

"Fast Forward" needs a property market, supported by an independent planning system

If "Fast Forward" means rapid urban development accompanied by shared prosperity and ecological sustainability, the property market and the planning system must be based on the rule of law.

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Background

This paper reports on the outcomes of research into the land economics of urban planning. The research has been conducted over a long period and has involved investigating the historical evolution of specific planning systems, transformations in planning systems, the operations of planning systems in diverse social and political environments, the attitudes of developers, and the relationships between planning and the urban development process and industry.

Cities as market places

It is a commonplace to say that cities are by far the most complex things created by humans. They are entirely collective in their origin, function and development. The product of innumerable decisions by innumerable decisions makers over many decades and centuries, they can be studied, but never fully described. They are intensively planned, but incapable of being designed.

Compared with any other project of governments and corporations, the intentional planning of a city involves the largest number of actors, the greatest number of possibilities, the most divergent views on what is 'the right course of action' (Faludi 1998, p 381), the smallest degree of coordination and the least concentration of power. Healey *understates* the challenges when she writes that 'most outcomes in the urban planning field are the consequence of multiple interacting factors, only one of which is the intervention in question' (Healey 2009, p 11).

Planned, designed and managed or not, cities are the engines of innovation, social change and economic growth (and also of inequality, environmental degradation and resource depletion). When cities flourish, they allow for many decision makers, many initiatives, unplanned exchanges, creativity and spontaneity (and, of course, exploitation, corruption and conflict).

This means that cities generate a *market* in ideas, activities, sites and – fundamentally – urban land. If the traditional mechanisms supporting an urban property market have been eliminated, they have to be rebuilt. China, many eastern European countries and Russia have been through the rebuilding process.

This paper asks the question, What has to happen for a country to move from state ownership of all urban land to efficient, fair, sustainable urban development? The paper argues that an open and efficient urban property market is part of the answer, but only if supported by transparent and independent land and planning mechanisms.

This finding is based on the long history of the regulation of urban property, and on the economics of law and land that provides the ultimate explanation for government intervention in urban development.

Markets, like property, are regulatory inventions

The starting point in the analysis is the proposition that property is a social construct. The 'bundle of rights' which defines what it is that property owners actually own is set down in rules of some kind – early oral codes, taboos and totems, local customs, unwritten laws, the king's decrees, and ultimately the laws of the land. These laws cover matters such as access to resources, possible uses, development potential, and how the title to the property can be sold, mortgaged, transferred and bequeathed.

In short, there is not, and never has been, anything like absolute property rights, and there never has been an unregulated 'free market' in urban property. The notions of the owner's absolute rights and a free market are contradictions. Without rules and enforcement by the state there is no property, and no possibility of an urban land market.

Adam Smith, often imagined as a supporter of free markets, knew that the wealthiest owners tend to conspire, to monopolise and to control markets. In other words, markets need to be regulated. This is necessary not only in the interests of the public, but to ensure that a market operates at all. Benjamin Franklin said a similar thing in his own way: 'Private property therefore is a creature of society and is subject to the calls of that society whenever its necessities shall require it.' In other words, private property may be taxed. A property tax was not some kind of gift by the property owner to the public, but the 'return of an obligation previously received or the payment of a just debt' to the society which created the conditions for private property to exist (Franklin 1789 (1905-7), p 59).

Ronald Coase put the matter most succinctly: 'The delimitation of rights is an essential prelude to market transactions' (Coase 1956, p 27). In other words, unless there is a social contract defining the rights and obligations of property owners, market transactions cannot take place and a market (in any meaningful sense) cannot exist.

The next step in this analysis is to identify what urban property owners are most concerned about: impacts from development, or absence of development, next to or near their land.

