private rights in IP, it is private ownership and control that subsequently compromises public use (Sell, 2003b).

Second, the agenda establishing TRIPS gave impetus to strong states, and key agencies, to institute governance at the global level as a means of legitimising and

commercialising IP in order to advance the material requirements of knowledge accumulation and wealth around key new knowledge in communications and the life sciences. Similarly, IP re-regulation complemented the rational approach of Anglo-American governments seeking to merge the public and private sectors through political strategies of corporatisation and privatisation. The political implications of applying IP laws in a diminished public domain brought with it social repercussions illustrated by significant impediments to fair and just knowledge distribution. As a consequence, the advocacy of knowledge benefit-sharing revealed a deficit because the 'good' became measured in terms of the 'good' for the owners of property. In addition, the pressures of competitive trading in knowledge goods and ideas compromised the ability of many communities to establish controlling interests in technologies where IP-centred trade rules reduced knowledge to economies of scale, radically altering the broad epistemological base of knowledge whilst marginalising reciprocity. The dominance within global governance of powerful interests has impacted upon the social and cultural fabric of many groups and is demonstrated in the de-valuation of reciprocal exchange. The transformed regulatory global order has given rise to monopolisation by private power and has allowed and sanctioned formidably powerful economic coalitions that challenge the reciprocal relationship between the public good and public law.

Third, the legal and economic consequences of strengthened rules lent themselves to a significant realignment of global power that set up the conditions for TRIPS articles to be subsumed in bilateral agreements and forms of private contracts. As a consequence the multilateral system of bargaining trade has been displaced from its institutional framework with further implications for the social utility of rights to ideas. These major elements represent the distinct visions of capitalist accumulation and illuminate the difficulties in realising the fundamental public good goals of trade reciprocity and illustrate how, under TRIPS, reciprocity is prevented from acting as a catalyst for knowledge encompassing capital and applied science. The challenge from the re-regulation of IPRs to reciprocity is epitomised as a political exercise that has paradoxically put not only protection under duress, but also competition and

open markets for knowledge. As argued in chapter two, the commercialisation of IPRs is contrary to reciprocal obligations, is exacerbated by global governance, and on the evidence in succeeding chapters, has assisted in the legal strengthening of rights through extended IP time-frames. The implications of this reveal a significant reduction in the aspirations of reciprocal norms and benefit-sharing intrinsic to the stated intentions of the Agreement.

On the basis of these findings, it is clear that reciprocity requires reclamation, not only as an imperative to optimise public good values, but also to facilitate equity. In chapter three, the historical importance of knowledge to Western and non-Western states and groups explored the political significance of dominance and control over trade routes, goods and services, and outlined the powerful authoritative mechanisms of ownership and governance. The mobilisation of power in oppressive ways has been shown in many instances to have displaced long-standing self-organising and self-determining strategies of knowledge and reciprocal exchange. This thesis has set out in some detail how knowledge has been used as a tool of oligarchic power, with deleterious results for large numbers of people. Where political actions have resulted in forms of oppression whether by cultural, religious or colonial practices resistance to knowledge as property has found expression. While it is impossible to dispense with power, it is important to check its abuses exercised through means of empowering people to make their own decisions. By that reckoning, reciprocity offers an important check on power and legalised forms of commercialisation that detract from public good governance. As outlined in chapter two, failing to leave 'as good and enough for others' is both detrimental to reciprocity and has implications for the public good in terms of social order and the capacity to make effective political transformations.

In chapter four, the cumulative material demands and economic relations legitimising authority over property were explored. The identification of rights as politically significant to the maintenance and power of property-owning groups in society reveals the duplicity between rights and the considerable capital resources

used to unbalance knowledge exchange and, by implication, undermine reciprocity between right-holding groups. Chapter four adds weight to the evidence that individuals are increasingly excluded from claiming private rights because of political power assigned by commercial imperatives which highlights the rights themselves rather than property. The mechanisms for securing property rights in the interests of wider public good requirements lie in the obligations of reciprocity for both the individual and society. Identifying the points at which the individual and society collectively assert rights, and seek protection in property, is important in delineating the extent to which private ownership and authority concentrate controls that states and institutions fail to address by reciprocal obligations.

Chapter five reveals that significant changes to the public good foundations of knowledge, shaped by TRIPS, provide limited application to invoke reciprocity for a number of important reasons. First, the neo-liberal market model, by virtue of its emphasis on the expansion of private power, only allows partial explanations about issues at the centre of disputes over IP. Free trade and market access have worked against reciprocity by intensifying unilateral responses from the strongest states toward weaker trading partners supported by a range of trade laws and dubious legal interpretations. These have induced IP compliance and, for the most part, are indicative of a powerful shift away from TRIPS when parties are not disposed to comply with rules that impact upon their domestic economic self-interest. Second, while IPRs are private rights, under the auspices of the WTO, they are given a liberal trading function that puts costs back on those least able to pay while providing significant benefits for those with the capacity to pay when employed alongside trade law and protectionism. Third, the re-regulation of rules of ownership and control are clearly in favour of international markets where the strongest states and owners of IP enjoy monopoly control over knowledge proving detrimental to local innovation and discovery across a range of states, in particular, weak ones. Fair and just distribution remains compromised, and will give rise to increasing inequality and conflict if the legal dimensions of IP are not challenged by reciprocal trade goals

required to mediate the space between capital and applied science in order to close the reciprocity gap.

The competitive nature of knowledge in the information age, analysed in chapter six, reveals that under jurisdictions prior to TRIPS no overt commercialisation existed for IP beyond the necessity of ensuring timeframes compatible with the need to secure returns for investment, after which time, the knowledge created was returned to the commons and public advantage. The re-regulation of IP effectively subjects the non-exclusive and non-rivalrous nature of knowledge to economic scarcity, thereby legitimising and commercialising IP as a potent form of property subject to trade and competition rules (Dutfield, 2003a; May, 2002b; and Sell, 2002). As the evidence in this thesis shows, this situation has implications for the distribution of knowledge, and is significant to political efforts by developing states to achieve reciprocal trade benefits capable of bench-marking where capital and applied science can induce redistribution, whether through property reform, public representation or consent.

While the regulatory changes to property rights have contributed to the establishment of wide-ranging economic rewards for many, the uneven spread of internet and related technologies, and a concentrated patent market around business communications, has resulted in the flow of ideas being dominated by the domestic interests of the wealthy states whose capacity to restrict access to knowledge and control innovation has intensified around the creation of monopolies in order to retain ownership in private hands. At one level, monopolies are magnified globally and maintained by the coordinated support of strong states in order for corporations to control trade in, and rights over IP. At another level, as this research reveals, the intrusion of TRIPS into domestic affairs interrupts the necessary political will to contribute to knowledge transfers through obligations toward reciprocal trade. This thesis argues that the absence of political goals that genuinely work toward freeing up trade and reducing protectionist policies denies the normative contribution of reciprocity, and precludes the productive knowledge base from inviting equivalence in trade relations between states. Mutual benefits, fair trade and proportionate justice

are the supporting normative rungs of reciprocal obligations to knowledge as a public good which mitigate conflict — potential and real — assisted by qualifications to restructure trade distortions that impede the delivery of knowledge.

The arguments in chapters seven and eight around IPRs and indigenous knowledge highlight the ways in which knowledge systems, critical to the reciprocal social and cultural maintenance of group autonomy, have been undermined. For many groups IP is seen as detrimental to long-standing self-organising and self-determining practices by devaluing the reciprocal foundation of knowledge. In international forums, as has been argued, the debates on TK and IP invariably raise moral concerns backed up by strong practical arguments in favour of recognition, preservation and protection — almost always presented in that order. As a first approximation, it is necessary to cultural stability and social cohesion for TK resources to be recognised prior to preservation and protection whether through IP or customary rights. The African Proposal is cognisant of obligations toward reciprocity as discussed in chapter seven, and is consistent with international TK group determinations to redress trade inequalities. It also introduces what Kuruk (2004) considers important procedures to recognise TK and put in place enforcement protection mechanisms consistent with group requests for action. Severing knowledge from its social and cultural foundations is a source of political conflict and is detrimental to reciprocal exchange. This thesis establishes arguments that reciprocity requires a fully operational role alongside instrumental law giving TK-holders a tool to contest IP rights that undermine recognition and protection. Facilitating the African proposal does not necessarily mean creating more national law. Instead, it desires actions that make recognition and enforcement relevant to, and consistent with, policies to secure redress if fair and equivalent technology transfers and other benefit-sharing strategies are not forthcoming.

As noted in chapter eight, Maori have been foremost amongst other indigenous groups in leading international claims for knowledge recognition and preservation in international and national forums. This study found little support for further

international law with the majority of interviewees seeing greater merit in building on existing treaties and conventions to better serve indigenous interests at global and national levels. More apparent was the stipulation that wider debates were needed on what forms of knowledge needed recognition in IP law, and what needed to be protected by customary rights. In many other areas of IP, as outlined in chapter eight, Maori have continued with claims for customary rights to become the real beneficiaries and guardians of cultural and spiritual knowledge. Furthermore, IP, TK, and customary rights issues are far from reconciled in parliamentary debates or in communities where clashes between local constituents and the law over the guardianship and ownership of resources are on-going.

Investigating aspects of Maori knowledge systems in relation to the politicisation of IP is of considerable importance to the commercial deployment of IP in Aotearoa/New Zealand. As chapter eight shows, Maori groups display a long history of political activism against particularising and commercialising culture through the abuse of IP rights. Appeals for justice to address the disadvantages arising from the encroachment of IP rights into the area of TK remains a political issue for Maori groups in relation to arguments that reparations are due for TK abuses in return for harm caused. At the same time that the application of IPRs are viewed by many as a significant violation of TK, significant numbers are defending and protecting resources through IP to maintain stakeholder rights over cultural items. Adopting national laws to promote Maori business inclusive of a *kaupapa* Maori approach based on the full recognition of *tikanga* is an acknowledgement of autonomy. Nonetheless, the debates around IP and TK continue to reflect tensions between the production of new ideas and the social stability and maintenance of longstanding collective practices and reciprocal understandings of knowledge.

In chapter nine, the economic implications of IP, trade sanctions, and the deleterious consequences of tariffs underscore the necessity for reciprocity to become an important element and significant principle for guiding political bargaining around IP. What then of reciprocity and its need for reclamation as a norm to ensure fairness

and equivalence, and as a foundation to invite technical transfers? Chapter nine addresses these issues outlining the significant impact of TRIPS post-implementation phase and the political implications of scientific and technological access and diffusion. In the areas of pharmaceuticals and bio-technologies, for example, a premium is placed on commercial imperatives through the increased importance attached to the role of patents as an area for profit extraction by corporations and strong states. Political will is required to address the demeaning of knowledge and its fair and just distribution and, as this chapter argues, to reclaim reciprocity by building trust between knowledge-holding groups dependent upon civil codes of conduct. After all, reciprocity and open markets rather than knowledge gate-keeping, were seen as integral to member-states' democratic concerns on the establishment of the WTO.

