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ABSTRACT

The purpose of this paper is to outline the evolution of western land administration systems with a view to determining what lessons can be learnt as well what are likely to be the future trends in the relationship of humankind with land.

This paper will outline the evolution of western concepts of land and property, from the tribal period through feudalism, the industrial revolution, capitalism/socialism and the current Kenyesianism/Privatisation phase. Examples will be given of the interrelationship between socio-economic changes, the dynamics of the humankind to land relationship and the legal/administrative infrastructure.

The paper identifies some lessons on the development of land administration systems:

1. The relationship between humankind and land will always be dynamic. The current western trend towards tempering economic imperatives with more community-based concerns is likely to lead to a new cultural approach to land.
2. The direction which that dynamism takes is dependant on the society's priorities.
3. The extent to which a society can successfully achieve its objectives depends in part on the tools available to achieve those aims. „We have the technology“ does

not mean anything until our society determines its preferred relationship with land into the future.

4. Appropriate legal and administrative infrastructures are crucial to the process of delivering the changes demanded by society. These infrastructures include the social, economic and political processes.
5. Further research is required to determine the right direction for the relationship of humankind to land and the appropriate legal and institutional infrastructures for the 21st century and how this is to be achieved.

INTRODUCTION

The relationship of humankind to land has always been dynamic (see Figure 1). After outlining the evolution of western land administration systems, this paper will demonstrate that western nations are currently seeking to respond to community pressures to temper economic imperatives with environmental and social concerns such as native title.

The current privatisation trend has seen government departments either replaced by private bodies or restructured to prove their worth through quality assurance schemes and improved efficiency because „the relationship between quality, productivity and international competitiveness is becoming more evident and imperative“(Parker, J, 1997).

This paper will focus on land because property in land has always been the fundamental model from which other conceptions of property have grown. Land usage and land markets continue to be key considerations in economic and social planning.

The examples given in this paper will also demonstrate that policy-making needs to respond to this changing relationship by activating corresponding reforms of the legal and administrative infrastructures. Hernando de Soto (1993:8-10) has commented that in the developing world, the basic ability to compete in the modern market economy is hindered by the absence or inadequacy of formal legal and administrative structures for land:

„Third-world leaders are basically facing the same challenge that politicians of western nations dealt with some 100-200 years ago: massive informality appears when governments cannot make the law coincide with the way people live and work. The difference is that today, thanks to dramatically larger populations and the communications revolution, there has been a much speedier consolidation of informal property law.“

„In Peru, investment in property tends to increase ninefold when squatters obtain formalised title to their homes, and in Costa Rica farmers who are formally titled have much higher incomes than those who are not. Formalised titles open the door to credit. In the US, up to 70% of credit that new businesses receive comes from using formal titles as collateral for mortgages.“

If the ultimate goal of land titling is to bring more of the population into the market economy (as opposed to merely increasing the landholdings of banks) then it is worth emphasising that whilst land titling is one of the vital keys to opening up the market economy, legal and administrative infrastructures must be in place to both regulate banking practices and prepare the public for the newly-emerging world of credit.

Legal frameworks are vital instruments in any process of change:

„Law in particular is one of the primary instruments through which the State acts to select particular institutions and types of economic organizations. The rise of the modern corporation in the US, for example, could not have occurred without active encouragement by courts and legislatures“(Alexander & Skapska, 1994).

Whatever one's political leaning, land administration systems and land registration in particular, are but a means to an end. As Simpson states:

„In England, and in many other countries which use English land law, land registration has nothing to do with land tax or a public inventory of ownership, but has been introduced solely to simplify conveyancing (as the business of creating and transferring interest in land is called)“(Simpson, 1976:3).

As Hernando de Soto stated, it is certainty of ownership that is the ultimate aim of an effective land/titles registration system (de Soto, 1993:8-10). Land markets are reliant on a system of land registration which can deliver certainty.

The law plays a crucial role in manifesting policy changes. The following are some useful illustrations, presented within the relevant chronology of mankind's relationship with land.

EVOLVING CONCEPTS OF LAND AND PROPERTY

As Don Grant stated in his paper on territoriality:

„Territoriality is the primary expression of social power. Its changing function helps us to understand the historical relationship between society and space.

