

Identifying Principles for Spatial Policy: Levels of Intervention

The European Regional Science Association

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by

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ERSA is making great progress. I have just come from our 46th Congress in Volos, in Greece. This is not the most accessible city in Europe nor the largest, yet we had some 700 registered participants – almost the number we had at our 45th Congress in Amsterdam; and Amsterdam had had the largest gathering of regional scientists ever brought together in the world. So I have just come from the second largest Regional Science Congress ever organised, anywhere. Not only was it large but it was excellent in terms of the quality of the papers. There were 50 papers submitted for our Epainos Prize for young scholars under 33 years old and there was tremendous quality amongst them. Professor Bob Stimpson, the President of the Regional Science Association International, judged the winning paper, which he heard presented, as the best paper by a young Regional Scientist he had ever heard given. We gave our European Prize in Regional Science to Professor Martin Beckmann – who for many years combined a Professorship at Brown University in the USA with a Chair in Germany, first in Bonn and more recently at the University of Munich. We also had excellent papers on many topics, given by scholars from a total of 45 countries.

Our 47th Congress will be in Paris from 29th August to 2nd September 2007 and the general theme will be “*Local Governance & Sustainable Development*”. We already have our 48th Congress organised in Liverpool, in the UK, for 2008 and at the meeting in Volos chose the University of Lodz, in Poland, to host the 2009 Congress. There are already bids being made for the 50th Anniversary Congress in 2010!

There are two really important developments in ERSA. The first is that following four years of discussion we finally made a decision in Volos to go professional. Starting from the spring of next year we will have an office and at least a half time professional organiser/administrator. ERSA is already legally incorporated in Belgium as a learned society (which requires a degree of professional administration in itself) and our aim is to be located at the University of Louvain la Neuve, a university close to Brussels with a strong tradition of regional science.

There are, of course, many advantages of being located close to Brussels and one of them is access to EU funding. Another is that over the years the Regional Science community – while it has been scientifically powerful and has particularly made renewed strides in the past 10 to 15 years – has not been successful in communication to the policy community. Since Europe is the continent with the most interest in regional and spatial policy of any in the world, this is a serious failure and we hope that having a professional office will improve communications with policy makers. We also hope it will improve our ability to support some of the weaker national associations, particularly some in Central and Eastern Europe: indeed, in some cases help us get national sections established where there are currently none. A final important role for professionalisation is to establish an ‘institutional memory’ so we can learn and improve over time. For example, so we can carry forward improvements in the organisation of congresses so lessons learnt by one Local Organising Committee are passed on. A further reason is to take some of the ever-growing administrative burden off Local Organising Committees and off ERSA’s officers. For example it should be possible to establish the Congress software in Louvain la Neuve and maintain it there without newly installing it and

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training local organisers for each Congress. This should not only be more efficient but it should be cheaper as well.

The organisers of all the next three congresses – Paris, Liverpool and Lodz – supported this move strongly and the newly appointed Administrative Officer will be recruited initially to work in the Paris team. This will ensure the person appointed will learn how Congresses are organised and help with future Congresses, although it is not intended that they would be part of local teams after the Paris Congress. Details of the proposal as it presently exists will shortly be available on the ERSA Website and suggestions are welcome. A small working group has been established to finalise details for decision at the next European Organising Committee meeting in Paris on Feb 10th 2007. Of course professionalisation costs something – although an important element of the job will be to help raise funding for the office and for ERSA – so Congress fees will have to be raised somewhat to pay for it.

The second important development is ERSA's new Summer Schools. We had a working party looking at the functions and format for our Summer Institutes in 2002/03. These have been very successful over the years but had developed into essentially mini-Congresses. We decided if it was possible that it would be better if we could make them real 'schools', running serious and high level courses which would give students advanced research skills and techniques. Regional Science is not taught in every university and high level specialist skills are not available at universities throughout Europe, so there was also a potential function of serving young researchers in such countries. We designed the first of these new style Summer Schools to teach an integrated syllabus on GIS, Geocoded data and Spatial Econometrics. The idea was to have a syllabus that would really equip the students with the technical skills needed to analyse spatial data sets. There have been great strides in all three of these associated fields over the past 10 years and bringing them together in one course seemed a great opportunity. This School was organised by the University of Groningen in the Netherlands together with some advice and input from the London School of Economics.