The value of non-urban land may be derived from its plants and wildlife, or from its soil and water for agriculture, or from its mineral resources. Urban land has no such inherent value. Its value is determined by the urban activity that can take place on the land: residence, retail, exchange, manufacturing, storage, etc. And the value for any one of those activities is also not inherent. It is determined by the nature of the activities and investments nearby. Land that has excellent attributes for housing (and is therefore valuable for that use) may not have much value for an office. Depending on the surrounding activities and investments, the exact opposite may be true. As we know from experience, land once valuable for housing may, as a result of public and private investments in the vicinity, become much more valuable for an office. Equally, land once valuable for housing may become almost unusable, and therefore almost valueless, as a result of nearby activities and investments, or lack of them.

It is the combination of these attributes – the opportunity to develop land for a particular use and to a particular intensity, and the pattern of externalities arising from activities and investments nearby – that determines the value of land. These attributes are not derived from the land itself and do not simply exist independently: they are rights defined in custom or law. The rights are defined in such a way as to fix the development potential of a land parcel at a given point in time, and to make the externalities impinging on the land predictable and roughly measurable. When a valuer values an urban land parcel, or when

an intending buyer assesses what a land parcel is worth, both are attempting to sum up the market value of those rights. If the rights are not defined, or if the rights can be arbitrarily ignored or taken away, the land cannot be valued, its development potential cannot be assessed, and normal market transactions cannot take place.

The third and final step in the analysis is the recognition that specific agencies of the state have as their primary function the definition of the above property rights attached to urban land.

Some kind of mapping agency must maintain public records of the boundaries of all land parcels. This is a Coasian 'delimiting of rights' in a very literal sense. An agency must maintain a register of the owners of all land parcels. An agency must actively assess the value of all land parcels, and maintain a database showing the market value of every urban land parcel. While these measures are needed for revenue raising (land tax, local government rates, etc) they are also the foundations for an urban property market.

The most crucial right in the bundle of rights is the right to develop urban land – for instance, to build on the land, to convert the use to a new more intensive use, and to replace buildings with much larger buildings. This not only fixes the development potential of the land, but also defines the nature of the externalities that can arise from the use of land parcels all around the land in question.

In the case of development rights, regulatory mechanisms are needed to define the permissible use of every land parcel, and the intensity of the use. These mechanisms must be permanent and reasonably stable – or at least there must be public confidence in the stability of the regulatory mechanisms. Once defined, the development rights must be enforced by the state. Essential to this whole system is public confidence that rights will be upheld and enforced, and that infringement of the rules will be penalised. High levels of confidence and compliance are necessary for the market to operate. It is characteristic of all prosperous urban economies that there is a high degree of confidence in the administration of the development rights system, and a high level of compliance with the rules.

Of course, it is also true that the real money is made by manipulating, exploiting or avoiding the rules that all other market participants comply with – but this is a feature of all regulatory systems and markets.

The typical mechanism used by the state to define the permissible use of every land parcel is the so-called planning system. Just as states invest significant resources in mapping land parcels, maintaining title registers and valuing land, they also invest significant resources in agencies which create legal instruments to define the development rights of every land parcel, and which must accordingly operate approval systems to licence development which complies with the 'planning' instrument.

The principal aspects of development that give rise to substantive externalities are the *use* of land, the *intensity* of that use, the *form* of the structures built to accommodate that use, and the infrastructure which services the land and enables that use to occur – most importantly, the infrastructure required to make the land *accessible*. These aspects of development impact directly on the value of the land, and, willy-nilly, impact positively and negatively on the value of all land parcels around it, and must therefore be regulated. A typical 'planning' instrument will define the *use* by zoning. It will define the *intensity* of the use through rules relating to density (plot ratio, floorspace, dwellings per hectare, etc) and rules concerning local impacts (noise, lighting, hours of operation, etc). It will contain rules about *form* such as development standards, height limits, setbacks, landscaping, heritage provisions, appearance, etc. It will contain rules related to accessibility, such as the provision of car parking space, or contributions to public transport, or the payment of levies for local infrastructure.

Mechanisms of this kind can be found in all kinds of societies and most social systems. On the surface, the mechanisms are highly diverse, in terminology, legal procedures, and administrative practices. The model presented here looks for the underlying systems that are common to all.