It was anticipated that signatories and intending members would benefit exponentially and equitably from an expansion of market-led free trade policies. Ironically, a major impediment in tying knowledge to trade regulations is seen in the formation of monopoly controls secured in licensing fees and royalty payments. Here, open markets are subject to the contradictory priorities of competition and the inclusion of restrictive trade practices leading to the increasing erosion of competitive advantage which impacts upon the efficacy of reciprocity. This thesis argues that the way in which IPRs have been divested of much of their intrinsic public good value demonstrates that global governance is synonymous with a lack of democratic leadership and reciprocal trade. In short, mechanisms for furthering the innovative capacity of human societies through IPRs by democratic and by fair means is secondary to the economic imperatives of profit-seeking. The weight of evidence, presented in chapter nine, suggests that there are profound political consequences and social repercussions arising from knowledge commercialisation, and that support for reciprocity needs to be a deliberative process to arrest its decline as an international norm of governance.

II. The Hypotheses and Political Implications for Reciprocity

The hypotheses derived from the literature in chapter two are now revisited, and their relevance to arguments for and against how knowledge is politicised, assessed. In particular, consideration is given to the problems of establishing reciprocity in theory and practice evaluated here to weigh up whether reciprocity is robust enough to uphold the social foundation of knowledge, or at least arrive at better questions to frame future scholarship around the protection of knowledge technologies from the dominance of powerful groups. Attention is also given to the TK of indigenous groups, the analysis of the reasons for the re-regulation of IPRs, and what steps may be taken to address the serious implications arising from the gap in reciprocal trade under TRIPS. The arguments of this thesis are, accordingly, strongly normative in their orientation.

Hypothesis 1. Current trade mechanisms undermine national and global obligations toward benefit-sharing.

Despite benefit-sharing being a foundation of IP, this research reveals that there are considerable obstacles within the mechanisms of exchange that restrain benefit-sharing based on three political realities:

- (a) IPRs themselves inhibit benefit-sharing in their expanded and strengthened form;
- (b) The re-regulatory and technocratic importance of IP rights has effectively established an alliance between national and global governance inducing governments to support expanded economic-legal frames of reference narrowing the broader social importance of obligations toward benefit-sharing;
- (c) States can challenge other states to be effective political advocates for the advancement of knowledge through IPRs, but they are often reluctant to implement benefit-sharing obligations out of trade concerns related to their own national self-interest.

In terms of the political implications of (a) the evidence in chapters five, six and seven reveals that much of the potential for benefit-sharing, integral to reciprocity in the form of technology transfers and other trade initiatives, is unrealisable in any satisfactory way without taking into account the manner in which patents, in particular, have been strengthened under expanded legal rights and concentrated in the hands strong states and corporate agents. Concerning (b), as argued in chapters four, five, six and nine, benefit-sharing is compromised by the re-regulatory framework, and by the privileging of proprietary markets and corporate controls under global governance. TRIPS proved to be both 'a carrot and a stick'; an instrument to integrate innovative ideas into IPE, and a political tool to entice members to sign up to the WTO's trading system. By politicising knowledge under trade, benefit-sharing is separated from democratic politics and becomes vacuous, evidenced by a lack of reciprocal obligations within the framework of global governance practices. Benefit-sharing has proved to be a double edged sword. On the one hand, benefit-sharing is affirmed by an emphasis on the re-regulatory and competitive technocratic importance of IP rights inducing governments to follow a rational approach opening the way for concerted economic-legal frames of reference. On the other hand, this economic-legal approach narrows understandings of the wider social obligations of benefit-sharing toward knowledge technologies and their cultural frames of reference.

Concerning (c), as discussed in chapters three, five, six and nine, the political actions of strong states and corporations serve to illustrate the ideological imperatives of national self-interest. While the contentious issue of national self interest goes beyond the scope of this study, it is clear that the merging of the public and private spheres has a significant impact on reciprocal trade as subsidies and protectionism leaves a void in knowledge benefit-sharing advocacy because the national 'good' is measured in terms of the economic 'good' for the owners of property. Much more research is required into the capacity of developing national markets to establish IP around technologies given that large economies, supported by private power, have successfully altered the broad epistemological base of knowledge, and particularly

TK, toward ownership and control. National self interest under the guise of governance criteria, and instituted by the global uniformity of rule-making raises the spectre that the access and dissemination of knowledge will not give way to benefit-sharing for large numbers of people. The lack of respect toward reciprocal obligations, at all levels of governance, set up competitive strategies which effectively side-lined the social value of knowledge to market imperatives.

Hypothesis 2. The uniformity imposed by TRIPS constitutes a politically-driven privileging of neo-liberal market economics.

This second hypothesis lends qualification to the significant antagonisms that have arisen over political decisions to induce a harmonised (uniform) trade framework for IP. Harmonisation and strengthened rights are integral to uniformity and symptomatic of a problem area for reciprocity by making the material connections encompassing property and rights secure for commerce. This is demonstrated in arguments that the privileging of market economics generates competition for knowledge by establishing a scarcity value. Three aspects concerning this hypothesis emerge from this thesis:

- (a) Uniformity expands timeframes and strengthens rights around IP;
- (b) Too little recognition of the public good, and too much IP law, disrupts the reciprocal value of knowledge;
- (c) Antagonisms are good for competition.

In relation to (a), and the central theme in this thesis, the harmonisation of standards and the institutionalisation of global governing re-regulatory rules, this study concludes that uniformity has extended its instrumental arm into areas of knowledge for commercial purposes to extract market value from national rights over knowledge resources. A major implication for reciprocity is that a reversal of uniformity under the current global governance of IP by political actions is highly unlikely, for several reasons. First, the enormous capital base to invite novelty and originality claims exceeds the economic reach of many proving far too costly an

exercise. Second, uniformity has not only strengthened IP but also represents a particular stage in knowledge development and in the globalisation of innovation. Uniformity can push national law in directions that do not serve the public interest, as evidenced by the commercialisation of some aspects of TK, and will continue to do so. While there have been substantive cases where power groupings of strong states and corporations, in pressing uniformity too far, have been forced to make legal concessions to small states and companies, penalties accrued under the WTO and the costs to the less powerful are disproportionately high. Alterations to TRIPS and liberal interpretations of its articles have also assisted the process with the anomalies and inequalities within TRIPS profiled by anti-globalisation and free trade opponents. Nonetheless, while the strengthening of property rights have contributed to the establishment of wide-ranging economic rewards for some, an uneven spread of knowledge technologies and a concentrated market for patents around all forms of communications persists and is an impediment to reciprocity. The drawback with this situation is that the flow of ideas is dominated by the domestic interests of the wealthy states whose capacity to restrict access to knowledge has intensified around the creation of monopoly power.

Concerning (b), from this analysis we can say that too little recognition of the public good and too much IP law results in exclusivity and the maintenance of ownership in private hands. In turning to (c), it is clear that any major reform to TRIPS is doubtful since under the re-regulatory trade framework competition invites antagonisms seen by many (economists) as necessary to induce efficiency and inspire innovation. Trade competition around ideas thus lends sway to the intensification of private power giving encouragement to corporations to assume dominant economic positions by being efficient whilst challenging the state and its law to extract value from knowledge. The social unrest generated by this top down global governance approach to all forms of knowledge, and especially TK, made it necessary to look at deficits in reciprocal knowledge as discussed in chapter nine, and found in examples in pharmaceutical manufacturing, and in the proprietary capture and control of molecular biology, database ownership and computer technologies.

Hypothesis 3. The concept of reciprocity is central to ensuring the socio-cultural foundation and the public good value of knowledge in global governance.

This hypothesis proposes a sustainable relationship between market competition and the normative goals of reciprocity — one aimed at fair and just distribution. The political implications of this hypothesis are wide-ranging and imply that norms are made, upheld and altered by people and institutions under reciprocal conditions. It follows from this hypothesis that a lack of reciprocity works against fairness and equivalence giving rise to tensions around IP rights which burdens access and delivery and enables those who control and own knowledge to manipulate trade competition rules. Market liberalisation strategies based on the competitive goals of profit seeking and economic rationality create a duality between IP monopolisation and competitive trade with competition rules favouring monopoly control around selective technologies. While this situation does not expose any new information the nature and extent of corporate investment in rights is new and only relatively recently integrated by capital into large scale investment portfolios in IP and TK. These portfolios are unambiguously a major source of significant economic wealth for states residing in the 'basket of good things', and has serious implications for social access and the democratic proliferation of ideas and distribution of knowledge, as well as the maintenance of cultural practices.

A broad set of conclusions, tested in the hypotheses, have developed about the nature of TK, the emergence of declarations and legal rules for the recognition and preservation of TK, and the scope of reciprocity to ensure fair and equivalent outcomes. First, TK stake-holders often lack the capital, technological or organisational resources to compete with corporations and the regulatory demands of strong states in open market competition thus compromising their capacity to obtain mutually agreed reciprocal benefit-sharing outcomes. Second, sufficient substantive directives already exist in numerous agreements to cover key areas where TK is put at risk from misappropriation. However, it is the implementation of agreements and the political will to evaluate progress and make reforms where

necessary which presents a significant problem for those seeking recognition and protection. In addition, the failure of key states to ratify existing agreements forecloses on the transparency and disclosure necessary for TK to be adequately recognised and protected. Third, there is a need to counter the dominant form of economic alliance where state power and corporate capital concentrates through monopolies the use of TK for proprietary purposes without leaving 'as good and enough for others' which poses a threat to reciprocal outcomes.

III. Significance of the Study and Future Research Avenues

This study of knowledge commercialisation challenges the political ambivalence toward reciprocity within the governance arrangements of IPRs. It foreshadows escalating impoverishment for many stemming from a failure to address inequalities measured by the public-regarding aspects of reciprocity toward knowledge goods. With a few exceptions, Kuruk, 2004; Drahos and Braithwaite, 2004; Solomon and Watson, 2001; as well as IR theorists noted in section one above, the qualitative literature on reciprocity has tended to be cursory. Rather than qualitative analysis, it has been quantitative research on reciprocity by economists and lawyers that has gained attention (Freund, 2003; Nogues 2003). This thesis addresses the qualitative gap in the literature on reciprocity by delineating the normative obligations toward trade-related IPRs. In addition, the study contributes to the debate on the globalisation of IPRs and its public and private politico-legal dimensions (Arup, 2000; Drahos and Braithwaite, 2002; Maskus and Reichman 2004; May, 2000; Sell, 2003b). By addressing the political implications of commercialisation on aspects of Maori knowledge and reciprocity this study fits the broad framework of normative arguments into a national context. Further research in Aotearoa/New Zealand and elsewhere may explore how reciprocal norms could be incorporated more comprehensively in national political negotiations to serve the interests of indigenous groups in terms of recognising the contributions of TK recognition to social cohesion.

The question of whether reciprocity is robust enough or capable of attracting shared visions and consent to bridge the gap between capital and applied science remains in the realm of political will and action. Related to political will and action are wide-ranging trade bargaining and exchange issues around the emergence of the newly industrialising states accumulated knowledge, and the scope and direction for emerging economies to institute protection, prevent piracy and develop innovation under IPRs which are limited by Western values of commerce, science and law. Similarly, the encroaching commercialisation of knowledge into areas hitherto untrammelled by IP rights show little signs of abating offering a pathway for more focussed scholarly attention, particularly in key areas of institutional management, as for example, in relation to gene technologies and developments in quantum physics. In addition, this study confirms that there are moral considerations relating to changes in patent, copyright and other IP laws regarding a moral defence of rights, left largely unchallenged. Much more research needs to be done in the area of obligations toward knowledge in terms of understanding the repercussions of neglecting normative values and privileging instrumental law.