...„Perhaps, throughout history, one of the strongest drivers for territoriality and associated expansionist claims is the desire for commercial growth....“(Grant, 1997).

It can be argued that from a Western perspective, the drive for international territoriality that characterized the colonial era has been reinterpreted in modern times to the expansion of multi-national corporations. At a local level, however, the economic imperatives in Western nations are increasingly tempered by environmental and native titles' movements. Although these movements have occurred worldwide, the Western nations are generally regarded as being in a better position to take these additional factors into consideration.

An examination of the development of Western thinking about the human relationship with land/property holds some lessons for developing nations.

Tribal Communities

As Marx outlined: in the ancient world, tribal property tended to be landed property and the right of the individual tended to be that of possession. Real private property began with movable property e.g. slaves. Tribal property then evolved through various stages: feudal landed property; corporative movable property (feudal organisation of trades); and capital invested in manufacture. Marx stated:

„Through the emancipation of private property from the community, the State has become a separate entity, beside and outside civil society;...The modern French, English and American writers all express the opinion that the State exists only for the sake of private property, so that this fact has penetrated into the consciousness of the normal man.“(Arthur et al, 1974:97).

Feudalism

Ownership in the Crown: The Normans extended and developed the feudal system after the Conquest of England in 1066. Under the feudal system, all land was owned directly or indirectly by the king. He granted use of these lands to his subjects in return for the rendering of military or other services. The tenant and his heirs were bound in feudal service even if they had subinfeudated to another party. Karl Marx commented in „The German Ideology“ that:

„The chief form of property during the feudal epoch consisted on the one hand of landed property with serf labour chained to it, and on the other of the labour of the individual with small capital commanding the labour of journeymen“ (Arthur et al 1974:46).

Magna Carta: The Magna Carta of 1215 in England was revolutionary for the establishment of the right to not have one's body or land taken by the king without due process. This early document is an example of the tension that exists between the rights of the individual and the crown/state with regard to property. The authors of this paper would add that there is a further dynamic - the community's interests - which may not be represented in the individual nor the crown.

Private ownership: John Locke's writings in the late 1600's focus on the dichotomy between the concepts of owning property in common as well as on a private, individual basis. He considers how there can be private ownership even though:

„God gave the World to Adam and his Posterity in common...The Earth, and all that is therein, is given to Men for the Support and Comfort of their being. And...all the Fruits it naturally produces, and Beasts it feeds, belong to Mankind in common...[T]he Earth and all inferior Creatures be common to all Men“(Locke, 1967: Treatise II, sections 25,26,27).

He found that one of the justifications for individual ownership was that labour expended to „value-add“ gave one some justification to claim individual enjoyment of the fruits of the land. Locke also argues that unless money had been invented, there would have been no sense in accumulating more than could be used. The advent of

money certainly contributed to the decline of the feudal system because land was no longer the key currency.

Pierre-Joseph Proudhon's book „What is Property“ was published in 1840, a crucial point in French history. The Orleanist monarchy, in seeking to fulfill the aims of the first French Revolution, had „degenerated to a tyranny of wealth and status barely better than the Old Regime“. Proudhon's first proposition is that:

„Individual possession is the condition of social life; five thousand years of property demonstrate this. Property is the suicide of society“(Proudhon, 1994: xi-xxxiii).

That distinction between possession and ownership is not dissimilar to the modern concept that the essence of property ownership is the control of access rather than the enjoyment of access(Braybrooke et al 1996:1.31).

The Industrial Revolution

The Industrial Revolution came at a time of agricultural change as well as industrial invention. There were significant land management changes which led to improved productivity. The most well-known being the enclosure movement of the 1700s across Europe and the UK. This consolidated the tiny, inefficient parcels of feudal land into larger, more productive plots. In the UK, for example, about 7,000,000 acres of land were enclosed between 1760 and 1845; these were made more productive by mixed agriculture, which included crop rotation and alternating arable/pasture use(Toynbee, 1884). This movement, when coupled with the move by landed aristocracy into industry and the demand for labour in the urban factories, again changed the relationship with land. The urban swell may be exemplified by statistics from Liverpool, whose population of 4000 in 1685 increased to 40,000 in 1760 and then 552,425 in 1881(Toynbee, 1884). This made it all the more important for the rural food bowl to increase productivity. Increased density in urban areas created new needs in land, land markets, land administration and property law.