At the same time Professor Gunther Maier, from the Vienna University of Economics and Business Administration, led an application for funding for four ERSA Summer Schools (starting in 2006) to the EU's Marie Curie Programme. This application was successful and late last year we heard that we had been awarded Euro 270 000 to fund our new style Summer Schools. The first one was held this year at Groningen with a truly world class teaching faculty including Luc Anselin and Steve Sheppard from the US as well as distinguished Europeans. It attracted more than 80 applications for 30 places. The students were enthusiastic and engaged – great fun to teach - and rated the course as outstanding. They were so enthusiastic that they started their own electronic discussion group to keep in touch and seven gave papers at the ERSA congress in Volos. More will give papers in special sessions at the next Congress in Paris.

In 2007 the Summer School will be on "*Analysis of Networks: Visualising, measuring and modelling spatial interaction*" and will be held at the University of Bratislava between July 2nd and 11th 2007. Full details will shortly be on ERSA's Website and applications are strongly encouraged. It is going to be hard work but – if Groningen is anything to go on – great fun. Because of the support of the Marie Curie Programme, costs of participation are minimal. Funds are available not just for the fees but for travel and living costs. Like all the new style Summer Schools it is aimed at European PhD students and young researchers: especially those who might have difficulty getting access to these sorts of skills in their

home countries. That said, there were students both from Groningen and the LSE at the School this year – but it could be argued that such a high level and intensive course, teaching an integrated set of spatial data analysis skills, had never been available anywhere before.

Spatial Policies and Levels of Intervention

I have worked on the economic effects of land use planning for 20 years or more and for the past year I have been involved in an internal re-assessment by government in Britain of the foundations of a range of spatial policies. This has been being carried out by the British ministry responsible for land use planning, local government and urban policy and which also has close links to policy in transport and regional development. Indeed this is a new initiative – almost a blue skies initiative – across the whole range of spatial and sub-national policies in the UK.

I have to say this is a very welcome initiative. Most ‘spatial’ policies, in the UK as elsewhere, grew up long ago, often in an *ad hoc* manner or as a political response to some pressing problem. Systematically assessing their logical consistency and their relationship to current analysis of spatial economic processes is long overdue. It is welcome that government is beginning to re-think them coherently and on the basis of first principles. Moreover, if we look at the roots of spatial policies – not just in the UK – we can see that they did not in their origins reflect current analysis and this is still visible in the policies. They originated in an era when there was a much stronger belief in state direction and what could be achieved with central planning. We can illustrate this by looking at the origins of the three most important types of spatial policy: regional development concerned with regional inequalities; urban regeneration/neighbourhood policy; and land use planning. In the UK regional policy can be traced back to the report of the Barlow Commission (1940). This was strongly influenced by the then new ideas of Keynes and the threat to the prosperous south and east of England from enemy bombs. A major part of the report and its recommendations is concerned with the strategically dangerous ‘overconcentration’ of resources in the rich South and East and the need to protect the new industries, especially aircraft and munitions, from exposure to attack from Germany. Reasons for policies change but the aims of the policy are strangely familiar. Overconcentration is still seen as the enemy in European spatial planning¹.

Land use planning in Britain is still based on the 1947 Town and Country Planning Act – part of post WWII reconstruction. This expropriated ‘development rights’ of all owners of land except the Crown. Although one of the aims of its founders – to establish the state as the sole developer – has been abandoned – the powers to control development have been enhanced over the years since 1947. One can clearly see it as the last surviving structure of Fabian Socialist utopianism in the UK.

Urban regeneration policy started as a political response to central city riots, initially in the Los Angeles neighbourhood of Watts in 1968. In Britain the themes were taken up in the

¹ ‘Over’ concentration is, of course, precisely the degree of concentration which is undesirable. It is a rhetorical device rather than a scientific judgement. All concentrations of activity – more transparently called ‘cities’, ‘city-regions’ or ‘urbanised regions’ represent a trade-off between the costs of concentration – such as higher space costs, congestion, or pollution – and the benefits in the multifarious aspects of agglomeration economies and widening choices. A more scientific question is whether what we observe represents an economic and social optimum.