As the multilateral aspirations of TRIPS are abrogated to bilateral forms of trade collaboration, and given the support of strong states and corporations to trade around IP, there is a need to look in greater depth at contradictory trade patterns that impede the recognition and protection of IP and TK. These anomalies need to be brought to political light more rigorously in negotiating forums. The lack of robust institutional machinery at the global level to address strong state power, and contradictory forms of democratic leadership characterised by reciprocal rhetoric that fails to reach implementation targets, inhibits the political will to contribute to knowledge obligations. Prevarication leads to conflict, invites social disharmony and breaks down institutional trust. The conceptualisation of reciprocity in this thesis not only opens the way for further studies into forms of justice and equity around the framework of IPRs, but may also appeal to other areas of research such as the field of gender and development studies and environmental ethics. While legal interpretations of IP are necessary for the adoption of rules across different

disciplines it is the normative codes of conduct fundamental to the maintenance of the broad epistemological base of knowledge, that requires closer attention than has been the case to date.

A theoretical route based on justice deliberations to draw threads between political rule-making and intellectual property of the type Posner, Rawls and others might offer to the philosophical debates on knowledge has not been attempted in this thesis. Clearly, justice deliberations have an implied and workable position within the normative framework of reciprocity. As outlined in chapter two, section one, reciprocity is a virtue and its moral status is valued as a public good guide to invite justice in conduct between states, firms and institutions. In spite of this obvious consideration, no attempt is made in this study to engage in wide-ranging justice arguments. Rather, the focus on conceptualising reciprocity provides an entry, and contributes towards ideas for future studies on justice and intellectual property to be appraised in global governance research, and elsewhere, at another point in time.

(A) Problems and Opportunities

If the social fallout from commercialisation is to be more completely understood and scrutinised by public citizens — many of whom are unsuspecting of the instrumental reach of the current IP regime — an enlarged debate within local levels of governance, states and global institutions is required to highlight the political implications for democratic participation from the privatisation of public goods. Debates and institutional initiatives already underway in a number of states include discussions on consumer interests and the present commercial trajectory of human genome and associated scientific technologies. However, along with this there also needs to be consideration of the social elements of ownership within IPRs, particularly around the moral dimensions of patent and copyright controls and the impact on knowledge access and dissemination from other rights that impinge upon reciprocity, including trade secrets. Public participation through democratic procedures is vital to address the social implications of bio-technologies and its products on societies, along with the future viability and sustainability of

biodiversity as noted in chapters seven, eight and nine. Two important questions about knowledge practices not fully explored in this study also require further examination. The first relates to categories of intellectual knowledge which ought to be given common pool status and decreed as beneficial to the general welfare of humanity including discoveries that would find jurisdiction in common heritage practices. The second is the question of how indigenous communities might organise and extend a global public future at institutional levels for knowledge on justice grounds that engages reciprocity and meets the needs of TK preservation decided by the groups themselves as vital to socio-economic survival and cultural sustainability.

An important question from this research is where the model of reciprocity, as conceptualised in chapter two, is able to find institutional backing given that the state has maintained its resilience by integrating public authority with the interests of the private sector. This research has established that before reciprocity and its value to human societies can be reconciled several conditions need to be met. In the first instance, the Doha Round of talks, at the time of writing only inching toward agreement on reducing trade distortions and agriculturally-based impediments to fair trade, requires a re-organised agenda to invite reciprocal obligations. After all, IPRs were legitimised by the Uruguay Round and it ill behoves the present Round not to acknowledge a greater debt toward benefit-sharing than has been the case in the past. In the last few years, a coordinated approach by both developed and developing states supported by regional blocs, have issued powerful demands for fair distribution and equitable trade putting pressure on the EU and US to reform trade laws. To that end, fair trade outcomes have been sought by the coalition of newly industrialising states who have moved the debate toward altering the asymmetrical power of trade bargaining that goes on between states. These measures have not gone far enough. Instead of wrangling over economic rationality and strengthening instrumental rules to bind innovation to expanded trade conditions, a window presents in the current round of WTO trade talks for greater dialogue on instituting fair and equitable exchange. For the least-developed states this must centre on reciprocal developments encompassing obligations to public domain rights

as a pre-emptory condition *prior to* markets being opened up to further competition and integration.

Second, at the level of the state, the political groundwork to counter the private determination to own and control knowledge resources (which has been well prepared by social activists both at government and non-governmental level) needs to be extended in political demands for reciprocity. Thus, the socio-economic significance of knowledge and its reciprocal trade value remains an urgent concern for institutions, states and communities across the world. Third, enhancing the public good value of knowledge through reciprocity requires a fundamental shift in economic trade practices at domestic levels. A greater role for the state in vetoing anti-competitive practices that deny scope for innovation is needed to induce reciprocal behaviour as compared to the present thrust of strengthening rights through unilateral, bilateral and even trilateral arrangements. Legitimising citizen welfare through the benefits of innovations must be the cornerstone of trade bargaining and commercial exchange. The appeal to establish reciprocal relations seeks to avoid short-term coercive strategies and solutions that in the past have been given priority over long-term conflict reducing proposals.

Fourth, corporations need to alter their private strategic policy-making toward a social framework of knowledge production consistent with the normative values of reciprocity. Some firms are actively engaged in this process as illustrated in preceding chapters, but there are not nearly enough corporations willing to adopt reciprocal exchange and use fair trade as a practical business device to induce producer and consumer good will. Greater commercial emphasis needs to be put on introducing equivalence into global governance which means deflecting the emphasis away from the 'capital capsule' economy that represents rational economic decision-making based solely on profit, to a focus on knowledge production valued for its humanitarian qualities, which becomes its own form of profit. Fifth, reciprocity means reshaping a world economy where tangible goods such as food, water, and medicines are not so over-laid with intangible property rights that they

fail to cater to the most basic of human needs. It is vital that less-developed economies, particularly those on the African continent, are able to trade equitably and have access to the benefits of discovery and innovation demonstrated through reciprocal exchange. A *quid pro quo* system of proposals would allow the development of new technologies to be achieved through cooperative chains of dialogue and action rather than coercive practices related to economic demands. This study has illustrated, particularly in chapters seven and eight, areas where reciprocity has been achieved guided by institutional good practice, trust and respect for diversity and instituted by competing parties to protect and enforce rights through reciprocal agreements that meet the needs of the communities involved.

IV. Closing the Reciprocity Gap

Although this thesis presents reciprocity primarily through a conceptual analysis based upon normative considerations, this does not mean that policy implications are unimportant; indeed policies are a central part of IPRs in all areas of IPE. An understanding of the contradictions in the governance of IP has been one way of signalling that there are significant coercive coalitions that inform policy, and has also helped identify areas where the normative possibilities still need to be realised in policies on IP in order for the reciprocity gap to be closed. On its entry to the WTO, TRIPS was seen as a firm policy move to induce democratic trade by not only guaranteeing protection, but also instituting enforcement mechanisms into legislation. The political demands that trigger change, such as those seen with the re-regulation of IP have certainly not given substance to democratic practices. Indeed, democratic aspirations have violated the institutional norms of public good conduct seen in the repeated failure of governance to relieve trade distortions in the area of access to pharmaceuticals for the poor which infringed, and continues to impede, both IP provisions and democratic values. The normative value of reciprocity and its philosophical disposition within a moral framework must be compatible with institutional policies to secure intellectual ideas and maintain the public good legitimacy of IPRs essential to respect for knowledge proliferation through ideas that have social utility.

This research shows how IP law has set aside responsibility for benefit-sharing by privileging proprietary markets in ideas as an economic imperative. This is displayed in the strategic deployment of IP inhibiting access to knowledge for large numbers of people through controls. Further, the political agenda that drives intellectual property precludes the rewards of knowledge to those who can least afford to pay, revealing that once IP falls into the hands of the few rather than the many, access diminishes and undemocratic political practices become characteristic of propertied relations. The concentrations of private power around knowledge are destabilising for existing democracies and place a social cost on fledgling democracies because of the high price of IP as it is presently governed. This begs the question of whether TRIPS was ever about multilateralism or merely a tactical conjuncture to secure the resources of knowledge for proprietary purposes and eschew the framework of reciprocity that underpins knowledge protection. If this is so, then strong states and corporations will continue to be well placed as unilateral agents of licenses and royalty fees with the fruits of inventions and new discoveries locked into a monopoly consensus that is contrary to the reciprocal principles of justice and fairness.

This study concludes that long-term initiatives for the exchange of knowledge technologies need to be mediated by reciprocal agreements supported by a broader range of ethical guidelines around IPRs which states and institutions would be responsible for upholding in consultation with communities. The basis for these strategies presently exists in proposals and conventions worked out for indigenous knowledge, elaborated in chapters seven and eight and discussed here. The future direction of multiple forms of knowledge tied to scientific discovery lies in achieving trust around reciprocal trade arrangements. This is vital because the legal interpretations of IP mean one thing in the wealthy developed world (where the full force of legal power and expert knowledge comes into play) and quite another in states where legal and social inequalities put different demands on knowledge resources. For these reasons, the granting of private rights over IP needs to be measured, not by minimum standards of IPRs but by maximum global public standards of human livelihood. The instruction and development of workable reciprocal strategies is a large and complex task for states and global institutions and

would require, in part, shareholder acceptance and parliamentary leadership through recognition that reciprocity adds value to competition by privileging the social dimensions of knowledge. Categorising the types of knowledge that ought to remain as the common heritage of particular groups tied to their geographical and cultural settings is an important lead in proposals for change.

Whether TRIPS will remain the legislative international centre-piece for guiding states in the application of minimum standards to protect and enforce intellectual rights is far from clear. As has been argued, significant efforts have already been made to by-pass TRIPS in order to achieve concessions in other areas of trade. Attaching private contract to knowledge and side-lining TRIPS allows bilateral trade bargaining to proceed between nationals uninterrupted by legal interpretations. Pressured by free trade agreements states are increasingly obligated to add additional covenants covering IP rights over and above the compliance TRIPS requires in its minimum standards. Figuring prominently in the link between the ownership of ideas embodied in private rights and public law are controls around inventions and discoveries that impoverish reciprocity. This thesis argues that reciprocity is put at risk not only from a lack of protection, but also from elevated re-regulatory standards and trade laws that impact on applications for rights by failing to guard the common pool of knowledge.

Reversing the strengthened rights, and allowing a weaker system of IP, such as operated a hundred years ago, seems unlikely in the present era of intense technological expansion. Instead, the public domain and free commons idea supported by reciprocity which has been hollowed out from the public realm of science and captured by powerful interests in the knowledge age needs recalling to centre stage. To ameliorate the economic imperatives of IPRs which, in and of themselves, have become a major industry for states and corporations to profit from ideas requires revitalising reciprocity through collaborative visions that intersect the public and private domains of knowledge. IPRs have lost their reciprocal private value to protect public ideas muddied by the blurred boundaries of public and

private power where class alliances dominated by corporations operate alongside strong state trading interests in an elite cycle of capital accumulation and materialism. At the same time that the WTO is seen to be stimulating competition and enforcing rules on tradable goods, IPRs are deliberately being used as commercial instruments to close down competition. These actions reduce key scientific information and knowledge to the controlling forces of capital disrupting the normative value of reciprocity.

