From Peri-Urban to Unknown Territory

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This paper is a symptomatic reading of the idea of 'peri-urban', exploring the often difficult-to-define transformations it names. The purpose of the exploration is to see what 'peri-urban' might offer to illuminate the thinking of problems of structural unsustainability, both globally and in Australia.

Peri-urban is a term used by professionals such as geographers, sociologists, planners, economic development advisers, regional development specialists, natural resource managers, agricultural educators. At a meta level, these range from discourse-bound theorists to critical and uncritical appropriators of the concept. Incoherence can be expected when the term is just picked up and used as if its meaning was self-evident. But incoherence is also found when looking across the more self-conscious attempts to define it. But this failure of coherence is in itself illuminating, for it reveals the complexity of that which is attempting to be named, and sometimes, an underlying issue of concern that the category attempts to stand in for.

Not that much coheres, if you track the occurrence of the term 'pre-urban' across different disciplines and

professional usages. At one extreme you can find it used in the context of the need for food security for Africa's urban poor, and at another, it may be evoked in the context of preserving landscape views for tourists in France. In affluent nations or regions, peri-urban issues will be those of landscape integrity, heritage, environmental quality and rural residential development supplanting productive farmlands. In less affluent regions, in Africa, Asia and Latin America, peri-urban concerns are ones such as major pollution of land and waterways, poverty, informal settlements and slum living conditions.

On Naming

A caveat on naming and categorisation: all forms are provisional and destined to incompleteness; all are mere attempts at understanding the complexity of that which is, by isolating, by making distinctions, by applying features of the known to the unknown. Between 'what is' and our desire to know, we have only language, and language can only play a constant catch-up game.

The desire to name the peri-urban, comes, I suggest, from the uneasiness felt about a form of settlement that cannot be easily classified according to the longstanding urban-rural binary. Understanding of place in Western thinking (and beyond, cf. Berque 2003, on the history of 'disurbanity' in China and Japan) has been structured for so long by this dichotomy, that territories that do not fit this model can be unsettling. Just where are we? City or country? For example: "a new, uneasy equilibrium that is neither totally urban or suburban." (Webster, 2002); and an "uneasy, phenomenon, usually characterised by the loss of rural aspects (like fertile soil, agricultural land, natural landscape) or the lack of urban attributes (such as services and infrastructure)" (Allen, 2003).

It's not a question of assessing the success or failure of different definitions of the peri-urban to account for the phenomenon. Rather, conceptualisations of the peri-urban can be read as compensatory attempts at assuaging anxiety in the face of change and transformations that are bewildering and can never be fully grasped.

Space and Beyond

The simplest definitions of peri-urban are spatial, defining it as a zone around the built up area of a city, its perimeter or edge, the 'rural-urban fringe' where city and country land uses overlap. And while this kind of definition is considered to be superceded within the literature of the peri-urban (Adell, 1999), it remains in circulation (e.g., Aslin et al, 2004) – such is the power of spatial metaphors.

Geographers, sociologists, planning theorists and economic development specialists have layered other factors onto the spatial definition of peri-urban. Kinds of characterisations include:

a zone of interaction between urban and rural socio-economic systems; …. a transition zone between fully urbanised land in cities and areas in predominantly agricultural use …. mixed land uses and indeterminate inner and outer boundaries …. a zone of rapid economic and social structural change (Rakodi, 1998 cited in Adell, 1999).

In his survey of the literature of the peri-urban, Adell traces a shift from spatial, morphological definitions, to ones in which social processes and other dynamics are more important. He cites Carter's 1981 definition of the rural-urban-fringe as:

the space into which the town extends as the process of dispersion operates ... an area with distinctive characteristics which is only partly assimilated into the growing urban complex, which is still partly rural and where many of the residents live in the country but are not socially and economically of it (Adell, 1999).

This version introduces the element of time into the spatiality of the peri-urban, as well as importing an economic development model that assumes urbanisation as an inevitable process. The term 'peri-urbanisation' also appears (e.g., Webster, 2002), thus positioning the peri-urban as somewhere destined to become urban. Here, peri-urban becomes 'pre-urban' (Adell, 1999). In many parts of the world, this means farming land awaiting residential subdivision.[1]

Urban theorists, such as Guldin who has studied East Asian urban regions and McGee with his influential *desakota* study of Jobotabek (the greater Jakarta region) do not regard the peri-urban as a transition state to the fully urban – but as a new kind of rural/urban hybrid landscape, "a partially urbanised countryside" or "a dramatic new species of urbanism" (Davis 2004).