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Inner Area Studies (Department of the Environment, 1977) and policy makers went into overdrive after the riots in the London neighbourhood of Brixton and in Toxteth in Liverpool in 1981. The policies that were implemented, however, were essentially political and not based on any scientific analysis of how cities worked, what they contributed in economic and social welfare terms or how social and economic segregation or exclusion related to the wider causes of social inequality.

What all these policies lack is intellectual coherence or an adequate base in evidence. There is now acknowledgement of the role of markets. There is no consideration of the interaction of the policies with each other and with other policies. Planning of land use is of course a vital function. Land markets have many imperfections and unless they are closely regulated it is unlikely that they would produce a socially optimal outcome. There are interdependencies between uses of adjoining parcels of land that create significant problems of externalities; there are important classes of public goods such as amenities, open land and wild life habitats; and there may be valuable contribution to environmental quality planning can make. But a central feature of land use planning is that it is about the allocation of a scarce resource: private space in gardens and houses and space for economic activities. Thus it controls the supply of a range of scarce 'goods' and so has a significant role in determining prices – of houses and urban land for private use. Yet the British system of land use planning – in common with most others – actually excludes price information from consideration in making decisions about how much land to release for categories of urban use. If not enough land is released relative to the demand for it, this inevitably drives up prices. But this is information planners are not only not aware of but which, in the UK, they are specifically excluded from taking into account. As I will argue shortly, this creates a whole range of problems not only of a directly economic type but for the planning process also, since it increasingly drives the political process within which British planners, at least, have to act and decide.

A useful starting point in trying to bring more coherence to spatial policies is to ask what is the most appropriate level of government at which decisions should be taken. I will illustrate this in the context of land use planning in Britain.

So what general principles can one identify to guide us in choosing the most suitable geographic scale at which to implement policies? There would seem to be four:

- The first is that conditions vary across space in ways that mean that there is a plausible case for local tailoring of policies to regional or local circumstances.
- The second principle to take into account is the need to identify the geographical area over which a policy is likely to impact and, therefore, the extent to which there are likely to be spillovers at different spatial scales.
- Principle three is to identify whether there may be significant economies of scale or scope affecting the economic policy area.
- Finally, principle four is to identify potential synergies and co-ordination challenges within and between economic policy areas.

When we look at land use planning we can easily make the case that there are benefits of spatially tailored policies. There are also important – I would argue vital – issues concerned with the spatial scale of spillovers. Issues related to economies of scale or scope seem less relevant but there are certainly important synergies between planning policy and other areas and considerable need to co-ordinated across policies areas. I will now expand on each of these points.

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Land Use Planning: arguments for and against devolution

There would seem to be two primary reasons in favour of decentralising decisions about land use to local governments. The first is the general presumption that there are gains from increasing choice in the provision of local public goods. Land use planning is significantly about providing such local public goods: the type of (built) environment, the extent of preservation of public open space or wildlife habitats, for example. This argument is well established in the public finance and urban economics literature and originates with Tiebout (1956). In response to the well known argument that there were difficulties in establishing the correct level of provision of public goods because of the difficulties in estimating demand, Tiebout argued that - in the case of local public goods - competition between jurisdictions allowed people to express their demand by voting with their feet. This is a powerful argument but is valid if and only if 'externalities' are fully internalised in decision making. As I argue below, this condition is almost certainly not met - at least in a British context - because of principle two - the spatial scale of spillovers has to be appropriate for the geographical limits of the tier of government implementing a policy.

There is a second reason for devolving the implementation of planning policies to a local level and that is that conditions do differ between regions - or more strictly geographic housing and real estate markets. As already noted planning is about many things; but it is importantly about the allocation of a scarce resource: land for urban purposes; land for living space. Demand and supply conditions for environmental goods, for planning produced amenities and for space show great spatial variation. Supply of these amenities is mainly determined by nature - for example beautiful landscape or coastline. But demand is mainly determined by incomes (see Cheshire and Sheppard 2005).