The model

The structure of the model is shown in **Table 1**. Its components are described in the appendix.

The model is presented here in a summary form. The background, data and sources are available elsewhere (Dawkins 1996, 1997a, 1997b). The work of Lawrence Wai-chung Lai (1994, 1995, 1996) and the commentary it has generated has been important in the development of my thinking in these areas. Lai drew attention to the so-called Coase theorem (that 'the delimitation of rights is an essential prelude to market transactions' (Coase 1959, p 27)) as it applies to zoning. This has fruitful implications for understanding the market in urban land and development, as may be discerned from the model itself.

The model is in two parts. In the first part, the world is assumed to be static. Various mechanisms establish the ground rules, including the boundaries of urban land parcels, ownership in all its forms, land values, and urban development rights (permissible land use, density, form and accessibility). To support this, even in a static world, there is a need for property services to be delivered to the land – principally roads, water, sewerage, drainage, power, telecommunications, waste removal – and therefore mechanisms for funding these services through charges and taxes.

In the second part of the model, change is taking place, and urban development is occurring. Mechanisms are now required for changing the parcel boundaries (subdivision and amalgamation), recording transfers of ownership or interests in the land, and reassessing land valuations. Mechanisms are needed to enable development proposals to be assessed against the rules, for approvals to be issued, and for non-complying development to be corrected (application, permit, review and enforcement).

There are many additions to these elements in the real world. Banks, and financiers generally, effectively operate as part of the system and become a separate layer of regulation. Similarly, industry regulatory bodies such as stock exchanges are an important element, if only because such high proportions of corporate and institutional wealth are held in the form of urban property. Many public agencies with functions related to consumer protection, environmental protection, emergency services and public health have functions interacting with or running parallel to the system described.

As new forms of property have been devised, such as transferable development rights and securitised interests in buildings, they have relied on such a system for their value. Where new urban policies and institutions are under consideration – for instance Henry George-related land value taxation in a number of Asian countries – they will depend on such a system for their implementation (Lam 1995).

Where property markets were largely eliminated, and where urban development was a negotiation within the state apparatus rather than being based on the rule of law, an urban property market and regulatory systems for urban development have had to be reinvented. The end result, regardless of differences in terminology, style and local traditions, is likely to reconstruct precisely the components identified in the model (**Table 1**).

URBAN MANAGEMENT		ISSUE	MECHANISM
Defining Rights	Individual land parcel	Boundaries	Land mapping
		Interests	Land titling
	Use of all land parcels	Land use	Statutory planning
		Density	Statutory planning
		Form	Statutory planning
	Property services	Accessibility	Statutory planning
Managing infrastructure		Local government	
	Taxes and charges	Valuation / collection	
Changing Rights	Changing the parcel	Subdivision of boundaries	Development control
		Transfers of interests	Registration of titles
	Changing use	Application	Development control
		Permit	Development control
		Review	Judiciary
	New property services	Enforcement	Court
		Construction of infrastructure	Local government
		Taxes and charges	Valuation / collection

Table 1 Summary generic model of the urban land management SYSTEM

Conclusion

If the traditional mechanisms supporting an urban property market have been eliminated, they have to be rebuilt. China, many eastern European countries and Russia have been through the rebuilding process.

The essential components of an urban property market – all of which need to be reinstated if they are weak, compromised or non-existent – are a legal cadastre for land, title guaranteed by the state, a public land valuation system, transparent rule-making for land use and other aspects of development, a development control system that strictly follows the rule of law, publicly planned and managed infrastructure, and a property tax to fund these systems.

The generic model presented here suggests that precisely those components are common (if largely hidden beneath the surface differences) to all urban planning, urban management and land administration systems.

In my view, the model provides a powerful device for analysing the effectiveness and fairness of institutional arrangements for urban management, for comparative analysis of arrangements in different jurisdictions, for designing fairer and more effective processes, and for further research into the political economy of planning and its relationships to development and the property market. The model is, potentially, a powerful teaching resource. I would welcome criticism of the model, and ideas relating to research in these fields.