The capacity for discoveries and new innovations to emerge in the most unlikely places, often under extreme circumstances (outside research laboratories), is what makes human creativity such a fascinating social phenomenon adding to our well-being and ability to reciprocate. As humans we are intellectually impoverished if we fail to allow ingenuity the chance to develop by restricting knowledge to those with the capacity to pay. Similarly the addition of clauses in trade laws and levels of protectionism that lead to exclusive controls disrupts knowledge from its social base and causes the on-going displacement of reciprocity. Such actions lead to the subordination of reciprocity and invite national communities run by superficial oligarchies with little but their own self-interest at heart. Reciprocity as a human virtue has had its social power constrained by an overtly economic emphasis on market demands around knowledge that pays scant attention to values that could direct parliaments and institutions toward alternative solutions and a more distributive vision of trade and governance. This can be reversed, for while profit can be its own reward, and law attempts the work of distributive justice, the virtue of moral lore and its wise judgements on reciprocity must ultimately be the political goal.

Indeed, to deny room in national and international trade for reciprocity is to deny cooperative and cohesive civil norms capable of accounting for practices to reduce impediments to commercial forms of exchange. A broad political canvas of normative values underpinned by reciprocity is critical to global governance if the macro-global picture of international trade relations is not to be lost in the micro-

level of instrumental domestic politics. In support of reciprocity as a normative guide to public good conduct this study has argued against deterministic and universal explanations of market economics directed specifically at IPRs that imply centrifugal forces are at work to make the process of rule-making inevitable, and the consolidation of powerful unequal commercial trade, irreversible. IPRs are not locked into an immutable trade paradigm partly dependent on, and partly threatened by, the state, institutions and firms. There are alternatives to omnipotent knowledge technologies of power and as members of a global community we put our public good obligations of fairness at risk if our intellectual ideas and laws of protection rely on sanctioning legal controls around knowledge that deny access and justice to those in need. The risks to civil societies today are collective risks, unique to our level of material consumption and unequal development which, compared to earlier times when nature and god drove understandings of knowledge, are much more capable of amendment. What is needed is political leadership to critique the market direction of knowledge in response to externalised market values that operate beyond the social contexts in which ideas are constructed and inform societies. Reciprocity offers a strong normative reminder that we are the guardians of the ideas upon which we build our knowledge.

CHAPTER TEN

CLOSING THE RECIPROCITY GAP: CONCLUSIONS AND PROSPECTS FOR KNOWLEDGE

This study of the re-regulation of intellectual property has revealed a reciprocity gap in the governance and exchange of knowledge which has arisen from the failure of the TRIPS' governing framework to move beyond the context of re-regulatory trade rules and assert reciprocal norms consistent with the long-standing social foundation of IPRs as a public good. The normative context of this thesis that reciprocity is vital to the fair and equitable exchange of knowledge is supported in arguments that reciprocity has the capacity to transform unequal trade practices in the interest of democratic governance. Reciprocity, it is argued here, challenges the monopoly control manifest within the politically structured global trade framework of IP. By virtue of its public good grounding, reciprocity is complementary to social and economic institutions, and politically necessary to mitigate the powerful commercial concentration of knowledge ownership that TRIPS, and its post-implementation phase, represents.

In arguing for the normative value of reciprocity and its contribution to moral virtue, this research draws on Becker's comprehensive study of reciprocity, and his philosophical justifications and moral framework for social interactions between groups in societies. The moral virtue of reciprocity is one in which the human disposition to act and respond for good is mediated by balanced levels of social and political power. Reciprocity finds its virtue-theoretic mandate in notions of justice based on the common acceptance of equitable transactions to enhance and sustain the intrinsic social value of knowledge. Understanding how reciprocity can inform IPRs, and produce significantly different outcomes from policies and practices to govern knowledge, is integral to this political exploration of IP governance.

Reciprocity as a normative concept guiding public good practices is advanced in this research based on equity and civil rewards consistent with benefit-sharing. This concept of reciprocity has not been realised or practised in institutional procedures of

IPRs because the moral foundations of reciprocity are frequently overridden by power protagonists. Becker is firm in his contention that normative obligations diffuse power and are the crux of reciprocity, giving it a moral foundation and residence as a virtue. Reciprocity as a virtue can go beyond a 'feel good' factor to the practical idea that we ought to be morally disposed to tie reciprocity to deeply-held duties, obligations and rights. Reciprocity, then, is not merely symbolic of civil consensus, but requires political will and appropriate legal rules to ensure appropriate rewards and durable dispute settlement procedures. In this thesis, these become the vehicles for mutual exchange against threats and un-lawful actions of power that might conceivably disrupt justice and fairness resulting in negative consequences for governance. Alley's observations, as noted in chapter two, that within significant areas of international security, reciprocity is a principle in deep trouble has resonance in the arguments advanced in this thesis.¹

The conceptualisation of reciprocity developed in chapter two derives from virtue-theoretic arguments about the core value of normative principles to societies set down by philosophers, political scientists, legal scholars, economists and sociologists. The main hindrance in conceptualising reciprocity in international politics and trade, in particular, is the perceived moral ambiguity of establishing how benefits can be equitably distributed between competing states and other market competitors. While some scholars point to the ambiguity surrounding reciprocity (Keohane, 1986), others consider the conditions for inducing a semblance of equity between competing parties (Gouldner, 1960), and yet others note the political problems arising from state and institutional attempts to standardise fundamental beliefs about society and economy (Strange, 1996).

Why was this conceptualisation of reciprocity necessary to observations and understandings of IP governance and the public good features of knowledge? Reciprocity became relevant to political culture in historical efforts to create laws supported by normative frameworks to guide conduct between states. By the latter

¹ Chapter 2, fn. 12.

half of the 19th century reciprocity was an accepted moral principle to mediate interstate tensions foreshadowed by recognition that significant trade inequalities posed a threat to the international state system. For example, as outlined in chapter two, a framework of action based on reciprocal norms was instituted to dismantle protectionist policies and work toward greater levels of international co-operation between states. These steps were strengthened in 1947 with the consolidation of GATT multilateral rules aimed at expanding trade and lowering protectionist barriers and emphasised further in the 1974 US Trade Act. In subsequent years, efforts to encourage liberal trade growth had a negative impact on attempts to achieve trade equity as the strongest economies revealed a penchant for remaining highly protectionist, and the least advantaged in the global economy were persuaded to adopt an open markets policy. At the same time, reciprocity as a normative goal to forge sovereign equality faltered. As the evidence in chapters five and six show efforts to promote equal national treatment and make trade more open and free faced disruption from state-backed corporate ownership and control. By the end of the 1990s the uneasy juxtaposition between trade protectionism and trade liberalisation had severely compromised the normative roots of reciprocity as a means of attaining national harmony and international co-operation.

The normative position of reciprocity with its attendant conventions such as MFN status, mutual recognition and national treatment continued to be aimed at actions to induce trade integration. As global trade in knowledge technologies expanded, and states became more reliant on IP to remain competitive, expectations grew that similar standards could be applied to goods and services recognisable in agreements between one state and another. Yet setting common global standards for IP failed to secure significant trade advantages for the weakest states as trade protectionism became instrumentally linked to market competition usurping reciprocal obligations (Drahoš and Braithwaite, 2002; Kuruk 2004). In short, the institutional practices and political policies that encompass sovereign equality, mutual recognition and MFN have become increasingly indistinct, a process confirmed by the enactment of TRIPS aimed at standardisation and successive initiatives to strengthen trade laws.

I. Establishing Reciprocity in Knowledge and Property

Several findings are made in the preceding chapters. First, TRIPS falls far short of the reciprocal provisions of adequate standards and guidelines to protect the availability of rights allowing scope for technological advancement. The implications of this are wide-ranging; not only did the Agreement represent a significant stage of historical development in IP rule-making by seeking to balance rights with obligations, but also in the strengthening of rights, which exerted a burden on the private protection of public access to knowledge through a harmonised approach to rule-making (as discussed in chapter five, section three). Other factors, unrelated to IP law, but closely associated with trade competition law, were influential in determining the scope of actions under which strong states pursued efforts toward a harmonised global agreement. Behind the USTR's efforts from the mid-1980s to expand the range of trade competition laws, including going beyond US 301 to Special 301 in the 1990s, were political and commercial strategies, which further safeguarded private investment, and assisted in tying IP to capital demands, prior to and during, the TRIPS implementation stage.

Evidence shows that competition law is consistent with the core features of economic rationalism invoked by state-backed international economic institutions collated and juxtaposed in the context of the comparative features of reciprocity and market competition set out in table 1, chapter two. Accompanying trade-related rules to re-regulate IP is the imposition of conformity (seen in harmonising standards) under the guise of multilateral consensus driven by trade-related compliance (enforcement mechanisms) that cut across jurisdictions to the detriment of reciprocity. Clearly, the irony of re-regulation and its impact on reciprocity is seen in the political demands of private authority for knowledge ownership and control, and the paradox, that while public law creates private rights in IP, it is private ownership and control that subsequently compromises public use (Sell, 2003b).

Second, the agenda establishing TRIPS gave impetus to strong states, and key agencies, to institute governance at the global level as a means of legitimising and

commercialising IP in order to advance the material requirements of knowledge accumulation and wealth around key new knowledge in communications and the life sciences. Similarly, IP re-regulation complemented the rational approach of Anglo-American governments seeking to merge the public and private sectors through political strategies of corporatisation and privatisation. The political implications of applying IP laws in a diminished public domain brought with it social repercussions illustrated by significant impediments to fair and just knowledge distribution. As a consequence, the advocacy of knowledge benefit-sharing revealed a deficit because the 'good' became measured in terms of the 'good' for the owners of property. In addition, the pressures of competitive trading in knowledge goods and ideas compromised the ability of many communities to establish controlling interests in technologies where IP-centred trade rules reduced knowledge to economies of scale, radically altering the broad epistemological base of knowledge whilst marginalising reciprocity. The dominance within global governance of powerful interests has impacted upon the social and cultural fabric of many groups and is demonstrated in the de-valuation of reciprocal exchange. The transformed regulatory global order has given rise to monopolisation by private power and has allowed and sanctioned formidably powerful economic coalitions that challenge the reciprocal relationship between the public good and public law.

Third, the legal and economic consequences of strengthened rules lent themselves to a significant realignment of global power that set up the conditions for TRIPS articles to be subsumed in bilateral agreements and forms of private contracts. As a consequence the multilateral system of bargaining trade has been displaced from its institutional framework with further implications for the social utility of rights to ideas. These major elements represent the distinct visions of capitalist accumulation and illuminate the difficulties in realising the fundamental public good goals of trade reciprocity and illustrate how, under TRIPS, reciprocity is prevented from acting as a catalyst for knowledge encompassing capital and applied science. The challenge from the re-regulation of IPRs to reciprocity is epitomised as a political exercise that has paradoxically put not only protection under duress, but also competition and

open markets for knowledge. As argued in chapter two, the commercialisation of IPRs is contrary to reciprocal obligations, is exacerbated by global governance, and on the evidence in succeeding chapters, has assisted in the legal strengthening of rights through extended IP time-frames. The implications of this reveal a significant reduction in the aspirations of reciprocal norms and benefit-sharing intrinsic to the stated intentions of the Agreement.