These changes during the Industrial Revolution set in train a host of administrative and legal reforms vis-a-vis property and land(Lieberman 1995:Ch7). The concepts of property began to expand considerably beyond land, particularly in the 20th Century, to include ideas such as intellectual property.

Statute of Uses: One example of legal evolution and ingenuity is the Statute of Uses. From the beginning of the 15th century, the system of uses was the means by which the Chancellor, on behalf of the King, could hear petitions for the creation of equitable interests in land. These equitable interests had the effect of depriving the Crown of feudal dues. The Crown responded in 1535 with the Statute of Uses which vested legal title in the recipient of the equitable benefit in land, and thus enabled the king to collect more feudal dues (Bradbrooke et al, 1996:4.1,10.6; Baker, 1979:210-219).

Thus the Statute of Uses proved unpopular in the beginning, but by the time of the Industrial Revolution, when the landed aristocracy wished to sell their land to raise capital, they realised that the pre-existing legal framework made it extremely difficult

to convey land because of the lack of simple legal conveyancing methods and the inherent feudal tendency towards creating interests in land into perpetuity (Megarry & Wade, 1984:1169-1170). The lawyers discovered that by applying the Statute of Uses, they could transfer land and the legal obligations in a manner which traditional methods could not achieve. Later, between the late 17th and early 19th centuries, the rule against perpetuities was developed by the English courts as a compromise between the landowners' right to dispose of land at will (which arose after the decline of feudalism) and the need to prevent land being removed from the market indefinitely by way of will or grant. The Statute of Uses was eventually repealed by the 1922-1925 legislative reforms that codified and simplified property legislation - culminating in the Law of Property Act 1925 (Simpson, 1976:3.15).

A notable consequence of the Industrial Revolution was the growing realisation of a need for some State regulation of land use by private owners. The lessons on treatment of labour, the impact on the local community and the wider environment are still issues today.

The Industrial Revolution led into the capitalism vs socialism debate which has continued to this day with varying degrees of passion.

Capitalism/Socialism

Land Markets: The existence of land markets is one of the crucial identifying features of private ownership and capitalist society. In a little over one lifetime, the Eastern Bloc has moved from private ownership to absolute State ownership and back again only to find that the Western nations have moved even further along the path into privatisation. Unified Germany is one example (Raiser in Alexander & Skapska, 1994:3-18). Each of these changes has brought a need for matching development of legal and administrative infrastructures.

Torrens System: The Torrens System, which developed in Australia, is interesting because in a sense, it is an example of legal change responding to society's needs, then propelling further changes in the land markets and land administration, including surveying methods. The Torrens System was revolutionary for its ability to deliver certainty as well as a cheaper and speedier land registration. The pre-existing Deeds method required that lawyers trace the actual documents back as far as possible to determine whether there was good title to be passed on. Each transfer involved the preparation of yet another detailed legal document. Whilst Torrens had intended that the act of registration would grant title as though it had been granted directly by the Crown, the South Australian Real Property Acts of 1860 and 1861 used a combination of provisions that made the certificate irrefutable evidence of title in the person registered (unless of course there was evidence of fraud, error, etc)(Harrison, 1962).

The Torrens System has been adopted throughout Australia and in other parts of the world with varying degrees of success. It should be remembered that the Torrens Systems was developed primarily as a response to 19th century paradigms that were driven by the imperatives of a newly-emerging nation-state with vast tracts of unidentified land. Its value in our current and future society is certainly a matter for further research and deliberation (Parker, 1995).

Subdivisions legislation: In addition to certainty, people increasingly seek flexibility. Post WWII has seen the development of legislation that grew to meet the people's expectations of their relationship to their land and buildings - in this case, higher density housing and subdivisions legislation.

In Victoria, prior to the Subdivisions Act 1989, subdivisions were regulated by a series of separate pieces of legislation. Each of those pieces of legislation reflected a fresh change in community attitudes to their land and property.