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Appendix: Outline of the model

Except in lawless societies (kleptocracies) and totalitarian societies (dictatorships), the following model describes a fundamental pattern to be found underneath the surface of apparent differences. In these societies, there is a recognised and formal market in urban land, whether or not privately owned land is universal, widespread or limited. To enable a market to operate, rights in urban land must be defined or, as Coase put it, delimited.

The model is shown in Figure 1. The first part of the model deals with the mechanisms and processes required to define rights in urban land, **(1) Delimiting rights**. It addresses **(1.1) the individual land parcel**, **(1.2) all land parcels** collectively, and **(1.3) servicing the land parcel**. These are the preconditions for any market in urban land to exist.

The second part of the model deals with change. Cities are under continuous construction, and society has to provide the mechanisms and processes that enable the rights described in the first part of the model to be transformed into other states through urban development. After all, urban development is a means of extracting value from locational advantage (the sum of all externalities). Accordingly, this part of the model needs to address **(2) Exercising the rights** described in (1) above and includes **(2.1) changing the land parcel** itself, **(2.2) changing the use of the land parcel**, and **(2.3) changing property services**.

1.1 The individual land parcel: identifying the legal entity

1.1.1 Specifying the physical boundaries

The most obvious and direct form of 'delimiting' the rights arising from urban land is to delimit the land itself. This is carried out by land survey, with an official and incontestable record of the boundaries held in some kind of land office. The boundaries of the parcel may be very complex and subtle. For instance, with spatial/strata/unit titles the parcel is defined in three dimensions, may be located high above the ground, and may terminate between a wall and the layer of paint attached to the wall. These and related group titles may define overlapping private and collective/community parcels of land (or space).

1.1.2 Defining the nature of the legal interests in the land parcel

The land parcel is the unit of property: each has attached to it discrete rights. 'Parcel' is a good description, since the rights are often referred to as a bundle, involving various degrees of ownership (individual and common), tenure, obligations, covenants (positive and negative) and easements. Typically these rights, and the person who is able to exercise them, are identified in an incontestable entry in a public registry of land titles. Since the value of the rights in urban land relate to its locational attributes, and therefore to the right to exploit those attributes, the most significant issue is the nature of the right to develop the land (see next item).

1.2 All land parcels: identifying the development rights

If the rights attached to a parcel of land include the right to develop it and to profit from the development, the most important issue is the precise quantum of development which will be permitted. The quantum of development is most usefully conceptualised as being composed of land use, density, form and accessibility. The permissible development may have other attributes, such as limitations of ownership, or financial obligations, but the irreducible dimensions are the following four.

1.2.1 Defining permissible land use

The ability to make use of the locational advantages of a site, and to avoid the locational disadvantages – in short, the value of those localities – is entirely a function of the range of possible uses for the site. Equally, the impact of the site on the surroundings is also a function of the range of uses for the site. Land use is the purpose for which the site may be used. Invariably the land use is prescribed – or the mechanism for prescribing land use is prescribed – in some kind of land use planning instrument.

1.2.2 Defining the intensity of use

The land use itself can be defined independently of any controls on the amount of the use which is permissible. The control of the amount of any use will largely determine the extent to which the localities of the site can be exploited, and will largely determine the impact of the site on the surroundings. The permissible degree, or intensity, of the site's use for a particular purpose may be related to variables such as the surrounding environmental constraints, the surrounding buildings and uses, the physical characteristics of the site, and its present state of development. Typically the permissible intensity of any use of a site is prescribed in some kind of planning instrument as a maximum permissible density, in the form of a ratio of floor area to site area, and/or the ratio of the number of units (dwellings, parking spaces, hotel beds, etc) to the floor area and/or site area.

