

# Practicing Land Consolidation in a Changing World of Land Use Planning<sup>1</sup>

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*Harvey M. Jacobs: Jordskifte under endrede forhold for planlegging*

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The professional practice of land consolidation is part of a global movement of land use planning. This planning was invented in the early part of the 20<sup>th</sup> century and is based on a set of presumptions, many of which are now under challenge by social and technological forces. These forces are predicted to substantially reshape professional practice in the next decade. Most significantly land use is becoming redefined as an area of social planning, rather than technical planning, and while this redefinition can be difficult for practitioners, it will lead to more enduring land use plans.

*Key Words:* Land use planning. Global Change. Forecasting. Professional Practice.

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## Introduction

The twentieth century has ended with a flurry of intensive socio-political changes in the world (Fukuyama 1989, Huntington 1996). A partial listing of the changes would note that in the last decade alone we have experienced the end of communism in the former Soviet Union and among its central European allies, the balkanized breakup of the Soviet Union itself, the reunification of the former two Germanys, the slow but steady emergence of what may become a United States of Europe (through, for example, the introduction of the Euro, the lowering of trade barriers and the introduction of common standards in areas such as education), and the possibility of a reunified Korea. The emergence of the internet has transformed global communication patterns and the structure of global commerce, and, in fact, globalization seems to be the economic and political term on the tip of everyone's tongue (Martin and Schumann 1997, Schaeffer 1997).

As the socio-political and economic structure of the world itself changes, we find ourselves forced to examine whether the institutional structures we have developed to interact with each other remain as relevant for the new century and millennium as they were for the times in which they were developed. In this article, I offer my thoughts and observations on the practice of land consolidation and land use planning in this changing world.

As readers of this journal well know, the practice of land consolidation is an old one in Norway. Rognes and Sky (1998) write that early legislation for land consolidation dates to 1821, and that in 1857 the Land Consolidation Act was passed, leading to the establishment of the first Land Consolidation Service in 1859. What is unique about Norway's approach to land consolidation is its placement wholly within the judicial system. According to Rognes and Sky (1998: 2), "... Norway is the only European country that has organized its land consolidation process completely within the framework of its judi-

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cial system." The basic system has been modified numerous times, including quite recently, but the fundamental judicial-based structure remains the same. To an outsider what is especially curious about this structure is the training of its practitioners. Land consolidation judges are not educated in law programs, but rather must graduate from a specialized course of study at the Agricultural University of Norway. Here they undertake a multi-disciplinary education in surveying, mapping, cadastre, law, land use planning, and land consolidation; the judges are not allowed to begin their practices until they have "... gained some practical experience as a surveyor in the Land Consolidation Services" (ibid: 2-3).

The practice of land consolidation itself focuses on the conflicts that arise among landowners when social and technological changes impinge upon traditional land use activities. Land consolidation represents an effort to maintain a degree of fairness, social justice, among land users so that as society and technology change, no one land owner is required to bear an unreasonable burden on behalf of society as a whole. Social values of both equity and efficiency drive the land consolidation process (ibid: 3). In this way, land consolidation was and is part of a broader social movement for land use planning that arose at the dawn of the twentieth century in Europe, north America, and other developed countries. Recognizing the rapidly changing nature of land use as a function of industrialization and rural to urban migration, modern land use planning arose to address two inter-related points: the fact that an individual's choice of land use was not always optimal from a social point of view, and the need to coordinate land use activities among individuals in an increasingly complex and urban world (Hall 1988).

So two key questions present themselves – what kind of land use planning arose at the dawn of the twentieth century, and how relevant is this approach to planning as we begin the twenty-first century? My argument and conclusion is that the kind of planning that was developed one hundred years ago is no longer relevant to the world of today. Just as the social and technological conditions of the past required that we invent a particular form of land use planning, the social and

technological conditions of the present necessitate that we re-invent land use planning for this new era.

### The Past and Present of Land Use Planning

This discussion must begin by acknowledging that modern land use planning was *invented* at the dawn of the twentieth century. The specific model of land use planning in use today grew out of the German forest management and city planning movements of the late 1800s. These movements promulgated the idea of an analytical, scientific, and systematic approach to determining how land should be used. These movements also put forward the idea that the general public interest could not be served by each individual pursuing their own self-interest, and that there was a need for a social structure which identified and integrated the goals and activities of individuals (Jacobs 1993, 1992). Overall, this idea was reinforced by a general interest in Taylor's scientific operations-management movement in the early 1900s. In the rapidly growing cities of the period these movements gave birth to modern city planning (Hall 1988).