On the basis of these findings, it is clear that reciprocity requires reclamation, not only as an imperative to optimise public good values, but also to facilitate equity. In chapter three, the historical importance of knowledge to Western and non-Western states and groups explored the political significance of dominance and control over trade routes, goods and services, and outlined the powerful authoritative mechanisms of ownership and governance. The mobilisation of power in oppressive ways has been shown in many instances to have displaced long-standing self-organising and self-determining strategies of knowledge and reciprocal exchange. This thesis has set out in some detail how knowledge has been used as a tool of oligarchic power, with deleterious results for large numbers of people. Where political actions have resulted in forms of oppression whether by cultural, religious or colonial practices resistance to knowledge as property has found expression. While it is impossible to dispense with power, it is important to check its abuses exercised through means of empowering people to make their own decisions. By that reckoning, reciprocity offers an important check on power and legalised forms of commercialisation that detract from public good governance. As outlined in chapter two, failing to leave 'as good and enough for others' is both detrimental to reciprocity and has implications for the public good in terms of social order and the capacity to make effective political transformations.

In chapter four, the cumulative material demands and economic relations legitimising authority over property were explored. The identification of rights as politically significant to the maintenance and power of property-owning groups in society reveals the duplicity between rights and the considerable capital resources

used to unbalance knowledge exchange and, by implication, undermine reciprocity between right-holding groups. Chapter four adds weight to the evidence that individuals are increasingly excluded from claiming private rights because of political power assigned by commercial imperatives which highlights the rights themselves rather than property. The mechanisms for securing property rights in the interests of wider public good requirements lie in the obligations of reciprocity for both the individual and society. Identifying the points at which the individual and society collectively assert rights, and seek protection in property, is important in delineating the extent to which private ownership and authority concentrate controls that states and institutions fail to address by reciprocal obligations.

Chapter five reveals that significant changes to the public good foundations of knowledge, shaped by TRIPS, provide limited application to invoke reciprocity for a number of important reasons. First, the neo-liberal market model, by virtue of its emphasis on the expansion of private power, only allows partial explanations about issues at the centre of disputes over IP. Free trade and market access have worked against reciprocity by intensifying unilateral responses from the strongest states toward weaker trading partners supported by a range of trade laws and dubious legal interpretations. These have induced IP compliance and, for the most part, are indicative of a powerful shift away from TRIPS when parties are not disposed to comply with rules that impact upon their domestic economic self-interest. Second, while IPRs are private rights, under the auspices of the WTO, they are given a liberal trading function that puts costs back on those least able to pay while providing significant benefits for those with the capacity to pay when employed alongside trade law and protectionism. Third, the re-regulation of rules of ownership and control are clearly in favour of international markets where the strongest states and owners of IP enjoy monopoly control over knowledge proving detrimental to local innovation and discovery across a range of states, in particular, weak ones. Fair and just distribution remains compromised, and will give rise to increasing inequality and conflict if the legal dimensions of IP are not challenged by reciprocal trade goals

required to mediate the space between capital and applied science in order to close the reciprocity gap.

The competitive nature of knowledge in the information age, analysed in chapter six, reveals that under jurisdictions prior to TRIPS no overt commercialisation existed for IP beyond the necessity of ensuring timeframes compatible with the need to secure returns for investment, after which time, the knowledge created was returned to the commons and public advantage. The re-regulation of IP effectively subjects the non-exclusive and non-rivalrous nature of knowledge to economic scarcity, thereby legitimising and commercialising IP as a potent form of property subject to trade and competition rules (Dutfield, 2003a; May, 2002b; and Sell, 2002). As the evidence in this thesis shows, this situation has implications for the distribution of knowledge, and is significant to political efforts by developing states to achieve reciprocal trade benefits capable of bench-marking where capital and applied science can induce redistribution, whether through property reform, public representation or consent.

While the regulatory changes to property rights have contributed to the establishment of wide-ranging economic rewards for many, the uneven spread of internet and related technologies, and a concentrated patent market around business communications, has resulted in the flow of ideas being dominated by the domestic interests of the wealthy states whose capacity to restrict access to knowledge and control innovation has intensified around the creation of monopolies in order to retain ownership in private hands. At one level, monopolies are magnified globally and maintained by the coordinated support of strong states in order for corporations to control trade in, and rights over IP. At another level, as this research reveals, the intrusion of TRIPS into domestic affairs interrupts the necessary political will to contribute to knowledge transfers through obligations toward reciprocal trade. This thesis argues that the absence of political goals that genuinely work toward freeing up trade and reducing protectionist policies denies the normative contribution of reciprocity, and precludes the productive knowledge base from inviting equivalence in trade relations between states. Mutual benefits, fair trade and proportionate justice

are the supporting normative rungs of reciprocal obligations to knowledge as a public good which mitigate conflict — potential and real — assisted by qualifications to restructure trade distortions that impede the delivery of knowledge.

The arguments in chapters seven and eight around IPRs and indigenous knowledge highlight the ways in which knowledge systems, critical to the reciprocal social and cultural maintenance of group autonomy, have been undermined. For many groups IP is seen as detrimental to long-standing self-organising and self-determining practices by devaluing the reciprocal foundation of knowledge. In international forums, as has been argued, the debates on TK and IP invariably raise moral concerns backed up by strong practical arguments in favour of recognition, preservation and protection — almost always presented in that order. As a first approximation, it is necessary to cultural stability and social cohesion for TK resources to be recognised prior to preservation and protection whether through IP or customary rights. The African Proposal is cognisant of obligations toward reciprocity as discussed in chapter seven, and is consistent with international TK group determinations to redress trade inequalities. It also introduces what Kuruk (2004) considers important procedures to recognise TK and put in place enforcement protection mechanisms consistent with group requests for action. Severing knowledge from its social and cultural foundations is a source of political conflict and is detrimental to reciprocal exchange. This thesis establishes arguments that reciprocity requires a fully operational role alongside instrumental law giving TK-holders a tool to contest IP rights that undermine recognition and protection. Facilitating the African proposal does not necessarily mean creating more national law. Instead, it desires actions that make recognition and enforcement relevant to, and consistent with, policies to secure redress if fair and equivalent technology transfers and other benefit-sharing strategies are not forthcoming.

As noted in chapter eight, Maori have been foremost amongst other indigenous groups in leading international claims for knowledge recognition and preservation in international and national forums. This study found little support for further

international law with the majority of interviewees seeing greater merit in building on existing treaties and conventions to better serve indigenous interests at global and national levels. More apparent was the stipulation that wider debates were needed on what forms of knowledge needed recognition in IP law, and what needed to be protected by customary rights. In many other areas of IP, as outlined in chapter eight, Maori have continued with claims for customary rights to become the real beneficiaries and guardians of cultural and spiritual knowledge. Furthermore, IP, TK, and customary rights issues are far from reconciled in parliamentary debates or in communities where clashes between local constituents and the law over the guardianship and ownership of resources are on-going.

Investigating aspects of Maori knowledge systems in relation to the politicisation of IP is of considerable importance to the commercial deployment of IP in Aotearoa/New Zealand. As chapter eight shows, Maori groups display a long history of political activism against particularising and commercialising culture through the abuse of IP rights. Appeals for justice to address the disadvantages arising from the encroachment of IP rights into the area of TK remains a political issue for Maori groups in relation to arguments that reparations are due for TK abuses in return for harm caused. At the same time that the application of IPRs are viewed by many as a significant violation of TK, significant numbers are defending and protecting resources through IP to maintain stakeholder rights over cultural items. Adopting national laws to promote Maori business inclusive of a *kaupapa* Maori approach based on the full recognition of *tikanga* is an acknowledgement of autonomy. Nonetheless, the debates around IP and TK continue to reflect tensions between the production of new ideas and the social stability and maintenance of longstanding collective practices and reciprocal understandings of knowledge.

In chapter nine, the economic implications of IP, trade sanctions, and the deleterious consequences of tariffs underscore the necessity for reciprocity to become an important element and significant principle for guiding political bargaining around IP. What then of reciprocity and its need for reclamation as a norm to ensure fairness

and equivalence, and as a foundation to invite technical transfers? Chapter nine addresses these issues outlining the significant impact of TRIPS post-implementation phase and the political implications of scientific and technological access and diffusion. In the areas of pharmaceuticals and bio-technologies, for example, a premium is placed on commercial imperatives through the increased importance attached to the role of patents as an area for profit extraction by corporations and strong states. Political will is required to address the demeaning of knowledge and its fair and just distribution and, as this chapter argues, to reclaim reciprocity by building trust between knowledge-holding groups dependent upon civil codes of conduct. After all, reciprocity and open markets rather than knowledge gate-keeping, were seen as integral to member-states' democratic concerns on the establishment of the WTO.

It was anticipated that signatories and intending members would benefit exponentially and equitably from an expansion of market-led free trade policies. Ironically, a major impediment in tying knowledge to trade regulations is seen in the formation of monopoly controls secured in licensing fees and royalty payments. Here, open markets are subject to the contradictory priorities of competition and the inclusion of restrictive trade practices leading to the increasing erosion of competitive advantage which impacts upon the efficacy of reciprocity. This thesis argues that the way in which IPRs have been divested of much of their intrinsic public good value demonstrates that global governance is synonymous with a lack of democratic leadership and reciprocal trade. In short, mechanisms for furthering the innovative capacity of human societies through IPRs by democratic and by fair means is secondary to the economic imperatives of profit-seeking. The weight of evidence, presented in chapter nine, suggests that there are profound political consequences and social repercussions arising from knowledge commercialisation, and that support for reciprocity needs to be a deliberative process to arrest its decline as an international norm of governance.

II. The Hypotheses and Political Implications for Reciprocity

The hypotheses derived from the literature in chapter two are now revisited, and their relevance to arguments for and against how knowledge is politicised, assessed. In particular, consideration is given to the problems of establishing reciprocity in theory and practice evaluated here to weigh up whether reciprocity is robust enough to uphold the social foundation of knowledge, or at least arrive at better questions to frame future scholarship around the protection of knowledge technologies from the dominance of powerful groups. Attention is also given to the TK of indigenous groups, the analysis of the reasons for the re-regulation of IPRs, and what steps may be taken to address the serious implications arising from the gap in reciprocal trade under TRIPS. The arguments of this thesis are, accordingly, strongly normative in their orientation.

Hypothesis 1. Current trade mechanisms undermine national and global obligations toward benefit-sharing.