1.2.3 Defining the physical form of the development

A building constructed for any given use at any given density can usually take many possible physical forms. In the sense used here, the physical form of the building includes its design and siting, the materials and finishes, the relationship to boundaries, any connections across the boundaries (including emissions of all kinds), the impact on the form of the site and any natural or physical components of it, the landscaping, and any other physical (or at least visible) expressions of development. These are all attributes which affect the extent to which the localities can be exploited, and the nature of the impacts of the site on the surroundings. These matters are usually prescribed, as standards, performance standards or possible conditions, in some kind of planning instrument.

1.2.4 Accessibility

An urban location is, essentially, a mechanism for making connections, of bringing together people, goods and services of all kinds for all kinds of purposes. The manner in which this occurs on a given site can be thought of as accessibility in all its forms: transit nodes and connections; streets, links, driveways and parking spaces; loading and circulation spaces; access to pipes and wires; pedestrian links and spaces on and off the site. The extent to which these are available, permitted and/or constrained will influence the value of the localities and the impact of the site on the surroundings. Some or all of these matters are invariably

controlled through a variety of instruments including planning instruments, highway rules and instruments, service obligations, etc.

1.3 Servicing the land parcel

1.3.1 Providing property services

In the sense used here, property services include physical infrastructure (from the simplest - a street to which land parcels have access - to the more complex, including energy, telecommunications of all kinds, pollution controls) and services such as solid waste collection, security, information services and local promotional services. All of these are elements in the patterns of locational advantage and disadvantage. They are all products of government and invariably governed by public law, but their delivery may be achieved through a great diversity of government, semi- and quasi-government, 'private government' and corporate forms. Their nature and extent are a function of how they are paid for, hence the next item.

1.3.2 Collecting property taxes

Property services can be funded entirely by all taxpayers, entirely by users, entirely by taxes on the properties to which service is available, or a mixture of all three. To the extent that property taxes are collected for these or other purposes, two mechanisms are typically required: one for assigning a value to each parcel, and one for striking and collecting some form of tax or levy based on this value. Where value is assigned to property for taxing purposes it usually has a strong relationship, at least conceptually, to the price the property would find on the open market. The most significant element in the price is that element attributable to the bare land, because this value (first assuming a specific use for the land) expresses the sum of all the positive and negative locationalities at the site when it is used for a specific purpose. Followers of Henry George see merit in taxing the full annual value of the bare land, for reasons of justice, equity, economic efficiency and good urban management. One complication would be that the development potential of all sites would need to be prescribed more precisely than is usually the case under 1.2 above.

2.1 Exercising rights: changing the land parcel

2.1.1 Changing the boundaries of the parcel by subdivision and amalgamation

The boundaries of the land parcel, as defined in 1.1.1 above, may be capable of alteration. A single parcel can typically be subdivided into two or more parcels, which will have some or all of the interests and rights of the original parcel, or with entirely new interests and rights. Two or more parcels can typically be amalgamated into a single parcel. A group of parcels can typically be amalgamated and subdivided into a new group. This process is likely to be governed by several sets of rules contained in a planning instrument, land administration rules and conveyancing rules. The new boundaries will be specified as in 1.1.1.

2.1.2 Conveying interests in the land parcel

Where interests in the land are defined in such a manner to allow their transfer to another person, the mechanism consists of private contracts between the parties – possibly subject to approval by economic or other agencies of the state – and amendments to the entry in the registry of titles. This will define the extent to which those with interests in the land can exercise the rights described in 1.2 above.

2.2 Exercising rights: changing the use of the land parcel

The pivot of the urban land management system is the mechanism for supervising the transformation, through development, of land in one use or form to another use or form. The transformation brings into play a range of direct interests – investors, financiers, providers of design/construction/legal services, infrastructure and property service providers, realtors, tenants – and an even wider (though more distant) range of indirect interests – everyone within the area impacted positively and negatively by the development. All of this is most obvious in a large commercial building, but applies equally to the construction of an individual house. (Significant flows of wealth are generated by the process, many of them invisible as the result of regulated externalities, making the process unavoidably prone to distortion and corruption.) At the very least, to manage this process, it is necessary to prohibit all development unless it complies with a set of rules: such prohibitions go back at least to the dawn of urbanisation. More commonly – these days almost universally – development is prohibited unless it has been formally approved. The development control process, whatever it is called, is thus a form of licensing. 'Licensing' (or permitting) is a mechanism used by all human groups to regulate activities which have direct or indirect impacts on others (and there are countless such activities).