Initially, basic subdivisions could be carried out under the Local Government Act 1958 but these were limited to simple vertical boundaries. In response to the demand to own one's own flat, company share schemes developed based on share allocations. These were unwieldy and costly. Thus the Transfer of Land (Stratum Estates) Act 1960 was created to allow separate ownership of flats as stratum but did not overcome the problem of servicing the building as a whole. This latter issue was resolved by the Strata Titles Act 1967 which allowed the establishment of a single service company known as the „body corporate“. However, the Strata Titles Act 1967 eventually proved too inflexible because people wished to plan beyond the physical confines of the building. Thus the Cluster Titles Act 1974 came into force. The plethora of legislation was complex and clumsy. The Subdivision Act 1989 was designed to incorporate all the previous legislation into a more effective and flexible Act which regulated subdivision of land, buildings and airspace. It is expected that over time this too, will require updating to meet fresh community needs.

Similar issues have been faced in NSW, particularly in the high-density, high-value areas of Sydney where there is increasing demand among communities of residents to exert control over their surrounding environment in increasingly creative and varied ways whilst still maintaining individual ownership rights over their own dwelling. Thus the NSW Community Plans legislation arrived which allowed more flexibility to plan differing uses for various parts of common property to which different management strategies could apply.

Whilst trends such as those shown by the evolution of the subdivisions legislation have been driven by an economic imperative, namely the high cost of land; the trends also reflect community concerns over the state of their surrounding environment, i.e. beyond the four walls of their own home. The growth in centralization of decisionmaking at municipal council level has seen a complementary growth in mechanisms for citizen participation and objection(Raff, 1996).

Keynesianism/Privatization/Environmentalism

As with many western nations, Australia's recent shift away from Post-World War II Keynesian economic theory has been characterized by the privatization push that places state-owned utilities and services as well as key related decision-making into the hands of private owners. The fundamental belief is that laissez-faire will deliver. For example:

„Australia has, over the last few years, made considerable changes to the number of government services provided and to the way they are delivered. Measures have been taken to minimize government intervention and expenditure (capital and recurrent), and make more efficient use of public sector resources. Trade practices, competition policies and mutual recognition of trades, professions and occupations across jurisdictions, have all been reassessed.“(Lanphier & Parker, 1997)

This shift in economic thinking also comes at a time of impassioned calls for more centralized and coordinated global action on the environment, as exemplified by Agenda 21, the seminal document that encapsulated the deliberations of the 1992 United Nations Conference at Rio de Janeiro and the 1997 United Nations Summit in Japan on Global Warming. How these seemingly contradictory forces will affect land administration into the future remains to be seen. It is obvious from the experience of the Eastern Bloc that a centrally planned economy is not in itself any guarantee against major environmental problems.

INTERNATIONAL EXAMPLES: SOME COMMON THREADS

The following examples illustrate the progression of Western thinking towards land use options which are driven by factors which temper the short-term economic imperatives that have tended to dominate policy-making. These factors are the environmental and social factors such as higher density living and indigenous customary rights.

Western Division of NSW

The Western Division of New South Wales, Australia is an interesting example of the dynamism of land use and administration, even in consistently agricultural areas. The Western Division of NSW covers 42% of the state and is semi-arid, with low population density and restricted production potential. In research to develop a cadastral model for these low-value NSW Western Lands, Harcombe & Williamson (1997) traced the historical and legal developments which may be summarized as follows:

- Early settlement of NSW from 1788 followed the English feudal system of grants and registration by deeds.
- 1830-1884: The „Squatting Era“ of unregulated occupation, accelerated by the discovery of gold deposits.
- 1860's: the Torrens system.
- 1901: the Western Lands Act was introduced after a Royal Commission inquiry which was triggered by the need for financial and environmental rehabilitation following a period of severe drought and depression;

The resulting heritage may be summarized as being:

- From a survey point of view: an inappropriate cadastral survey system resulting in high survey costs compared to land value, and an emphasis on artificial boundaries established to create neat parcels rather than to be sympathetic to agricultural criteria like topography and natural boundaries.

- From an environmental point of view: issues of land degradation (erosion, woody weed infestation, salinity); declining water quality; rising production costs against low commodity prices (gross income for the Western region has declined by \$200 million in the last 5 years).