Despite benefit-sharing being a foundation of IP, this research reveals that there are considerable obstacles within the mechanisms of exchange that restrain benefit-sharing based on three political realities:

- (a) IPRs themselves inhibit benefit-sharing in their expanded and strengthened form;
- (b) The re-regulatory and technocratic importance of IP rights has effectively established an alliance between national and global governance inducing governments to support expanded economic-legal frames of reference narrowing the broader social importance of obligations toward benefit-sharing;
- (c) States can challenge other states to be effective political advocates for the advancement of knowledge through IPRs, but they are often reluctant to implement benefit-sharing obligations out of trade concerns related to their own national self-interest.

In terms of the political implications of (a) the evidence in chapters five, six and seven reveals that much of the potential for benefit-sharing, integral to reciprocity in the form of technology transfers and other trade initiatives, is unrealisable in any satisfactory way without taking into account the manner in which patents, in particular, have been strengthened under expanded legal rights and concentrated in the hands strong states and corporate agents. Concerning (b), as argued in chapters four, five, six and nine, benefit-sharing is compromised by the re-regulatory framework, and by the privileging of proprietary markets and corporate controls under global governance. TRIPS proved to be both 'a carrot and a stick'; an instrument to integrate innovative ideas into IPE, and a political tool to entice members to sign up to the WTO's trading system. By politicising knowledge under trade, benefit-sharing is separated from democratic politics and becomes vacuous, evidenced by a lack of reciprocal obligations within the framework of global governance practices. Benefit-sharing has proved to be a double edged sword. On the one hand, benefit-sharing is affirmed by an emphasis on the re-regulatory and competitive technocratic importance of IP rights inducing governments to follow a rational approach opening the way for concerted economic-legal frames of reference. On the other hand, this economic-legal approach narrows understandings of the wider social obligations of benefit-sharing toward knowledge technologies and their cultural frames of reference.

Concerning (c), as discussed in chapters three, five, six and nine, the political actions of strong states and corporations serve to illustrate the ideological imperatives of national self-interest. While the contentious issue of national self interest goes beyond the scope of this study, it is clear that the merging of the public and private spheres has a significant impact on reciprocal trade as subsidies and protectionism leaves a void in knowledge benefit-sharing advocacy because the national 'good' is measured in terms of the economic 'good' for the owners of property. Much more research is required into the capacity of developing national markets to establish IP around technologies given that large economies, supported by private power, have successfully altered the broad epistemological base of knowledge, and particularly

TK, toward ownership and control. National self interest under the guise of governance criteria, and instituted by the global uniformity of rule-making raises the spectre that the access and dissemination of knowledge will not give way to benefit-sharing for large numbers of people. The lack of respect toward reciprocal obligations, at all levels of governance, set up competitive strategies which effectively side-lined the social value of knowledge to market imperatives.

Hypothesis 2. The uniformity imposed by TRIPS constitutes a politically-driven privileging of neo-liberal market economics.

This second hypothesis lends qualification to the significant antagonisms that have arisen over political decisions to induce a harmonised (uniform) trade framework for IP. Harmonisation and strengthened rights are integral to uniformity and symptomatic of a problem area for reciprocity by making the material connections encompassing property and rights secure for commerce. This is demonstrated in arguments that the privileging of market economics generates competition for knowledge by establishing a scarcity value. Three aspects concerning this hypothesis emerge from this thesis:

- (a) Uniformity expands timeframes and strengthens rights around IP;
- (b) Too little recognition of the public good, and too much IP law, disrupts the reciprocal value of knowledge;
- (c) Antagonisms are good for competition.

In relation to (a), and the central theme in this thesis, the harmonisation of standards and the institutionalisation of global governing re-regulatory rules, this study concludes that uniformity has extended its instrumental arm into areas of knowledge for commercial purposes to extract market value from national rights over knowledge resources. A major implication for reciprocity is that a reversal of uniformity under the current global governance of IP by political actions is highly unlikely, for several reasons. First, the enormous capital base to invite novelty and originality claims exceeds the economic reach of many proving far too costly an

exercise. Second, uniformity has not only strengthened IP but also represents a particular stage in knowledge development and in the globalisation of innovation. Uniformity can push national law in directions that do not serve the public interest, as evidenced by the commercialisation of some aspects of TK, and will continue to do so. While there have been substantive cases where power groupings of strong states and corporations, in pressing uniformity too far, have been forced to make legal concessions to small states and companies, penalties accrued under the WTO and the costs to the less powerful are disproportionately high. Alterations to TRIPS and liberal interpretations of its articles have also assisted the process with the anomalies and inequalities within TRIPS profiled by anti-globalisation and free trade opponents. Nonetheless, while the strengthening of property rights have contributed to the establishment of wide-ranging economic rewards for some, an uneven spread of knowledge technologies and a concentrated market for patents around all forms of communications persists and is an impediment to reciprocity. The drawback with this situation is that the flow of ideas is dominated by the domestic interests of the wealthy states whose capacity to restrict access to knowledge has intensified around the creation of monopoly power.

Concerning (b), from this analysis we can say that too little recognition of the public good and too much IP law results in exclusivity and the maintenance of ownership in private hands. In turning to (c), it is clear that any major reform to TRIPS is doubtful since under the re-regulatory trade framework competition invites antagonisms seen by many (economists) as necessary to induce efficiency and inspire innovation. Trade competition around ideas thus lends sway to the intensification of private power giving encouragement to corporations to assume dominant economic positions by being efficient whilst challenging the state and its law to extract value from knowledge. The social unrest generated by this top down global governance approach to all forms of knowledge, and especially TK, made it necessary to look at deficits in reciprocal knowledge as discussed in chapter nine, and found in examples in pharmaceutical manufacturing, and in the proprietary capture and control of molecular biology, database ownership and computer technologies.

Hypothesis 3. The concept of reciprocity is central to ensuring the socio-cultural foundation and the public good value of knowledge in global governance.

This hypothesis proposes a sustainable relationship between market competition and the normative goals of reciprocity — one aimed at fair and just distribution. The political implications of this hypothesis are wide-ranging and imply that norms are made, upheld and altered by people and institutions under reciprocal conditions. It follows from this hypothesis that a lack of reciprocity works against fairness and equivalence giving rise to tensions around IP rights which burdens access and delivery and enables those who control and own knowledge to manipulate trade competition rules. Market liberalisation strategies based on the competitive goals of profit seeking and economic rationality create a duality between IP monopolisation and competitive trade with competition rules favouring monopoly control around selective technologies. While this situation does not expose any new information the nature and extent of corporate investment in rights is new and only relatively recently integrated by capital into large scale investment portfolios in IP and TK. These portfolios are unambiguously a major source of significant economic wealth for states residing in the 'basket of good things', and has serious implications for social access and the democratic proliferation of ideas and distribution of knowledge, as well as the maintenance of cultural practices.

A broad set of conclusions, tested in the hypotheses, have developed about the nature of TK, the emergence of declarations and legal rules for the recognition and preservation of TK, and the scope of reciprocity to ensure fair and equivalent outcomes. First, TK stake-holders often lack the capital, technological or organisational resources to compete with corporations and the regulatory demands of strong states in open market competition thus compromising their capacity to obtain mutually agreed reciprocal benefit-sharing outcomes. Second, sufficient substantive directives already exist in numerous agreements to cover key areas where TK is put at risk from misappropriation. However, it is the implementation of agreements and the political will to evaluate progress and make reforms where

necessary which presents a significant problem for those seeking recognition and protection. In addition, the failure of key states to ratify existing agreements forecloses on the transparency and disclosure necessary for TK to be adequately recognised and protected. Third, there is a need to counter the dominant form of economic alliance where state power and corporate capital concentrates through monopolies the use of TK for proprietary purposes without leaving 'as good and enough for others' which poses a threat to reciprocal outcomes.

III. Significance of the Study and Future Research Avenues

This study of knowledge commercialisation challenges the political ambivalence toward reciprocity within the governance arrangements of IPRs. It foreshadows escalating impoverishment for many stemming from a failure to address inequalities measured by the public-regarding aspects of reciprocity toward knowledge goods. With a few exceptions, Kuruk, 2004; Drahos and Braithwaite, 2004; Solomon and Watson, 2001; as well as IR theorists noted in section one above, the qualitative literature on reciprocity has tended to be cursory. Rather than qualitative analysis, it has been quantitative research on reciprocity by economists and lawyers that has gained attention (Freund, 2003; Nogues 2003). This thesis addresses the qualitative gap in the literature on reciprocity by delineating the normative obligations toward trade-related IPRs. In addition, the study contributes to the debate on the globalisation of IPRs and its public and private politico-legal dimensions (Arup, 2000; Drahos and Braithwaite, 2002; Maskus and Reichman 2004; May, 2000; Sell, 2003b). By addressing the political implications of commercialisation on aspects of Maori knowledge and reciprocity this study fits the broad framework of normative arguments into a national context. Further research in Aotearoa/New Zealand and elsewhere may explore how reciprocal norms could be incorporated more comprehensively in national political negotiations to serve the interests of indigenous groups in terms of recognising the contributions of TK recognition to social cohesion.

The question of whether reciprocity is robust enough or capable of attracting shared visions and consent to bridge the gap between capital and applied science remains in the realm of political will and action. Related to political will and action are wide-ranging trade bargaining and exchange issues around the emergence of the newly industrialising states accumulated knowledge, and the scope and direction for emerging economies to institute protection, prevent piracy and develop innovation under IPRs which are limited by Western values of commerce, science and law. Similarly, the encroaching commercialisation of knowledge into areas hitherto untrammelled by IP rights show little signs of abating offering a pathway for more focussed scholarly attention, particularly in key areas of institutional management, as for example, in relation to gene technologies and developments in quantum physics. In addition, this study confirms that there are moral considerations relating to changes in patent, copyright and other IP laws regarding a moral defence of rights, left largely unchallenged. Much more research needs to be done in the area of obligations toward knowledge in terms of understanding the repercussions of neglecting normative values and privileging instrumental law.

As the multilateral aspirations of TRIPS are abrogated to bilateral forms of trade collaboration, and given the support of strong states and corporations to trade around IP, there is a need to look in greater depth at contradictory trade patterns that impede the recognition and protection of IP and TK. These anomalies need to be brought to political light more rigorously in negotiating forums. The lack of robust institutional machinery at the global level to address strong state power, and contradictory forms of democratic leadership characterised by reciprocal rhetoric that fails to reach implementation targets, inhibits the political will to contribute to knowledge obligations. Prevarication leads to conflict, invites social disharmony and breaks down institutional trust. The conceptualisation of reciprocity in this thesis not only opens the way for further studies into forms of justice and equity around the framework of IPRs, but may also appeal to other areas of research such as the field of gender and development studies and environmental ethics. While legal interpretations of IP are necessary for the adoption of rules across different

disciplines it is the normative codes of conduct fundamental to the maintenance of the broad epistemological base of knowledge, that requires closer attention than has been the case to date.

A theoretical route based on justice deliberations to draw threads between political rule-making and intellectual property of the type Posner, Rawls and others might offer to the philosophical debates on knowledge has not been attempted in this thesis. Clearly, justice deliberations have an implied and workable position within the normative framework of reciprocity. As outlined in chapter two, section one, reciprocity is a virtue and its moral status is valued as a public good guide to invite justice in conduct between states, firms and institutions. In spite of this obvious consideration, no attempt is made in this study to engage in wide-ranging justice arguments. Rather, the focus on conceptualising reciprocity provides an entry, and contributes towards ideas for future studies on justice and intellectual property to be appraised in global governance research, and elsewhere, at another point in time.