2.2.1 Applying for a licence to overcome a general prohibition

An application is required to overcome the general prohibition on development. The application may take many forms, may demand diverse kinds of information, and may be called different names (for instance, a notice) but the starting point is invariably the description of a project in an application for approval. It may then become the basis for a series of steps involving the sharing or eliciting of information, including the notification of neighbours and the conduct of formal hearings.

2.2.2 The decision to grant or refuse a licence

The management mechanism empowers a person or body to grant or refuse a licence (called a consent, approval, permission, permit, authority, licence) to carry out the proposed transformation of the land. The grant of a licence will typically carry with it, to a greater or lesser degree, 'conditions' relating to minor changes in the proposal, standards, obligations and imposts. The decision makers may have little discretion beyond applying a set of rules, or they may have very wide powers to arrive at a decision which reflects their view of the proposal, in which case it may be called a decision on the merits of the case. The decision-making process may be precisely mandated, or it may take whatever form the decision maker chooses. The decision is essentially a judicial decision but the rules of natural justice and accountability seldom apply: speed, cost and simplicity are usually given a higher priority. In some systems the result is treated as an administrative decision; in others it is primarily technical; in many systems it results from a political process and is much less predictable. All three approaches can result in distortions and corruption, as can any process which allocates resources.

2.2.3 Review of the decision to grant or refuse a licence

The decision to grant or refuse a licence may be final. In earlier, simpler or private systems this is usually the case; the system requires only enforcement to make it work. Typically, however, those aggrieved by the decision on an application can appeal to another body to have the decision made again. One motive for including a review step in the process is that the vagaries of decision making, as described in the previous item, are serious and largely unavoidable; another is that the decision maker is typically a local agent of the state, which retains the right to review (or appoint the body to review) the decisions of its agent; a third motive for including a review step is that the initial decision can then be quicker and cheaper. Legal review, not of the merits of the proposed development but of the decision making process, is described in the next item.

2.2.4 Enforcement of the general prohibition and the terms of the licence

Although urban management has typically enjoyed a high level of legitimacy and compliance, often with only very modest sanctions, the system is based on law and depends on the enforcement of that law. The courts do this in three ways. Most commonly, they are asked to apply sanctions to those who have failed to observe the general prohibition on development (failing to apply for a licence); courts may also grant injunctions and make orders. Secondly, the courts are asked to apply sanctions, or issue orders, to those who are not complying with the terms of their licence to develop. Thirdly, the courts are asked to alter or invalidate the actions of the decision makers where they exceeded, misunderstood or misused their powers.

2.3 Changing rights: changing property services

2.3.1 Constructing new infrastructure

For infrastructure and property services to be provided in a tolerably efficient manner the urban management system must deliver two outcomes: reasonably accurate predictions of the spatial location of future demand, and coordination to ensure that (i) networks retain their integrity (connectivity) with the addition of new links and (ii) interdependent networks and land uses are spatially related. These outcomes can be approached through accurate information systems, command mechanisms and persuasion/prediction; the latter is often quite powerful, since advisory plans can be self-fulfilling. Mechanisms of these kinds are what many practitioners mean by the term 'urban planning'. In addition, the mechanisms described in 1.2 above make the planning and provision of new infrastructure more reliable and invariably less costly.

2.3.2 Funding new infrastructure and services

Additions to infrastructure and property services can be funded, like the system as a whole, by general taxation, property taxation and user charges. Additions can also be funded by a tax on development itself. Often called impact fees or developer contributions, these taxes may be flat or graduated levies or they may be related to (i) the demand for services generated by the proposed development or (ii) the costs to others or the environment imposed by the development. The mechanisms described in 2.2 above provide a means for assessing and collecting the fees, charges, levies and taxes.