For example, we find estimates of the income elasticity of demand for accessible open space to be close to 2 (Cheshire and Sheppard, 1998). Or consider the 'value' placed on publicly accessible open spaces such as Epping Forest or the Lake District. Epping Forest is a pleasant but not particularly remarkable area of old woodland which drives a wedge into the north eastern fringes of London: the Lake District contains some of the most beautiful scenery in England which was the major inspiration for one of our great national poets, Wordsworth, and for one of England's classic children's writers, Beatrix Potter. Both areas are protected by the planning system; both are highly valued. But the Lake District is comparatively remote from population and is valued because of its intrinsic qualities which draw people to visit it from all over the world. Epping Forest is valued because of strong local demand (and comparative scarcity of local supply) for amenity open space in one of the most heavily populated and richest areas Britain. So spatial variations in demand, as well supply, for space and amenities needs to be taken into account in local planning policy.

Nevertheless, there is a significant role for national - perhaps EU wide - standards. Just as it might reasonably be argued that access to healthcare should not vary according to where within a country a person lives, so it seems reasonable that all citizens should be safeguarded by similar environmental, safety and design standards. However, there is also an important equity issue to consider. Might it not be argued that relative to incomes all citizens should - so far as possible - have equal access to housing? Or at least that policy should aim towards equalisation of the 'hedonic' price of housing attributes relative to incomes across the whole country. Apart from equity issues this would improve interregional labour mobility and help labour market flexibility.

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As well as this argument for national standards on interregional equity grounds, affecting both environmental and design standards but also price : income ratios, there is also an issue – usually neglected - of intra housing-market equity. Land use planning produces important classes of amenities or local public goods – most obviously open space. Research shows that the benefits derived from most types of open space (excepting international attractions such as the Lake District or the Alps) are local and decline rapidly with distance. If your house overlooks a park, you have a significant benefit and it is reflected in the market price of your house. If you own a house surrounded by open farmland that, too, has a benefit and is reflected in the market price of the house (see Anderson and West, 2006, forthcoming; Cheshire and Sheppard 1995; or Irwin, 2002). However, the evidence of these studies also shows that amenities can only be consumed if accessible (e.g. open space; greenbelt). Realising this also implies that the ‘goods’ planning produces, while provided by public policy, are consumed by the wealthy. This is most true of the open farmland at the edge of cities produced in Britain by the planning policy of ‘urban containment’. The benefits from this policy accrue only to the owners of edge-of-city houses or houses built before planning policy came into force after 1947 and now having exceptionally high market prices. Since these are almost by definition the homes of the rich, public policy is systematically redistributing real welfare and asset values to the wealthiest (Cheshire and Sheppard, 2002).

Land Use Planning: the spatial scale of spillovers

This, in my judgement, is the most significant problem with planning and a powerful argument only for devolving decision making with great caution; and then to spatial units of government within which both costs and benefits of development are captured. As we will see this is not an easy task.

This need for caution arises as a result of two types of consideration. The first is the arguments originating with Fischel (2001) about the political economy of planning decision making. As home ownership and real house prices rise, houses become increasingly significant as a part of people’s financial assets. As financial assets, they have unusual characteristics: they are totally immovable and highly illiquid. Moreover, their value incorporates - via the processes of capitalisation already outlined - the value of all the amenities, neighbourhood characteristics and local public goods to which their precise location gives them access. The only way people can protect the value of their housing assets is by trying to maximise the value of these locational attributes – so, as voters, even without children, they vote higher taxes for better local schools (Hilber and Mayer, 2004); and, above all, they vote for planning authorities who will protect them against development.

The second consideration is the differing spatial range of the costs and benefits of physical development. The costs are very local, whether these are the costs of disruption, congestion, noise and pollution during construction or the loss in asset values after the development is complete (bear in mind the point made above that the ‘value’ of open space as capitalised in house prices is very localised apart from a few exceptional cases).