Harcombe & Williamson suggest that these issues set the imperative for policies that consider: sustainable land-use; comprehensive integrated datasets to allow for better decisionmaking; simplified cost-effective operation of the cadastre; and clearly defined, easily relocatable parcel boundaries supported by an appropriate low cost cadastral survey system.

New Zealand

Bill Robertson, the former Director-General/Surveyor-General for New Zealand, stated that:

„Multiple use of land has had a history of conflicting activities and negative side-effects where strong commercial factors have dominated. This is not inevitable and indeed our massive global population now demands an integrated and environmental approach to land use...A major instrument in effective sustainable resource development management is an efficient and relevant cadastral system“(Robertson, 1996:215).

The legal framework by which New Zealand sought to promote sustainable management was the Resource Management Act 1991 (RMA). The RMA came into effect in October 1991, resulting in the repeal of 14 statutes, the revocation of 19 regulations and orders, and the amendment of 55 statutes. Section 5(2) of the RMA states the purpose as being sustainable management:

„... managing the use, development, and protection of natural and physical resources in a way or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety...“

The early sections of the Act set the scene with strong emphases on conservation, ecology, sustainable development and Maori culture. The legislation includes Maori concepts such as waahi tapui (sacred places) and taonga (treasures of special value) and kaitiakitanga (the exercise of guardianship). The scope of enforcement orders is particularly interesting because the Planning Tribunal, has a wide range of options to: prohibit or require an action; order mitigation of an adverse effect on the environment; require reimbursement of an injured party; grant dispensations; as well as change or cancel or a resource consent. In the 1996 amendments to the RMA, the Planning Tribunal was renamed the Environment Court.

Robertson explained that the RMA was the product of 5 years of „participatory legislative development“. The RMA was the product of a number of factors:

- the environmental attitude that developed since the 1970s;
- the confusing and sometimes conflicting plethora of statutes;

- a desire to balance economic and conservation objectives (Gunn, 1991).

Denmark

The Danish example lends further support to the evolution of Western thinking about land. Stig Enemark (1997) has outlined the history of Danish cadastral reform. The Danish cadastre was established 150 years ago, coming into force in 1844 as a cadastral register and a cadastral map:

„The main purpose of establishing that old cadastre was to levy land taxes, based on a valuation of the yielding capacity of the soil... Simultaneously, in 1845, the Land Registry System was established at the district courts for recording and securing the legal property rights of ownership, mortgage, etc... This way the Danish cadastre is basically a legal cadastre, maintained by the state agency, while the cadastral work is carried out by private licensed surveyors“ (Enemark, 1997:3/2).

Enemark finds that the cadastral system in Denmark today has extended beyond taxation and legal identification to play an essential role in appropriate land management which includes economic, environmental and development interests in land (Enemark, 1997:3/4).

These new demands on the cadastral system have created the need for reform of technology (e.g. computerisation) as well as reform of the legal infrastructure to allow more flexibility as well as to simplify and modernize cadastral legislation whilst harmonising with building trends and regulations (Enemark, 1997:3/6).

TECHNOLOGY

Technological innovations such as digital cadastral databases and the WWW will be vital tools for land administration and planning both now and into the future. But technology, however impressive, is but a tool. The data which our society chooses to prioritize and maintain in those computers will be the factors which drive complex planning decisions into the 21st century. Information is power. As Jude Wallace (1990) concluded in her paper „Barriers to Cadastral Reform“:

