

Cadastral Systems - an Evolving Concept

Extract from

<http://www.geom.unimelb.edu.au/research/publications/IPW/CadastralTrendsSynthesis.html>

"Cadastral systems are the foundation and an integral component of parcel-based land information systems (LIS) that contain a record of interests in land. These systems are a central component of the land administration and land management systems in a state or jurisdiction" [Williamson, 1990]. This statement shows how far the application of cadastral systems has evolved.

Land as Wealth and Cadastre as Basic Record and Fiscal Tool

As 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].

In the early stages of human settlement, land was undisputedly the primary source of wealth and power. In that context, cadastre's primary function was as a record of ownership and as a fiscal tool. It is important to note that the point of the record was to provide some security of ownership as against the world and to do so, required a record which was publicly acknowledged and respected. Among primitive tribes, occupation of land had to take place in the presence of the chief and elders [Larsson, 1996].

The earliest records of land ownership date back to the Royal Registry of Ancient Egypt that was created in about 3000BC whilst in China in 700AD the taxation system was based on crop yields and land survey records [Larsson, 1996]. The Romans carried out a survey in 300AD to create a register of what lands the Romans controlled as well as using it as a basis for fiscal records [Larsson, 1996].

The feudal system was extended and developed by the Normans after the Conquest of England in 1066. All land was owned directly or indirectly by the king and he granted use of these lands to his subjects (and their heirs) in return for the rendering of military or other services [Ting et al., 1998a]. The remnants of that concept lie in the fact that land in modern-day England continues to be classified freehold or leasehold – both terms describe a form of "tenancy". 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, 1974].

Power in the feudal system vested in the institutional and legal structures that were put in place by the combined interests of landholders and the sovereign [Davies and Fouracre, 1995]. The Domesday Book was created after the Norman Conquest to develop a land register (there were no maps) that stated the owner's name, tenure, area and particulars for assessment of the land for the purposes of extracting feudal dues. In other words, the cadastral register existed for fiscal purposes and as a record of the territory of the kingdom. Henssen considered that the philosophy behind the establishment of fiscal cadastres throughout continental Europe in the early eighteenth century was the Physiocrat movement which held that land was the basis of all wealth and therefore land tax would be the basis for raising funds to maintain society [Henssen, 1975].

Mapping was not common until 1807 when Napoleon Bonaparte established the foundations of European cadastre when he ordered the creation of maps and cadastral records. During the Napoleonic era, particular bodies were given the task of registering transfers and deeds of ownership. The records showed the physical location of parcels of land as well as ownership across France, arranged by parcel numbers, area, land use and land values per owner. It was this combination of registry records and maps that lay the foundations for modern-day cadastral systems.

Accurate cadastral records were very important for proving ownership of land that in turn earned people substantial privileges such as citizenship. The concept of citizenship in the classical period introduced to Ancient Greece the idea that property ownership should be linked to citizenship, as defined in its earliest forms by Aristotle and Plato in the thirteenth and fourteenth centuries [Manville, 1990:94-96]. "It is the ownership of property which confers full citizenship since it is property which meant that the citizen did not require manual labour to survive; the propertied citizen could thus devote himself to public service without the distraction of labour [Turner, 1986:14]. By 500BC, Emperor Servius Tullius conferred citizenship on the Pleb (unprivileged aliens domiciled in Rome) [Heater, 1990:16], but implementation was another matter. Even in the Dutch Republic of the 1700s, the forces of oligarchy continued to draw a distinction between 'citizens' and the 'populace' or 'rabble'[Heater, 1990:29]. The contrary attitude to linking property and citizenship was not really fully developed until the twentieth century because prior to that it was generally agreed that citizens should possess an adequate amount of property to bring on a tangible stake in maintaining stability [Heater, 1990:167-170].

These basic record and fiscal tool rationales continued to be the basis for cadastral records until the development of land markets around the time of the Industrial Revolution.