#### *The presumptions of the 20<sup>th</sup> century model*

The land use planning model invented during this period was based on certain embedded presumptions. It is these presumptions that now must be re-thought and are at the base of the coming change in how land use planning and land consolidation practice will evolve. I have identified seven presumptions at the base of the century-old model of land use planning: 1) it is possible to perform a complete physical and social analysis of the capacities of, and demands on, land; 2) this analysis will yield information that will lead to better individual and social decision making; 3) this process of analysis and information generation will be heavily reliant on professionals and experts; 4) the result of this analysis will yield a single best pattern of land use and settlement (this is expressed, for example, in the policy tool of zoning with its single use districts); 5) while many western countries exhibit a strong cultural inclination toward local governance, there is a professional orientation toward centralization in ad-

ministrative authority for land; 6) urban society is at the height of the social hierarchy, and other land use concerns need to be subsumed to it; and finally, 7) land is, at base, a fundamentally private commodity and resource; the premise is that land use-rights should begin with the private owner and social intrusion should only occur to the extent it is clearly necessary to protect public health and safety.

This model of land use planning is now challenged by three different but interrelated and sometimes contradictory global phenomena: the rise of an increasingly empowered, diverse, populist citizens movement, a renewed emphasis on the institution of private property, and the invention, adoption and increasing accessibility of geographic information systems. I discuss each of these in turn.

#### *The challenge of an informed citizenry*

The citizens movement of the last several decades provides the most prominent push on the changing nature of land use planning practice. Citizens find themselves challenging many of the underlying presumptions of the model developed over one hundred years ago. First among these is the assertion that there must be perfect knowledge and information to plan for land. If there ever was a time when it could be argued that it was necessary and possible to have perfect knowledge and information in order to plan, that time has now passed. Citizens and decision-makers are well aware that it is probably impossible to achieve this state (our constantly evolving knowledge of ecology proves this to us; what we think we know always turns out to be woefully incomplete), and land use non-decisions are themselves decisions; there is often an optimal time for a decision to be made and it must be made with the best information available at the time.

Added to this is citizens' skepticism about the presumption of experts' preeminent knowledge. Citizens are no longer willing to cede to an expert's analysis and opinions just because that person, as a land use planner or land consolidation specialist, is presented as an expert. Citizens have ample evidence of the failure of experts and feel empowered to conduct their own analysis. This is especially true with regard to land issues, which are so

immediate and accessible (e.g. Strong 1975).

As part of this empowerment citizens are questioning our long standing reliance on the use of rationality and the scientific method as the only means of informing land use planning decisions. Rationality and the scientific method have been our anchor through much of the 20<sup>th</sup> century. In fact, they have become so much the norm that we have trouble imagining how else to "think" or "decide," or remembering that these approaches themselves replaced other forms of decision-making. One of the most significant elements of both the contemporary environmental and feminist movements of the last part of the twentieth century is a reassertion of other means of informing decision-making; means such as intuition, special-ness, and social justice (see, for example, Booth and Jacobs 1990, Jacobs 1995). Citizens are evermore willing to assert that their *feelings* about the transformation implied in land use planning and land consolidation decisions are as relevant and important as the use of economic-rationality and the scientific method, the traditional bases for decision making.

Finally, a part of the skepticism about land use experts and their advice is citizens' dubiousness about the long-standing call to centralize land use decision making authority and management so as to achieve sound land use objectives. Throughout the developed world, though more so in some countries than other, citizens exhibit a profound love-hate relationship with governmental authority. Especially with regard to land, there is often a conflictual cultural value where local governance is often touted, and it is also common to bemoan its shortcomings. Yet what is striking is how centralized governmental reorganizations over land use authority seem, more often than not, to portend less citizen access to the decision making process (e.g. Popper 1974).

More than anything else, this diverse, populist citizen movement has made clear that land-use planning and policy is as much a social and political issue as it is a physical and economic one. Land use decisions are not just about economic efficiency, land values, traffic flows, and municipal tax bases. They are as much about community stability, neighborhood character, individual and family well-being, and the ability of an indivi-

dual and a family to find and secure the freedom, justice, equity, and sustainability that land offers and promises (Logan and Molotch 1987).

#### *The resurgence of private property*

One part of the socio-political changes underway globally is the spread of the western institution of private property and private property rights. With the near-total collapse of communism globally and efforts to create market capitalism, private property has moved front and center into global policy debates. But at the same time, especially in developed countries, two trends are causing property to be an ever-present element of policy discourse (though in what appears at first to be a very different way) – the success of the modern environmental movement and resistance to this success by defenders of private property rights, and efforts by first (indigenous) peoples to re-assert land rights claims.