(A) Problems and Opportunities

If the social fallout from commercialisation is to be more completely understood and scrutinised by public citizens — many of whom are unsuspecting of the instrumental reach of the current IP regime — an enlarged debate within local levels of governance, states and global institutions is required to highlight the political implications for democratic participation from the privatisation of public goods. Debates and institutional initiatives already underway in a number of states include discussions on consumer interests and the present commercial trajectory of human genome and associated scientific technologies. However, along with this there also needs to be consideration of the social elements of ownership within IPRs, particularly around the moral dimensions of patent and copyright controls and the impact on knowledge access and dissemination from other rights that impinge upon reciprocity, including trade secrets. Public participation through democratic procedures is vital to address the social implications of bio-technologies and its products on societies, along with the future viability and sustainability of

biodiversity as noted in chapters seven, eight and nine. Two important questions about knowledge practices not fully explored in this study also require further examination. The first relates to categories of intellectual knowledge which ought to be given common pool status and decreed as beneficial to the general welfare of humanity including discoveries that would find jurisdiction in common heritage practices. The second is the question of how indigenous communities might organise and extend a global public future at institutional levels for knowledge on justice grounds that engages reciprocity and meets the needs of TK preservation decided by the groups themselves as vital to socio-economic survival and cultural sustainability.

An important question from this research is where the model of reciprocity, as conceptualised in chapter two, is able to find institutional backing given that the state has maintained its resilience by integrating public authority with the interests of the private sector. This research has established that before reciprocity and its value to human societies can be reconciled several conditions need to be met. In the first instance, the Doha Round of talks, at the time of writing only inching toward agreement on reducing trade distortions and agriculturally-based impediments to fair trade, requires a re-organised agenda to invite reciprocal obligations. After all, IPRs were legitimised by the Uruguay Round and it ill behoves the present Round not to acknowledge a greater debt toward benefit-sharing than has been the case in the past. In the last few years, a coordinated approach by both developed and developing states supported by regional blocs, have issued powerful demands for fair distribution and equitable trade putting pressure on the EU and US to reform trade laws. To that end, fair trade outcomes have been sought by the coalition of newly industrialising states who have moved the debate toward altering the asymmetrical power of trade bargaining that goes on between states. These measures have not gone far enough. Instead of wrangling over economic rationality and strengthening instrumental rules to bind innovation to expanded trade conditions, a window presents in the current round of WTO trade talks for greater dialogue on instituting fair and equitable exchange. For the least-developed states this must centre on reciprocal developments encompassing obligations to public domain rights

as a pre-emptory condition *prior to* markets being opened up to further competition and integration.

Second, at the level of the state, the political groundwork to counter the private determination to own and control knowledge resources (which has been well prepared by social activists both at government and non-governmental level) needs to be extended in political demands for reciprocity. Thus, the socio-economic significance of knowledge and its reciprocal trade value remains an urgent concern for institutions, states and communities across the world. Third, enhancing the public good value of knowledge through reciprocity requires a fundamental shift in economic trade practices at domestic levels. A greater role for the state in vetoing anti-competitive practices that deny scope for innovation is needed to induce reciprocal behaviour as compared to the present thrust of strengthening rights through unilateral, bilateral and even trilateral arrangements. Legitimising citizen welfare through the benefits of innovations must be the cornerstone of trade bargaining and commercial exchange. The appeal to establish reciprocal relations seeks to avoid short-term coercive strategies and solutions that in the past have been given priority over long-term conflict reducing proposals.

Fourth, corporations need to alter their private strategic policy-making toward a social framework of knowledge production consistent with the normative values of reciprocity. Some firms are actively engaged in this process as illustrated in preceding chapters, but there are not nearly enough corporations willing to adopt reciprocal exchange and use fair trade as a practical business device to induce producer and consumer good will. Greater commercial emphasis needs to be put on introducing equivalence into global governance which means deflecting the emphasis away from the 'capital capsule' economy that represents rational economic decision-making based solely on profit, to a focus on knowledge production valued for its humanitarian qualities, which becomes its own form of profit. Fifth, reciprocity means reshaping a world economy where tangible goods such as food, water, and medicines are not so over-laid with intangible property rights that they

fail to cater to the most basic of human needs. It is vital that less-developed economies, particularly those on the African continent, are able to trade equitably and have access to the benefits of discovery and innovation demonstrated through reciprocal exchange. A *quid pro quo* system of proposals would allow the development of new technologies to be achieved through cooperative chains of dialogue and action rather than coercive practices related to economic demands. This study has illustrated, particularly in chapters seven and eight, areas where reciprocity has been achieved guided by institutional good practice, trust and respect for diversity and instituted by competing parties to protect and enforce rights through reciprocal agreements that meet the needs of the communities involved.

IV. Closing the Reciprocity Gap

Although this thesis presents reciprocity primarily through a conceptual analysis based upon normative considerations, this does not mean that policy implications are unimportant; indeed policies are a central part of IPRs in all areas of IPE. An understanding of the contradictions in the governance of IP has been one way of signalling that there are significant coercive coalitions that inform policy, and has also helped identify areas where the normative possibilities still need to be realised in policies on IP in order for the reciprocity gap to be closed. On its entry to the WTO, TRIPS was seen as a firm policy move to induce democratic trade by not only guaranteeing protection, but also instituting enforcement mechanisms into legislation. The political demands that trigger change, such as those seen with the re-regulation of IP have certainly not given substance to democratic practices. Indeed, democratic aspirations have violated the institutional norms of public good conduct seen in the repeated failure of governance to relieve trade distortions in the area of access to pharmaceuticals for the poor which infringed, and continues to impede, both IP provisions and democratic values. The normative value of reciprocity and its philosophical disposition within a moral framework must be compatible with institutional policies to secure intellectual ideas and maintain the public good legitimacy of IPRs essential to respect for knowledge proliferation through ideas that have social utility.

This research shows how IP law has set aside responsibility for benefit-sharing by privileging proprietary markets in ideas as an economic imperative. This is displayed in the strategic deployment of IP inhibiting access to knowledge for large numbers of people through controls. Further, the political agenda that drives intellectual property precludes the rewards of knowledge to those who can least afford to pay, revealing that once IP falls into the hands of the few rather than the many, access diminishes and undemocratic political practices become characteristic of propertied relations. The concentrations of private power around knowledge are destabilising for existing democracies and place a social cost on fledgling democracies because of the high price of IP as it is presently governed. This begs the question of whether TRIPS was ever about multilateralism or merely a tactical conjuncture to secure the resources of knowledge for proprietary purposes and eschew the framework of reciprocity that underpins knowledge protection. If this is so, then strong states and corporations will continue to be well placed as unilateral agents of licenses and royalty fees with the fruits of inventions and new discoveries locked into a monopoly consensus that is contrary to the reciprocal principles of justice and fairness.

This study concludes that long-term initiatives for the exchange of knowledge technologies need to be mediated by reciprocal agreements supported by a broader range of ethical guidelines around IPRs which states and institutions would be responsible for upholding in consultation with communities. The basis for these strategies presently exists in proposals and conventions worked out for indigenous knowledge, elaborated in chapters seven and eight and discussed here. The future direction of multiple forms of knowledge tied to scientific discovery lies in achieving trust around reciprocal trade arrangements. This is vital because the legal interpretations of IP mean one thing in the wealthy developed world (where the full force of legal power and expert knowledge comes into play) and quite another in states where legal and social inequalities put different demands on knowledge resources. For these reasons, the granting of private rights over IP needs to be measured, not by minimum standards of IPRs but by maximum global public standards of human livelihood. The instruction and development of workable reciprocal strategies is a large and complex task for states and global institutions and

would require, in part, shareholder acceptance and parliamentary leadership through recognition that reciprocity adds value to competition by privileging the social dimensions of knowledge. Categorising the types of knowledge that ought to remain as the common heritage of particular groups tied to their geographical and cultural settings is an important lead in proposals for change.

Whether TRIPS will remain the legislative international centre-piece for guiding states in the application of minimum standards to protect and enforce intellectual rights is far from clear. As has been argued, significant efforts have already been made to by-pass TRIPS in order to achieve concessions in other areas of trade. Attaching private contract to knowledge and side-lining TRIPS allows bilateral trade bargaining to proceed between nationals uninterrupted by legal interpretations. Pressured by free trade agreements states are increasingly obligated to add additional covenants covering IP rights over and above the compliance TRIPS requires in its minimum standards. Figuring prominently in the link between the ownership of ideas embodied in private rights and public law are controls around inventions and discoveries that impoverish reciprocity. This thesis argues that reciprocity is put at risk not only from a lack of protection, but also from elevated re-regulatory standards and trade laws that impact on applications for rights by failing to guard the common pool of knowledge.

Reversing the strengthened rights, and allowing a weaker system of IP, such as operated a hundred years ago, seems unlikely in the present era of intense technological expansion. Instead, the public domain and free commons idea supported by reciprocity which has been hollowed out from the public realm of science and captured by powerful interests in the knowledge age needs recalling to centre stage. To ameliorate the economic imperatives of IPRs which, in and of themselves, have become a major industry for states and corporations to profit from ideas requires revitalising reciprocity through collaborative visions that intersect the public and private domains of knowledge. IPRs have lost their reciprocal private value to protect public ideas muddied by the blurred boundaries of public and

private power where class alliances dominated by corporations operate alongside strong state trading interests in an elite cycle of capital accumulation and materialism. At the same time that the WTO is seen to be stimulating competition and enforcing rules on tradable goods, IPRs are deliberately being used as commercial instruments to close down competition. These actions reduce key scientific information and knowledge to the controlling forces of capital disrupting the normative value of reciprocity.

The capacity for discoveries and new innovations to emerge in the most unlikely places, often under extreme circumstances (outside research laboratories), is what makes human creativity such a fascinating social phenomenon adding to our well-being and ability to reciprocate. As humans we are intellectually impoverished if we fail to allow ingenuity the chance to develop by restricting knowledge to those with the capacity to pay. Similarly the addition of clauses in trade laws and levels of protectionism that lead to exclusive controls disrupts knowledge from its social base and causes the on-going displacement of reciprocity. Such actions lead to the subordination of reciprocity and invite national communities run by superficial oligarchies with little but their own self-interest at heart. Reciprocity as a human virtue has had its social power constrained by an overtly economic emphasis on market demands around knowledge that pays scant attention to values that could direct parliaments and institutions toward alternative solutions and a more distributive vision of trade and governance. This can be reversed, for while profit can be its own reward, and law attempts the work of distributive justice, the virtue of moral lore and its wise judgements on reciprocity must ultimately be the political goal.