The geographic range of the benefits, however, is very considerable – affecting all residents of a given spatial real estate market which is probably best conceptualised as a Functional Urban Region. The benefits are in the form of small improvements in job opportunities and incomes and small reductions in the cost of housing. This last is particularly significant for non-home owners who tend to be poorer as a group than existing

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home owners. The relative range of these costs and benefits moreover, will vary with the form of the development. A small extension, or a single house, may have a very limited impact in terms of both benefits and costs; so not much is lost if decisions are taken at the local level. At the other extreme, a major transport development such as a new airport will have benefits at least at the regional scale. In the notorious case of Terminal 5, at London's Heathrow airport, it is reasonable to argue that the benefits were at the national scale. Yet the initial planning authority was the local Borough of London in which Heathrow was mainly located. For a substantial new housing development the benefits will certainly be at a regional scale.

A final point is the individual size of the benefits and the costs. The costs are substantial per affected individual while the benefits are very small per individual but spread over very large numbers of people. So we have a situation analogous to the arguments for free trade: there we need to balance the significant losses of a small number of producers from, say, opening up textile trade to Chinese imports, relative to the benefits to all consumers from somewhat lower prices for clothing and other textiles. Because losses are large relative to the number of people involved, producers readily form lobbies against freeing trade in their sectors. But consumers, being numerous relative to their individual potential gains seldom take to the streets to demand free trade.

So with planning. There is a powerful inbuilt asymmetry in decision making if decisions are devolved to a local level favouring NIMBYism (Not in My Back Yard). Decisions need to be taken at the most local scale feasible, subject to that level of government internalising both gains and costs. This implies different types of decision at different tiers of government, with major infrastructure decisions essentially being a national concern, and only small developments - such as extensions or single houses - left to the local level. Most decisions are probably most effectively made at the level of a Functional Urban Region: yet this is not common as an actual level of government. In Europe it is almost accidental – with some Spanish regions and the Ile de France being the only representatives that readily spring to mind.

Two final points here: in devolving decisions to lower levels of government, we need to keep in mind the possibilities of economies of scale or scope. Loss of economies of scale probably imposes no significant constraint on devolving planning decision making. In so far as these are relevant in planning then, in principle, smaller units could buy in their planning services from larger ones which would gain from the economies of scale. However there may be 'economies of scope' which are relevant. The smaller the unit of government, the lower its capacity typically is to deal with complex decisions. So small local governments may not have the information to know that they need to buy in services from larger units or if they do, not have the information and skills necessary to procure such services effectively.

The second point relates to the costs of development. These are certainly real to those who suffer them. What is needed is, therefore, systematic Impact Fees on developers paid to local communities to pay for the necessary infrastructure. In addition there is a case for direct compensation from developers to those house owners who are adversely affected by development. Given what has already been said, such Impact Fees and compensation would simply be capitalised in a (lower) price of land. There is strong evidence from those parts of the world where Impact Fees are paid by developers this is exactly what happens (Ihlanfeldt and Shaughnessy, 2004).

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Land Use Planning: issues of co-ordination

A further problem which arises from our governmental habits of consigning ‘planning’ to the environmental and design box and not realising the important economic aspects of planning, is the failure to co-ordinate physical with financial planning. This is a serious problem in the UK but is common throughout Europe. Gaining the permission to develop is a necessary condition (at least it is in most EU countries) for development to occur but it is not a sufficient condition. For development actually to occur there have to be the funds. Since private developers only take the trouble to commission plans if they think the development will be profitable once permission is gained, the houses, retail facilities or other buildings, are usually built. Planners may know perfectly well that the development requires complementary development of infrastructure but – certainly in the absence of Impact Fees – such development is typically in the public domain and funding is via central or regional government. So the infrastructure does not necessarily get built.

The South East of England is a good example. The regional economy is very buoyant and the skills base and international accessibility excellent; so there has been much development, despite a rising tide of NIMBYism and consequent rising real prices for land and real estate. One factor adding to the NIMBY pressures is the real problem of congestion and pressure on utilities, such as water supplies. Developers do not fund these and investment in transport and other infrastructure to support the growth has got far behind the actual local growth. An example is the proposed East-West rail route under central London, Crossrail. Politicians have announced almost every year since 1989 that ‘Crossrail has the go-ahead’. Yet Crossrail is not even off the drawing board. The reason is that the planning process has given the go-ahead but the finances have not been provided.