The fall of communism in eastern Europe and the former Soviet Union has caused a rush towards the creation of private property systems (Fukuyama 1989, Huntington 1996). As the new and newly liberated countries of this region seek to establish democratic and market systems, one of their first acts is in the area of private property. To some extent this is historical and focuses on the restitution of property to those from whom land was taken unjustly. But it is also a part of the broad push for privatization of former state assets. These assets include former state industries, state cooperatives, state farms, and urban flats. Privatization is pursued both for goals of equity to those who worked within these enterprises, but more prominently to facilitate a process of modernization and economic development. By moving these assets into private hands, it is expected that they will be used more efficiently and contribute to the economic and political transition of the country, and thus contribute to the establishment and maintenance of security and sustainability within and between places.

But in order for restitution and privatization to occur, there has to be a definition of what is being restituted and privatized. What is private property; what isn't it; what are the bounds between private and public rights in property; what are the rules for the interac-

tion and interrelationship of public and private rights in property; and how will private rights in property be recognized, managed and protected if (more likely when) they are challenged? These are among the very first issues that face state inventors from Poland to Albania, Russia, Krygyzstan, and Mongolia (for example) (Stiglitz 1999).

In the western countries the issue appears different but is very much the same – what should private property be, and what should be the bounds of private and public rights in property? Private property is a touchstone issue in many western countries. It defines how people think about foundational concepts such as freedom, democracy, and citizenship (Jacobs 1999a, Bromley 1998, Ely 1992, Epstein 1985.). To live in a democracy, to be a citizen, to have political and social freedom, means the right to hold and control private property. For many of the original American colonists this is what the journey to the new world was all about – the right to possess property in a way unattainable in their home lands (Jacobs 1999a, 1999b, Ely 1992).

The challenge provided to this conception by 20<sup>th</sup> century land use planning and more recently the modern environmental movement is in the suggestion that the ownership and control private property can often be socially dysfunctional. In fact, one way to understand land use planning is to view it as an organized effort to redefine the very nature of private property by removing key rights from the private property bundle so that individual owners are more and more circumscribed in what they may do with their land (Jacobs 1998). In response to the perceived success of this effort, a counter movement has arisen to assert the centrality of private property to democratic societies (Yandle 1995). This counter movement has been very successful in putting forth its position, redefining public debate on land and environmental matters, and reshaping the policy agenda to reflect its concerns, especially in the U.S. (e.g. Bethell 1998, DeLong 1997). The success of the private property rights movement in the U.S. has encouraged activists in other western countries – such as Canada and France specifically, and western Europe more broadly – to explore similar social and political agendas (e.g. Falque and Massenet 1997).

Lastly, one of the dominant issues globally,

in developed, transition, and developing countries, is the assertion by first peoples of their traditional claims to and rights in land. After several centuries of marginalization, first peoples are asserting their property rights in countries around the world (Boldt 1993). In most cases, the point of this reassertion is to achieve the dual purposes of security through land ownership through a form of private property, and to foster sustainability of resource management. Throughout the U.S. and Latin America, and in Canada, Australia, New Zealand, the issue of restitution of land to native peoples, and/or the renegotiation of traditional treaties about land, has led to, for example, creation of new provinces (Canada), uncertainty about non-native rights to land (U.S.), and new bases for thinking about access to exploitable natural resources (Fleras and Elliot 1992, Bourassa and Strong 1998). Quite literally, native peoples globally are re-inventing property, using the western model of private property to establish claims to their traditional lands as a first step in re-establishment and re-assertion of tribal identity, security, and sustainability.

The very nature of private property and its contribution to social and economic progress and poverty, local, regional, and global security and environmental and resource sustainability is once again dominant on the global stage, as efforts are mounted to reform societies in the directions of markets and democracies, and as efforts are made to address issues of social justice to first peoples. (The issues today echo a set raised over a century ago by Henry George (1879), a social reformer whose most famous book was titled *Progress and Poverty*, and focused on the paradox of private property during the time of the emergent and rising industrial revolution.) An almost unspoken assumption is that the establishment and/or strengthening of private property will lead to positive results for all concerned, both within a place, and thus within a region, and thus globally.