There is also a good deal of theorisation that draws on systems theory and functionalist sociology, adopting models that conceptualise the peri-urban in terms of rural and urban systems of production and exchange (Allen, 2003).

Over-reading, then, the peri-urban seems to be characterised by flux: rapid changes in land-use, built forms, economic activities; mismatches between administrative structures and territory; influxes of new populations; conflicts between new and existing landholders; and, visually, somewhere that seems disjunctive, that jars with longstanding preconceptions of the distinctiveness of places, as either fundamentally rural or urban. Linked to this is that the peri-urban is also nearly always associated with the naming of problems, whether these be issues of urban governance, exploitation of labour, lack of planning and infrastructure, degradation of natural resources and biodiversity or threats to

urban food security through loss of agricultural land. This would suggest that change in these territories is undirected, random, opportunistic. The peri-urban could be considered as a naming of ever-changing spaces of opportunism. Much of the research on the peri-urban phenomenon in non-Western nations over the last ten years has viewed such regions as the prime location of the intensification of forces of globalisation, where capital seeks out cheap land for industrial development, cheap local labour, and, in time, new markets for consumer goods.

As said, the peri-urban can be understood as a designation that attempts to make sense of change, an attempt to create a new category for a phenomenon that doesn't fit existing categories. In attempting to theorise any aspect of culture, there will always be a tension between generalised concepts and local particularities. This is even more so in regard to human settlement. The need for food, shelter and sociality may be universal, but the forms taken are myriad, and historically have taken on a particular character in their spatial expression – which we sometimes refer to as a sense of place. Place by definition implies distinctiveness, and attachment to place across its difference and its modes of expression, whether sacred or secular, is universal. To exist, we have to know where we are. It is within this frame that an idea like 'peri-urban' needs to be put. Across the literature, the spatial definitions of peri-urban range from a 10 km zone beyond the city proper (Randolph, 2003 on Australian cities) to a 100 to 300 km zone in parts of East Asia and China (Webster, 2002). Clearly then, peri-urban could never be defined by a singular spatial measure. If it was, all of Europe and many other regions of the world would be nothing other than peri-urban. The idea of peri-urban is a course grid, and not very meaningful unless the fine grain of local particularity is also seen and taken into account. Conversely, peri-urban may in fact be a not-yet-adequate way of naming a new (or newly remade) form of blended 'rurban' human settlement.

Peri-Urban Population Growth

The peri-urban takes on particular significance when seen in the context of global population trends. According to United Nations, the world's population is now equally divided between urban and rural areas. Their projections are that urban populations will continue to expand, while rural numbers will remain steady and then begin to shrink after 2020. From there on, cities will account for *all* future world population growth, expected to peak at about 10 billion in 2050 (Davis, 2004).

But this urban growth does not correspond with conventional city images of skyscrapers, freeways or sprawling suburban development, rather it is shaping up as an endless landscape of slums. Three quarters of population growth will be in second-tier cities and smaller urban areas (Davis, 2004), places without

planning or infrastructure (UN-Habitat 2003). In fact much of this population growth is occurring in regions designated as peri-urban.

Mike Davis' review of the UN projections and related research presents a striking, troubling picture of the vast bulk of the world's poor, *en route* to lives of *urban* rather than *rural subsistence*. He shows that slum residents already comprise one third of the global urban population, and that slum sprawl is as much of a problem in the developing world as suburban sprawl in rich countries. He cites the African city of Lagos, which doubled its area in less than a decade, between 1985 and 1994, with vast expansion of shanties and slums, adding that "Lagos, moreover, is simply the biggest node in the shanty-town corridor of 70 million people that stretches from Abidjan to Ibadan: probably the biggest continuous footprint of urban poverty on earth." Such a scenario totally explodes the conventional spatial image of city plus peri-urban fringe.

Such images are also a million miles away from the problems of cities in a place like Australia.

Urban Everywhere

The impossibility of getting a clear fix on the nature of the peri-urban is compounded, if not superceded by the breakdown of the operability of physical and spatial definitions of the urban, more generally. This has been in train since the 1960s in the West. As Adelle glosses "the city has been less and less seen as a discrete local place and the urban experience became, in a sense, universal. With the spread of urban functions to suburbs and then to a larger, decentralised 'urban field', it becomes more relevant to speak not of an urban-rural dichotomy, but of a rural-urban continuum, "where the mobile middle classes have built a highly dispersed pattern of activities developing not on a *place*, but on a *region*" (Adelle, 1999).

