

Shaping sustainable urbanism: are garden cities the answer?

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Dr. Susan Parham

Centre for Sustainable Communities

University of Hertfordshire

Introduction

Canberra’s planning is famously informed by ‘city beautiful’ ideas reflecting approaches found in Hertfordshire’s garden city settlement history, heritage and contemporary lived experience; but can these design and planning ideas work to deliver ‘sustainable urbanism’ in future - in Australia or elsewhere? In the United Kingdom, with the advent of the new Localism Act, the National Planning Policy Framework and a shortage of politically acceptable responses to pressing needs for new urban development and revitalisation, there is renewed interest at both the level of theory and practice in the capacity of garden cities to contribute to making sustainable places and communities. Britain’s Prime Minister, David Cameron, has promised to “apply the principles of garden cities” as part of his government’s overhaul of planning in England while the Town and Country Planning Association, founded by Ebenezer Howard, argues that the vision of combining the advantages of “the most energetic and active town life, with all the beauty and delight of the country” has again gained momentum in housing and urban development sectors.

Building in part on research and analysis undertaken at the University of Hertfordshire, this paper supports the presentation given at the Shaping Canberra conference and compares British, Australian and other experience of garden city and city beautiful geographies, designs and architectures in shaping - and now ‘retrofitting’ and building anew - the planned city. It explores whether these ideas can be situated as part of the perceived problem of low density sprawl, or can be understood as an aspect of a space shaping solution based on walkable, compact, fine-grained, mixed-use, intensively-used and diverse cities that will be resilient in the face of climate change.

Situating the garden city in historical practice

The garden city is sometimes thought to have been born with Ebenezer Howard, but various “villages of vision” (Darley, 1975) for remaking city space were current in the 19th century. Rosenau (1983), for instance, situates Howard within the Ideal City tradition, placing him among the utopians of the 19th century and prefiguring the futurists of the early 20th. And Howard acknowledged his debt to earlier utopian and reformist ideas. Adelaideans probably already know that Howard cited the influence of Edward Gibbon Wakefield's ideas (as did Marx) about moving populations and industries from city to the country, or to newly colonised areas, and Howard also referenced James Silk Buckingham's mid 19th century proposals for a model town with a greenbelt round it. Almandoz (2004: 238) suggests Howard owed something to French 19th century approaches to the *cit -jardin* as the suburban response to the question of the *banlieu pavillonnaire* (outer suburbs of detached houses), and also draws our attention to an intentionally back-dated use of the term ‘garden city’ to

catalogue Havana's 1850s neighbourhood of Vedado. And, of course, the second annual conference of the Garden City Association was held in Port Sunlight, William Hesketh Lever's industrial garden village near Liverpool (Schuyler, 2002), while early garden city literature cited both Port Sunlight and Cadbury's Bourneville outside Birmingham as demonstrating the practicality of developing planned towns which contained both housing and industry (Fishman, 2002: 61).

Howard's ideas were, in part, a response to the appalling overcrowding, disease and general misery he saw in London in which very high population densities, terrible housing conditions, poor sanitation and poverty led to miserable lives and early deaths. The abysmal condition of many working class urban populations, a spatialised effect of capitalism, had been well described by Engels in relation to Manchester, and work by Charles Booth and others had documented how bad things were for the poor in London who lacked pure air, water and sunlight. Social reformers like Octavia Hill were active in trying to improve poor housing conditions, access to green space and provision of health services, but Howard took the very radical step of proposing both a settlement form and a communal financing system that might offer a self sustaining economic system for garden city residents and workers and ameliorate the horrors of the Great Wen. As Schuyler (2002: 6) points out, Howard managed to achieve something that many other proposals failed to do, a workable synthesis between the visionary and the practical, and one grounded in a pragmatic but highly communitarian economic structure:

Howard proposed that in future years revenue obtained from higher rents benefit the entire community rather than a handful of individual landowners: the income would amortise the money borrowed to start the garden city and eventually subsidise a whole range of cultural and social welfare institutions.

So what did the garden city consist of? To achieve the slumless and smokeless spatiality he desired, Howard's *Tomorrow: A Peaceful Path To Real Reform, of 1898* proposed Garden Cities, famously based on the "three magnets" of town, country and town-country, "in which all the advantages of the most energetic town life, with all the beauty and delight of the country, may be secured in perfect combination" (Howard, 1946: 46). While those garden cities actually built at Letchworth and then at Welwyn Garden City were separate settlements Howard had intended a kind of network or constellation (Schuyler, 2002: 9) of these towns to be constructed. Garden city designs based on Howard's proposals, such as those by Parker and Unwin at Letchworth north of London, offered their inhabitants the possibility of suburban living; with areas for housing and industry around a cultural and social centre. Socialised food-related features included some of the houses having "common gardens and co-operative kitchens" (Howard, 1946: 54) and the improvement of land not in use for building, where fruit trees could be planted or a dairy set up (Miller, in Parsons and Schuyler, 2002: 106), as well as allotment areas in a park like settings and a productive agricultural periphery. It is worth noting that Howard's radical communitarian ideas about retaining value for the benefit of the townspeople were continued at Letchworth which maintained its economic structure, unlike the less fortunate Welwyn Garden City where these value returning mechanisms were abolished through the actions of national government.