For practitioners of land use planning, all of this is confusing and paradoxical. Land use planning was born because it seemed so clear that an Adam Smith-style world where each individual pursued their self interest with regard to land did not result in the greater social interest; intervention was necessary,

an intervention that required a lessening of the power of property rights. And as society changed and became more urban through the century the rationale for planning seemed stronger. So how does a practitioner and a field make sense of a global socio-political environment in which the very rationale for land use planning is contested?

#### *GIS and the democratization of analysis*

The third challenge to land use planning is the advent of 'user-friendly' geographic information systems (GIS). As the twenty-first century begins, it can be hard to remember that the first IBM personal computer was introduced in 1981, and the Apple Macintosh in 1984. Computers in general, including personal computers, modems, electronic networks, bulletin boards, and the internet have become ubiquitous. Along with the spread of computers has been the parallel spread of geographic information systems (GIS) among local governments and planning offices (Dangmond 1989, Jacobs 1989).

Before the advent of GIS technology land use and settlement analysis was conducted through a cumbersome and inefficient method of map overlays, in which the differences in base scales and boundary lines among resource maps were often fudged. Not only has GIS allowed a higher degree of accuracy in analysis, but it has opened up the opportunity of 'alternatives-analysis' in the same way that spreadsheet programs have for economic, fiscal, and demographic data (Ventura et al. 1988).

But GIS has done something else; it has opened the process of land use analysis from the professional office to the citizen on the street. Under the old way of conducting land use analysis it was impossible for anyone other than professionals to perform alternative analyses. This is no longer true. Just as citizens can now show up at municipal budget hearings with alternative budgets reflecting alternative priorities, because they have taken publically available data and analyzed them using their own spreadsheet programs, GIS provides the same possibility in land use planning and land consolidation. Exclusive access to information and the ability to rely upon it as a base for professional expertise in proffering land use advice is fast eroding.

## The Future of Land Use Planning

What does all this mean for the future of land use planning, including land consolidation activities? It means that they will become fundamentally different. Land use planning can no longer be viewed as a technical exercise, but has to be recognized for its strong social character (see, as illustrations, discussions in Jacobs 1995 and Beatley 1991). This fact, the democratization and socializing of land use planning, may change it more in the next decade than it has changed in the last century.

Globally three interrelated trends underlie the future of land use planning. First, as a result of citizen involvement planning is becoming more pluralistic. More types of individuals and groups are asserting more types of interests in planning activities. And all of them are able to argue, with increasing sophistication, that their perspectives on land and the public interest for its use are the appropriate ones. Second, because of this, land use planning is becoming more conflictual, among these individuals and groups, and among the groups and land professionals. Third, land use planning is becoming more political. The era of land use planning dominated by professionals, with exclusive access to information, is over.

A new form of land use planning and policy is emerging and it will be characterized by two approaches different from the practices of the past. First, while more participants will be involved in land use planning, and assert the legitimacy of their participation, most will bring a limited perspective to land use debates and conflicts; work will need to be done to broaden participants perspectives to assure that all legitimate concerns and interests are taken into account, and to mediate among these varied interests. Second, it is necessary to approach land use planning as an alternatives generating process, where the costs and benefits, the winners and losers, the economic, environmental, and social impacts of alternative concepts and plans are made clear as the basis for informed and vigorous public discourse.

The land use planning practice we do in the 21<sup>st</sup> century will have to acknowledge and confront the complexities and contradictions within it, and attempt to unveil this to all

those who do, and who should, share a concern about them. Such planning will not only respond to interest groups, it will also need to mobilize interest groups. And then, such planning will seek to present to participants options for addressing issues, and assist in assessing options that are brought forward by participants.

This means that the analyses and processes that comprise land use planning needs to change. Land use planning needs to become more pro-active and strategic in identifying participants to the planning process. This planning needs to conduct analyses that reflect not just the economic and ecological characteristics of land, but also its social characteristics. Analysts need to ask not just 'what is the economically efficient use of the land?' and 'what is the ecological carrying capacity of the land?', but 'what is a socially equitable way to plan for the land's use?'

In general, the future of land use planning practice lies in acknowledging that planning is not and cannot be a technocratic, scientific exercise. Land is a unique economic and ecological resource, but it is also a unique social resource. Land use planning and land consolidation often act as the stage for fundamental and complex social debate about individual and social rights and the articulation of ideals about family, community, democracy, and social justice.

Land use planning and land consolidation are, and always have been, exercises in social planning masked as technical planning. To be truly successful, to create enduring, efficient, and equitable land use patterns, it is necessary to recognize them as such, and to act accordingly.

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