Across the urban field there is no singular sense of place; geography becomes personalised, made up of fragments that accumulate idiosyncratically according to the activities, connections and movements of individuals and sub-groups.

As long ago as 1964 Melvin Webber proposed the concept of *nonplace urban realm* – "neither urban settlement nor territory, but heterogeneous groups of people communicating with each other through space" (cited by Adelle, 1999). Today we would extend this space to include air space and cyberspace, as cheap air travel and electronic communication have facilitated even more extensive dispersals and regroupings of urban culture. In affluent nations, this is seen especially in tourism, second homes in the countryside, and more recently, city dwellers permanently relocating to rural areas while maintaining cultural and economic links to the city.

Urban ways of life and urban values are highly mobile, both culturally and physically, which has allowed urban penetration of the rural. Cultural and lifestyle differences between rural and urban

dwellers have for a long time been steadily eroded via the flow of consumer goods and televisual imagery from urban to rural areas.

Australia: Rurban Shifts

Changes in agriculture have also contributed to make more rural properties available to hobby and non-farmers seeking 'a peaceful country life'. Small and middle sized farms are disappearing, as rural production becomes more industrialised, technologically advanced, and therefore, more capital intensive. Specialised machinery and scientific inputs are very much part of the production of livestock, cereals, horticulture, fruit and fibres. Those who can't 'get big' either 'get out' (sell up) or scale down their farming activity and take up off-farm occupations. This has been seen in Australia in recent years, particularly with dairy and sugar production.

There are convergences: former city dwellers shifting to become part-time semi-commercial or hobby farmers; traditional farmers moving to 'town jobs' while continuing to live on the farm. Census and survey data can be misleading – identifying oneself as a farmer may be more a statement of attachment to a particular way of life, than a statement about one's income source. Similarly, land-use maps cannot distinguish between: properties that are hobby, semi-commercial or fully commercial farms; or non-productive agricultural properties whose agricultural character is being maintained (Aslin et al).

Linked to the industrialisation of agriculture, there is increasing divergence between rural production and the traditional rural landscape: think cattle feedlots, large scale poultry sheds, tunnel greenhouses; orchards covered in shade canopies. And as for the imagery of extensive grain, pasture and fibre crop production – giant boom sprays, municipal-size irrigation pumping stations, GIS-guided caterpillar tractors with headlights ploughing thousand-acre paddocks at night – they do not register at all on the urban radar.

If you like, a split has opened up between for-profit agriculture, which increasingly is being carried on in remote or invisible places (often for security or biosecurity reasons) and 'picturesque farming', with *urban escapees* and *retirees* (including retired commercial farmers) rushing to occupy smaller holdings for olive groves, vineyards, flower farms, alpacas, heritage sheep and the like. It is in these scenic spaces that agri-tourism and 'food trails' flourish, often with the aiding and abetting of agricultural extension officers spouting a new mantra of niche markets and value adding – which translates as commodify or get out!

Other actors populating and remaking these new rural landscapes of Australia need to be acknowledged:

— '*conservationists*' who buy native forest or farm blocks to regenerate or establish small timber plantations;

— '*urban economic refugees*' in search of cheaper residential land;
— '*minimalisers*' wanting to establish less materially intensive lifestyles with a degree of self-sufficiency; and their opposite,
— '*sprawlers*' seeking larger blocks than available in urban areas, where they can live extended suburban lifestyles – larger house, plus room for several cars, ride-on mower, pool, perhaps boat, horses, quad, etc. (cf. the findings of Sinclair, Bunker, Holloway, 2003).

Clearly, knowledge of how to manage rural properties so as to minimise negative environmental impacts, as well as the motivation to acquire such knowledge stretch across a wide spectrum. It also needs to be acknowledged that motivations and dispositions are not immutable: they can and will change over time and across lifetimes. Certainly, the extension of commodified lifestyles into rural regions is having negative environmental impacts, and there is a need for widely available guidelines for managing rural properties for inexperienced rural landholders, that could then later become codified. There is certainly a need to establish new cultures of care that go against the grain of the prevailing market-driven idea of lifestyle as something that can simply be picked up and purchased, then discarded at whim.

Switch: Less Developed Nations

The actors may be different, but the plot line remains the same, when shifting focus from Australia to the peri-urban regions of less developed nations, where social composition is in constant flux and where "small farmers, informal settlers, industrial entrepreneurs and middle class commuters … co-exist in the same territory, but with different and often competing interests, practices and perceptions" (Allen, 2003).