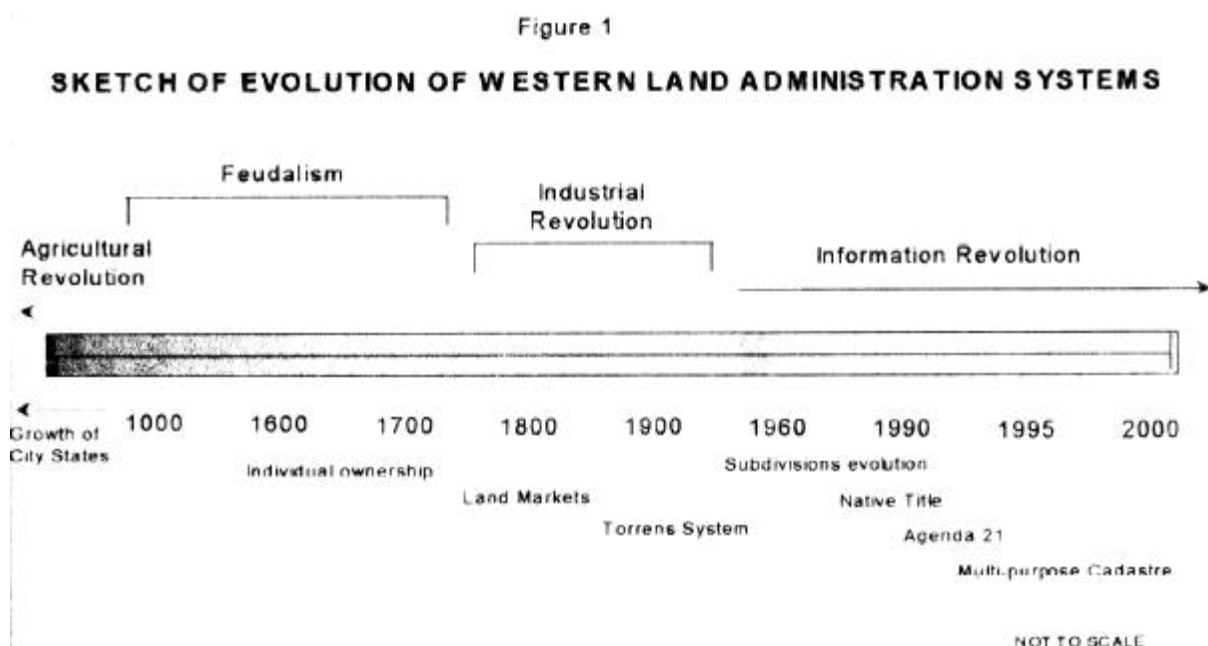
„The biggest reform is the capacity of the computer, when combined with coordinated surveying, to produce coordinated maps... Can we truly reform the cadastre and not be merely reactive sponges who must absorb new technologies but do not form their own destinies?“

CONCLUSION

The above discussion on the evolution of the Western land administration systems reveal:

1. The relationship between humankind and land is and always will be dynamic. The current trend is towards tempering short-term economic imperatives with environmental and social imperatives. In some respects, it appears that western society is coming full circle as the approaches of indigenous communities to land

- rights and obligations begin to find their way back in the form of community plans of subdivision and of course native title.
2. The direction which that dynamism takes is dependant on the priorities set by the society. The Industrial Revolution brought profound social, economic, legal and administrative changes which had a lasting impact on land administration. Currently, the world is experiencing an Information Revolution as well as a privatisation process which has seen government roles privatised in entirety or outsourced, whilst remaining government departments' decisionmaking is increasingly driven by principles of quality assurance and competitiveness. It will be interesting to follow the tension between these and the environmental and social imperatives.
 3. The extent to which a society can successfully achieve its objectives in land administration depends in part on a complex interrelationship with the available tools and technology. The Industrial Revolution saw the invention of electricity, machinery and a mobile workforce. Today's computer technology has the capacity to store, process and deliver vast amounts of data. What types of data, how data is managed and accessed, and privacy are issues yet to be fully explored and resolved. Ideally, the types of data maintained will reflect community imperatives.
 4. Effective and appropriate legal and administrative infrastructures are crucial to the success of land administration policies. There is no magic formula. The relevant legal and administrative frameworks extend well beyond land laws to the full and varied contexts of social, economic, and political processes. Western nations are now facing an evolutionary step which brings to light exciting and potentially conflicting trends for tighter, more enlightened planning within a context of decentralization and privatisation.
 5. Further research is required to determine what directions various societies wish to take into the 21st century. Only then can research determine whether and how the current cadastral or land administration systems can be reformed to deliver those changes.