This illustrates the need to co-ordinate physical and financial planning. Another example is provided by Dublin. For a long period, from the late 1970s, Dublin Corporation was proposing a new commuter rail system and new motorways. These were in the plans for the City and the necessary land was safeguarded from development. Unfortunately it was the national government which had responsibility for funding and no funds were made available. The result was to ‘blight’ great strips of Dublin for decades with individual property owners suffering considerable losses and not making any investments in the buildings and land they owned.

A further problem of co-ordination relates to incentives. The incentive for planning authorities to permit development of different types varies with the details of the fiscal system. Again to take the UK as an example, planning decisions are made at the most local level of government – the District or Unitary Authority. Most of the tax revenues received by such authorities are the result of transfers from central government. Local property taxes typically account for about 20 percent of revenues. Their outgoings are related to the number of inhabitants living within their areas, however, Worse than that, the tax system for business properties is such that all revenues derived from taxes on business property go to central government, directly. Thus it costs the tier of government charged with decision making with respect to development a significant amount of money – and unpopularity with voters – if they grant permission. This is especially true of development for business use. Local politicians respond rationally to such a structure of incentives by reinforcing the natural NIMBYist tendencies of their voters². That

² Encapsulated in the words of the retiring chair of the Reading planning committee in 1989 when asked what his major achievement had been. His reply was that during his period of office “Not a single new major office development has been approved. We managed to keep development down.” (*Reading Chronicle*, 1989)

local government does respond to financial incentives, however, is witnessed by the loss of school playing fields and publicly owned recreation areas. Over the past 10 years nearly 1000 school playing fields a year have been built over in Britain. The reason is easy to find. Local authorities own them and the same authorities are responsible for controlling where physical development occurs. So they gain financially from developing open spaces, highly valued by the local community, while not gaining from developing open spaces in private ownership which typically (because access is restricted to the owners themselves) are valued far less by the community (Barker 2003; 2004).

Indeed the only incentive for local governments to allow development of business premises in the UK is the fear of unemployment. In the least prosperous parts of Britain planning authorities constrain the supply of development to a much lower degree than is the case in the more prosperous parts and changes in the degree of planning constraints seem to be closely correlated with changes in local prosperity (Cheshire and Hilber, 2006). But this is a very suboptimal way of determining the degree of constraint on supply imposed by planning. It would be orders of magnitude more efficient to get better co-ordination between the financial incentives facing planning authorities and the economic and social desirability of development.

Conclusions

Planning is about many things but it is centrally and inescapably about the allocation of a scarce resource – urban space inside and outside buildings. It is urgent that we think through the implications of this insight to understand how we can make our planning decisions more effective and more economically efficient. At present in the South East of England our refusal to face this fact is causing growing price distortions and perverse incentives – almost on the scale of the former Soviet Union. Moving a boundary a metre can increase the value of a parcel of land from perhaps £7 500 to £4 000 000 per hectare. We are failing to co-ordinate infrastructure with the demand for development. We are even failing to protect from development important amenity land where that land is owned by planning authorities themselves. And we are creating growing inequalities between rich home owners who get the largest proportion of the ‘assets’ created by planning and poorer non-homeowners who simply pay higher rents and cannot afford houses in the more amenity rich locations.

These problems are perhaps worst in the UK but they are spreading throughout Europe. One reason is the strong income elasticity of demand for both private and public open space. Some of these problems could be resolved by moving decision making to a geographical tier of government within the boundaries of which both the gains and costs of development were contained. Unfortunately such a tier of government would correspond to a ‘spatial real estate market’ and such a tier does not often exist although it is possible it could be created – as has happened in a few cases in Germany – by a confederation of local governments with delegated powers.

Another problem is the frequent and related failure to co-ordinate physical and financial planning and the failure to align financial incentives for all those government bodies making planning decisions. We cannot expect an optimal outcome if all development represents a substantial net fiscal cost to local voters. One way out of this would be to introduce Impact Fees.

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