Some researchers acknowledge the difficulty of categorising regions and sub-regions as either urban, rural or peri-urban, and note that the blurring of categories is occurring at the household level (Adell, 1999). Examples are farmers with part time town jobs or working seasonally on other farms; home-based non-farm businesses on farms and generally, family members dispersed widely to gain a livelihood. The term 'multi-spatial households' has thus been coined.

Also to be noted in large third world cities, like New Delhi, is a mobile, often subsistence, labour force that periodically returns to the home farm or village, many of whom regard themselves as only temporary city dwellers (Mital, 2005). Hart has claimed "multiple, diversified, spatially extended livelihood strategies" as a distinctive feature of late capitalism (Adell, 1999). These strategies are not just limited to the poor and those who have had their traditional

way-of-life bound livelihoods made redundant by technological change and economic restructuring (this category extends, for example from Africa's urban and peri-urban poor through to ex-dairy farmers in Queensland). There are also the self-selected "multiple, diversified, spatially extended livelihood strategies" of the privileged. Examples include 'down shifters', 'grey nomads', part-time peri-urban commuters, people with 'portable careers' or who are able to adapt their skills to IT opportunities (e.g., consulting, researching, writing, advising, selling from home in a remote location to their liking).

South East Queensland Peri-Urban

And it is in somewhere like South East Queensland where the victims and beneficiaries of technological and economic change are likely to meet. In fact they already are. The pressures acting upon the region exemplify and, at the same time, exceed peri-urban typologies.

South East Queensland is the fastest growing region in Australia, expected to absorb more than a quarter of all the population growth in Australia over the next 25 years. It is estimated that by 2026 its population will be 3.7 million, up from 2.5 million in 2001 (Centre for Rural and Regional Innovation Queensland, 2005). This growth is already resulting in significant loss of South East Queensland's rural land, the recently released Regional Plan identifying "the excessive use of rural residential development on the urban fringe and in rural areas" as a major problem (Office of Urban Management, 2005). As well as rural residential subdivision fragmenting land into agriculturally non-viable parcels, it can also contribute to a new form of 'scenic sprawl' with longer distance commuter travel, thus more greenhouse emissions and reduced local air quality, as well as all the other impacts of urban ways of life (consumption-oriented, waste-generating, high-energy using, etc.) being transplanted to a rural setting.

Into this scenario of a fast growing population, many from interstate migration actively seeking the 'attractions of the countryside' and the appearance of a rural way of live, has to be added the question of water. The effects of climate change are already apparent: increasingly severe droughts are reducing dam water levels to record lows. Thus competition between rural, urban and environmental water uses is intensifying (Department of Natural Resources and Mines 2005a).

This is bringing into sharper focus the spuriousness of the rural/urban/environmental distinction. To make quantitative comparisons between agricultural and urban water users becomes quite meaningless, when one considers, for example, that South East Queensland's Lockyer Valley (an hour's drive west of Brisbane) produces close to a third of Queensland's vegetables, the bulk of which are consumed within South East Queensland.[2] All of

this is irrigated from groundwater and by diverting flood flows from intermittent creeks into storage dams – there are no rivers the Lockyer Valley. The valley is now recognised as stressed, with groundwater use continuing to exceed the estimated sustainable yield.

A range of legal mechanisms for the protection of agricultural land have been put forward[3], what is not happening however at the policy level, nor at the level of those who are theorising human settlement, is to put these problems in the frame where they truly belong, which is not simply that of space or land use, but of the overarching problem of unsustainability-as-structural and the urgent need for really big structural changes towards creating cultures of genuine sustainment. In order to begin to think this, we need to return once again to a global context.

Food and Water Futures

The urban-rural conflicts of South East Queensland are certainly not unique. Regions identified as peri-urban play a vital role in providing fresh food to city populations, and a major concern, worldwide, is that of residential and industrial expansion taking over agricultural (especially horticultural) land. In the developed world, 'urban agriculture' is sometimes promoted, somewhat half-heartedly as an answer to this. This is rarely connected to the fact that urban agriculture is already alive, well and thriving in the world's poorest cities. In fact, the keeping of livestock, growing of grains, fruit and vegetables has been on the increase over the last two decades across African, Asian and Latin American urban and peri-urban regions.