References

- Alexander & Skapska, (1994). *The Fourth Way*, Routledge, NY.
- Arthur, CJ, (ed), *The German Ideology*, Lawrence & Wishart, London, 1974.
- Baker, JH, (1979). *Introduction to English Legal History*, Butterworths, Sydney.
- Birrell, S, Barry, J, Hall, D, and Parker, J, (1995). „Is the Torrens System Suitable for the 21st Century?“. NZ Australia Cadastral Conference: 2010 Vision.
- Braybrooke, Maccallum & Moore, (1996). *Australian Property Law: Cases & Materials*, LBC Casebooks, Sydney.
- Brewer, J, & Staves, S, (1995). *Early Modern Conceptions of Property*, Routledge, NY.
- De Soto, H, (1993). „The missing ingredient“, *The Economist*, 11-17 Sept., pp8-10.
- Enemark, S, (1997). „Evaluation of the cadastral reform in Denmark - Training the Old Lady for the Skateboard“, in Enemark, S (ed), *Concepts of Cadastral Systems: General Overview and Examples from Countries throughout the World*, Aalborg University, Denmark, June 1997.
- Geyer, L, (1995). „Property Rights - a Fundamental Right Requiring Constitutional Protection or A Property Rights Manufactured Without a Duty?“ (Internal Paper) Visiting Fellow, Law School, The University of Melbourne.
- Grant, D, (1997). „Territoriality - Concept and Delimitation“, paper presented to First Trans-Tasman Surveyors Conference, 12-18 April, Newcastle, NSW, Australia.
- Griffiths, T, & Robin, L, (1997). *Ecology & Empire*, Melbourne University Press, Melbourne.
- Gunn, A, (1991). University of Waikato, New Zealand, Text of EECF evening lecture, 1 October, on Internet at <http://www/phil.uga.edu/eecp/gunn.html>.
- Harcombe, P, & Williamson, I, (1997). „A Cadastral model for Low Value Lands: The NSW Western Lands Experience“, Paper presented to the First Trans Tasman Surveyors Conference, 12-18 April, Newcastle, NSW, Australia.
- Harrison, WN, (1962). „The Transformation of Torrens's System into the Torrens System“, 4 *University of Queensland Law Journal* 125.
- Kolbert, CF & MacKay, NAM, (1977). *History of Scots and English Land Law*, Geographical Publications Ltd, UK.
- Kramer, M, (1997). *John Locke and the Origins of Private Property*, Cambridge University Press, Cambridge.

Lanphier, G, & Parker, J, (1997). „Private Sector Participation in Land Information System Development and Administration“, Paper presented at FAO UN High-Level Technical Seminar, The University of Bologna, Italy, 1-5 April.

Lieberman, D, (1995). „Property, commerce and the common law: Attitudes to legal change in the 18th century“, in Brewer, J & Staves, S (ed), Early Modern Conceptions of Property, Routledge, London.

Megarry & Wade, (1984). The Law of Real Property, 5th edition, Stevens & Sons Ltd, London.

Neave, MA, Rossiter CJ, Stone, MA, (1988). Property Law: Cases & Materials, Butterworths, Sydney.

Parker, J, (1997). „The Role of Quality Assurance in the Surveying Industry within Australia“, Paper presented at KONSAS conference, Durban, South Africa.

Pascal, R, (ed), The German Ideology, International Publishers, NY, 1960.

Proudhon, P, (1994). What is Property?, Cambridge University Press, Cambridge.

Raff, M, (1996). „A History of Land Use Planning Legislation“, (1996) 22 MULR No.1.

Raiser, T, (1994). „The Challenge of Privatisation in the Former East Germany“, in Alexander & Skapska, A Fourth Way?, Routledge, NY.

Robertson, WA, (1996). „Sustainable Resource Management and the Cadastre“, Symposia Papers, FIG Conference: Developing the Profession in a Developing World .

Simpson, SR, (1976). Land Law and Registration, Cambridge University Press.

Toynbee, A, (1884). Lectures on the Industrial Revolution in England, ChIII: „England in 1760: Agriculture“, Internet at „[http://www.berkeleycentral.com/DrPseudocrytonym/TOYNBEE_Industrial Revolution.html](http://www.berkeleycentral.com/DrPseudocrytonym/TOYNBEE_Industrial%20Revolution.html)“.

Tully, J, (1980). A Discourse on Property, Cambridge University Press, Cambridge.

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