Indeed, to deny room in national and international trade for reciprocity is to deny cooperative and cohesive civil norms capable of accounting for practices to reduce impediments to commercial forms of exchange. A broad political canvas of normative values underpinned by reciprocity is critical to global governance if the macro-global picture of international trade relations is not to be lost in the micro-

level of instrumental domestic politics. In support of reciprocity as a normative guide to public good conduct this study has argued against deterministic and universal explanations of market economics directed specifically at IPRs that imply centrifugal forces are at work to make the process of rule-making inevitable, and the consolidation of powerful unequal commercial trade, irreversible. IPRs are not locked into an immutable trade paradigm partly dependent on, and partly threatened by, the state, institutions and firms. There are alternatives to omnipotent knowledge technologies of power and as members of a global community we put our public good obligations of fairness at risk if our intellectual ideas and laws of protection rely on sanctioning legal controls around knowledge that deny access and justice to those in need. The risks to civil societies today are collective risks, unique to our level of material consumption and unequal development which, compared to earlier times when nature and god drove understandings of knowledge, are much more capable of amendment. What is needed is political leadership to critique the market direction of knowledge in response to externalised market values that operate beyond the social contexts in which ideas are constructed and inform societies. Reciprocity offers a strong normative reminder that we are the guardians of the ideas upon which we build our knowledge.

Appendix (A) Research Interviewees

Between 2002 and 2003 formal interviews (recorded), informal interviews and e-mail correspondence was conducted with the following individuals. Titles represent positions at the time of meeting.

Australia

Arup, Christopher. Professor, Law School, Victoria University, Melbourne. Formal interview

Drahos, Peter. Professor, Australian National University, Canberra. E-mail correspondence.

Ellender, Isabel. Anthropologist, Monash University, Melbourne. Informal interview.

New Zealand

Boelee, Tamara. Ph.D Candidate, University of Auckland. Informal interview.

Clark, Precious. Senior Policy Analyst, Ministry of Economic Development, Wellington. Formal interview.

Connolly-Stone, Kim. Senior Policy Analyst, Ministry of Economic Development, Wellington. Two formal interviews.

Coxhead, Craig. Senior Law Lecturer, Law School University of Waikato, Hamilton. Formal interview.

Dawson, Richard. Lecturer, Department of Economics, University of Waikato, Hamilton. Informal interview.

Dodd, Materoa. Senior Lecturer, Department of Maori and Pacific Island, University of Waikato, Hamilton. Formal interview.

Haira-TeHira, Anne. Senior Policy Analyst, Ministry of Economic Development, Wellington. Formal interview.

Harmsworth, Garth. Scientist, Landcare Research, Palmerston North. One informal and one formal interview.

Jacobsen, Veronica. Principal Advisor, The Treasury, Wellington. Formal interview.

Kingsbury, Anna. Senior Law Lecturer, School of Law, University of Waikato, Hamilton. Two informal interviews.

Lancashire, John. Science Strategist, Raumati South, Wellington. Formal interview.

Lynch, Tony. Senior Advisor, Ministry of Foreign Affairs and Trade, Wellington. Formal interview.

Mead, Aroha. Senior Lecturer, Business School, Victoria University of Wellington. Formal interview.

O'Connell, Kieran. Policy Advisor, Ministry of Economic Development, Wellington.

Perry, Diana. Ministry of Foreign Affairs and Trade, Wellington. Formal interview.

Solomon, Maui. Lawyer, Kawatea Chambers, Local Government Building, Wellington. Informal interview.

Stevenson, Cristine. Senior Advisor, Ministry of Economic Development, Wellington. Formal interview.

Tapsell, Warwick. Farmer, Trust Board Member, Tourism Advisor, Te Puke, Bay of Plenty. Formal interview.

Te Whiti, Rosemary. Policy Analyst, Intellectual Property Office of New Zealand, Wellington. Informal interview.

United Kingdom

Fitzgerald, Amy. Committee Legal Specialist, Home Affairs Committee, House of Commons, London. Informal interview.

Dutfield, Graham. Professor, Queen Mary and Westfield Intellectual Property Research Institute, Centre for Commercial Law Studies, London. Formal interview.

Hudson, Alan. Committee Specialist, International Development Committee, House of Commons, London. Informal interview and e-mail correspondence.

Larkin, Philip. Committee Specialist, Trade and Industry Committee, House of Commons, London. Informal interview.

May, Christopher. Reader, International Political Economy, University of the West of England, Bristol. Formal interview.

Appendix (B) Select Aspects of TRIPS Agreement

AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS

Members,

Desiring to reduce distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade;

Recognizing, to this end, the need for new rules and disciplines concerning:

- (a) the applicability of the basic principles of GATT 1994 and of relevant international intellectual property agreements or conventions;
- (b) the provision of adequate standards and principles concerning the availability, scope and use of trade-related intellectual property rights;
- (c) the provision of effective and appropriate means for the enforcement of trade-related intellectual property rights, taking into account differences in national legal systems;
- (d) the provision of effective and expeditious procedures for the multilateral prevention and settlement of disputes between governments; and
- (e) transitional arrangements aiming at the fullest participation in the results of the negotiations;

Recognizing the need for a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods;

Recognizing that intellectual property rights are private rights;

Recognizing the underlying public policy objectives of national systems for the protection of intellectual property, including developmental and technological objectives;

Recognizing also the special needs of the least-developed country Members in respect of maximum flexibility in the domestic implementation of laws and regulations in order to enable them to create a sound and viable technological base;

Emphasizing the importance of reducing tensions by reaching strengthened commitments to resolve disputes on trade-related intellectual property issues through multilateral procedures;

Desiring to establish a mutually supportive relationship between the WTO and the World Intellectual Property Organization (referred to in this Agreement as

"WIPO") as well as other relevant international organizations;

Hereby agree as follows:

ANNEX 1C AGREEMENT ON TRADE-RELATED ASPECTS OF
INTELLECTUAL PROPERTY RIGHTS

PART I GENERAL PROVISIONS AND BASIC PRINCIPLES

PART II STANDARDS CONCERNING THE AVAILABILITY, SCOPE AND USE
OF INTELLECTUAL PROPERTY RIGHTS

1. Copyright and Related Rights
2. Trademarks
3. Geographical Indications
4. Industrial Designs
5. Patents
6. Layout-Designs (Topographies) of Integrated Circuits
7. Protection of Undisclosed Information
8. Control of Anti-Competitive Practices in Contractual Licences

PART III ENFORCEMENT OF INTELLECTUAL PROPERTY RIGHTS

1. General Obligations
2. Civil and Administrative Procedures and Remedies
3. Provisional Measures
4. Special Requirements Related to Border Measures
5. Criminal Procedures

PART IV ACQUISITION AND MAINTENANCE OF INTELLECTUAL
PROPERTY RIGHTS AND RELATED *INTER-PARTES*
PROCEDURES

PART V DISPUTE PREVENTION AND SETTLEMENT

PART VI TRANSITIONAL ARRANGEMENTS

PART VII INSTITUTIONAL ARRANGEMENTS; FINAL PROVISIONS

PART I GENERAL PROVISIONS AND BASIC PRINCIPLES

Article 1 Nature and Scope of Obligations

1. Members shall give effect to the provisions of this Agreement. Members may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement, provided that such protection does not contravene the provisions of this Agreement. Members shall be free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice.

2. For the purposes of this Agreement, the term "intellectual property" refers to all categories of intellectual property that are the subject of Sections 1 through 7 of Part II.

3. Members shall accord the treatment provided for in this Agreement to the nationals of other Members.¹ In respect of the relevant intellectual property right, the nationals of other Members shall be understood as those natural or legal persons that would meet the criteria for eligibility for protection provided for in the Paris Convention (1967), the Berne Convention (1971), the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits, were all Members of the WTO members of those conventions.² Any Member availing itself of the possibilities provided in paragraph 3 of Article 5 or paragraph 2 of Article 6 of the Rome Convention shall make a notification as foreseen in those provisions to the Council for Trade-Related Aspects of Intellectual Property Rights (the "Council for TRIPS").

Article 2 Intellectual Property Conventions

1. In respect of Parts II, III and IV of this Agreement, Members shall comply with Articles 1 through 12, and Article 19, of the Paris Convention (1967).

2. Nothing in Parts I to IV of this Agreement shall derogate from existing obligations that Members may have to each other under the Paris Convention, the

When "nationals" are referred to in this Agreement, they shall be deemed, in the case of a separate customs territory Member of the WTO, to mean persons, natural or legal, who are domiciled or who have a real and effective industrial or commercial establishment in that customs territory.

In this Agreement, "Paris Convention" refers to the Paris Convention for the Protection of Industrial Property;

"Paris Convention (1967)" refers to the Stockholm Act of this Convention of 14 July 1967. "Berne Convention" refers to the Berne Convention for the Protection of Literary

and Artistic Works; "Berne Convention (1971)" refers to the Paris Act of this Convention of 24 July 1971. "Rome Convention" refers to the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, adopted at Rome on 26 October 1961. "Treaty on Intellectual Property in Respect of Integrated Circuits" (IPIC Treaty) refers to the Treaty on Intellectual Property in Respect of Integrated Circuits, adopted at Washington on 26 May 1989. "WTO Agreement" refers to the Agreement Establishing the WTO.

Berne Convention, the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits.

Article 3 National Treatment

1. Each Member shall accord to the nationals of other Members treatment no less favourable than that it accords to its own nationals with regard to the protection³ of intellectual property, subject to the exceptions already provided in, respectively, the Paris Convention (1967), the Berne Convention (1971), the Rome Convention or the Treaty on Intellectual Property in Respect of Integrated Circuits. In respect of performers, producers of phonograms and broadcasting organizations, this obligation only applies in respect of the rights provided under this Agreement. Any Member availing itself of the possibilities provided in Article 6 of the Berne Convention (1971) or paragraph 1(b) of Article 16 of the Rome Convention shall make a notification as foreseen in those provisions to the Council for TRIPS.

2. Members may avail themselves of the exceptions permitted under paragraph 1 in relation to judicial and administrative procedures, including the designation of an address for service or the appointment of an agent within the jurisdiction of a Member, only where such exceptions are necessary to secure compliance with laws and regulations which are not inconsistent with the provisions of this Agreement and where such practices are not applied in a manner which would constitute a disguised restriction on trade.

Article 4 Most-Favoured-Nation Treatment

With regard to the protection of intellectual property, any advantage, favour, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members. Exempted from this obligation are any advantage, favour, privilege or immunity accorded by a Member:

- (a) deriving from international agreements on judicial assistance or law enforcement of a general nature and not particularly confined to the protection of intellectual property;
- (b) granted in accordance with the provisions of the Berne Convention (1971) or the Rome Convention authorizing that the treatment accorded be a function not of national treatment but of the treatment accorded in another country;

(c) in respect of the rights of performers, producers of phonograms and broadcasting organizations not provided under this Agreement;

For the purposes of Articles 3 and 4, "protection" shall include matters affecting the availability, acquisition, scope, maintenance and enforcement of intellectual property rights as well as those matters affecting the use of intellectual property rights specifically addressed in this Agreement.

*Article 5 Multilateral Agreements on Acquisition or
Maintenance of Protection*

The obligations under Articles 3 and 4 do not apply to procedures provided in multilateral agreements concluded under the auspices of WIPO relating to the acquisition or maintenance of intellectual property rights.

Article 6

Exhaustion

For the purposes of dispute settlement under this Agreement, subject to the provisions of Articles 3 and 4 nothing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights.

Article 7

Objectives

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

Article 8

Principles

1. Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.

2. Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology.

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