For example, in Accra, Ghana, 90 percent of the city's fresh vegetables are grown in the city, in Hanoi the figure is 80 percent, Shanghai 60 percent (World Food Summit 2002). The reasons are clear, according to FAO researchers who are encouraging urban and peri-urban agriculture as an important element of food security for the urban poor. It is a response to economic crises and structural adjustment policies introduced in developing countries, which have impacted disproportionately on the urban poor, manifested as rising food prices, declining real wages, redundancies, cuts in food subsidies and reductions in public expenditure. This urban agriculture is partially subsistence and partially for cash. Their research has shown that grower households have better health – mostly better than non-growing households with higher incomes. Furthermore, urban agriculture is often an important component of the urban systems, recycling wastes as fertiliser. (World Food Summit, 2002 and UN-FAO, 2001).

The practices of poor urban farmers are highly variable, according to means and knowledge, ranging from landless families with one or two cattle let loose on the streets each day to forage on rubbish dumps through to well-organised co-ops and commercial enterprises employing a number of people. Similarly,

city authorities vary in control and regulation of agricultural health hazards and pollution often simply turning a blind eye to activities like spontaneous cropping on vacant public land. The FAO's support of urban agriculture is open to interpretation. Negatively, it can be read as an abandonment of developmentalist ideals and a normalising of the continuity of a subsistence existence for the urban poor. More positively, it could be seen – and developed as such – as coming from a critique of modernist urban planning's separation of functions and 'out of sight out of mind' banishment of unpleasant functions (like food production and by-products designated as 'waste') to hinterlands beyond the view of urban residents.

Possibilities and Convergences

The fact that urban agriculture is now being contemplated as an option in wealthy nations suggests possibilities for knowledge sharing, this not as a one-way traffic of exporting developed nation agricultural expertise to farmers of poor nations, but also for re-inventing, developing and raising the status of survival strategies of the urban and peri-urban poor.

Given the energy, material and pollution impacts involved in bringing the world's urban poor closer to 'our' standard of living, the principle of social justice demands that we, the wealthy, need to become poorer. This is not just altruism. There are real, material benefits in divestment and disinvestment. The message is just beginning to arrive, when someone such as CSIRO's chief of livestock research talks of "the tyranny of cheap food (which) has taken its toll on the environment" and a major cause of the obesity epidemic. He continued this introduction to a recent conference on animal agriculture, asking questions such as:

> Do we need to change the way we view food? Do we need to eat less? Should we double the price of food, but only if we consume half … (and) could we produce less, increase environmental values, and maintain rural populations?" (Coffey, 2005)

Returning to the peri-urban. The question is not how to precisely define it, but how to shape its direction and manage the impacts associated with what probably is a new (or newly recognised) form of human habitation. This direction and management cannot be founded upon spatial or functional categories. These have to be 'grounded' in what is needed to sustain the well-being of populations, plus the natural and naturalised environments upon which they depend. This would mean, for example, the development of integrated food and public health policies at state and federal levels to inform other portfolios like agriculture, industry development, natural resources, and ultimately, rural and urban planning, as well as providing the criteria used to direct research funding, subsidies, incentives, tax concessions etc. Linked to this,

cities and population centres would formulate food security policies, which would impact on land use decisions and land management regulations and guidelines.

If sustainment – of the population and of the natural environment – was to genuinely inform policy at all levels, Australian cities, the peri-urban and neo-rural regions would develop very differently.

And remembering those rurban and neo-ruralists mentioned previously – the conservationists, the minimilisers, etc. – who can be found across the developed world and whose actions (unfortunately, usually unknowingly) are changing agricultural lands and rural landscapes, we could ask, is it possible that at some point there will be a convergence between those raising themselves from extreme poverty and those who have the choice of 'down-shifting'? Is it possible that moderation could become a global aspiration? This is the kind of cultural shift needed to break the hegemony of structural, market-driven unsustainability.

Notes

1. This assumption can have significant consequences, with subdivision coming to be regarded as a 'right' – evidenced in NSW, with the opening up of former green-belt zones (west of Rouse Hill and Glenfield) of the Sydney basin to residential development, after pressure from landowners (SMH 2005).

2. Looking at the proportion of particular Queensland crops contributed by Lockyer's growers gives an even clearer picture of it as South East Queensland's 'salad bowl': cauliflower – 44%, lettuce – 60%, broccoli – 75%, carrots – 90% and beetroot 99% – which incidentally is also 90% of the whole nation's beetroot crop (Department of Natural Resources and Mines 2005b).

3. See, for example, Centre for Rural and Regional Innovation Queensland 2005b.

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