Unlike many later developments of suburban character, Howard was particularly concerned with the possibilities for agricultural production in close vicinity of such settlements. These were advocated by Howard as of benefit to the farmer in producing a local food market and to inhabitants in lowering food costs. The greenbelts proposed by Howard were not just a landscape setting for his Garden Cities but a highly productive agricultural component of the economic base underlying these settlements, and it is notable that Howard saw urban food waste (and human waste) going back into the countryside round these settlements to enrich the soil (Howard, 1902: 13-14). Presciently, Howard also proposed electrically powered transit arrangements to move produce and people, which would keep the "smoke fiend...well within bounds' and allow produce to be sent to more distant markets" (Howard, 1902: 6).

Every farmer now has a market close to his door. There are 30,000 townspeople to be fed... and this is a market which the rent he contributes will help to build up (Howard, 1902: 12).

Rational, local food growing and shopping arrangements (and ethical approaches to food) were central to Howard's conceptualisation of the garden city and influenced many imitators. Consciousness about food became embedded in the culture of the garden city: historical connections between the garden suburb and vegetarian ideas has been noted (Miller, 2010; Spencer, 1996), yet these were reflected in later suburban developments in sometimes perverse ways. For instance, Howard's notion of a Crystal Palace which was conceived as a large covered circular arcade ringing the City's central park, in part given over to "that class of shopping which requires the joy of deliberation and selection" (Howard, 1902: 4), is thought to have contributed to the idea of the "covered collective retail space" of the regional shopping mall (Ward, 2002: 229).

In the UK, notable garden city examples such as Letchworth Garden City included shopping parades built in the town centre; while Louis de Soisson's 1920s master plan for Welwyn Garden City showed a town divided into four by railway lines, with each area boasting its own local food shops (Miller, in Parsons and Schuyler, 2002: 125). Barry Parker's 1927-29 plan for the "municipalized" garden city of Wythenshawe in Greater Manchester, meanwhile, included neighbourhood shops and plans for a major town centre (Miller, 2010: 84). Unwin's 1905 plan for an artisan's quarter in Hampstead Garden Suburb in London, proposed and promoted by Henrietta Barnett (Miller, in Parsons and Schuyler, 2002: 113) meanwhile offered "a garden suburb for all classes...where the innovation of the Garden City Movement [was] allied to a broad social purpose" (Miller, 1992: 22). The plan foreshadowed ideas set out in Unwin's 1912 pamphlet *Nothing to be Gained by Overcrowding* and reflected his diagram contrasting (undesirable) traditional terrace housing with (desirable) detached and semi-detached garden city housing arrangements. Unwin's plan had included two shopping parades but these "somehow got lost in the transition to Edward Lutyens plan" and the relative isolation of 'The Suburb' meant that by the 1930s 'The Market Place' was developed astride a diversion to the major roadway of the A1" (Miller, 2010: 65) to make good this absence. In fact, a salient characteristic in food terms of the near ubiquitous garden suburbs of post First World War Britain, was the loss of a relatively direct spatial relationship between housing and food shopping areas, although allotment food growing opportunities were sometimes more accessible. Morphological work on the suburbs of the interwar period in the United Kingdom suggests that

residential areas were frequently laid out with little or no thought having been given to the provision of social services...Despite the fact that movement within suburbs was still mostly on foot, town-planning schemes prescribed the concentration of shops within a limited number of designated areas, often at main road junctions or near railway stations. This was in marked contrast to the individual corner-shops at both major and minor road junctions and the shopping ribbons along main roads that were characteristic of the majority of residential areas constructed before 1914 (Whitehand and Carr, 2001: 44, based on Jackson, 1973: 129-130).

The greenbelt was a key element and Howard again referenced Adelaide's plan in relation to its parklands. As Freestone (2002) notes "parkland towns" in South Australia that had been designed and planned by Maslen, Light and Goyder prefigured and influenced Howard's thinking about the function and design of the greenbelt round his Garden City. Of course, as Freestone points out, such green belts have an ancient urban lineage but in the South Australian case Adelaide's parkland belt (ascribed to Colonial surveyor William Light) remains somewhat intact despite various depredations. In Freestone's (2002: 71) view, the "hundreds of little Adelaide's codified by State Surveyor General G. W. Goyder in the 1860s" offered "a threefold morphological division of town, parkland and suburban land" which were impressive in regional if not indeed in world terms.

The decline of the garden city ideal?

Like so many things, it has been argued that critical aspects of the garden city were lost in translation – confusing Howard's garden city “with the garden suburb found at Hampstead and in numerous imitations” (Hall, 1988: 88). Equally clearly, aspects of Howard’s legacy have influenced many suburban and new town developments worldwide (Parsons and Schuyler, 2002). Approaches to settlement that reference the garden city may have misunderstood or more cynically misapplied some of Howard's basic principles of physical shaping such as the development of high density, populous conurbations; and ignored his grand aims including the creation of self governing communities and the reconstruction of capitalism (Hall, 1988: 88). Notwithstanding these deficits, garden city ideas have been employed in certain ways in both the United Kingdom and the “new urban frontier” where there grew

a broad functional region of *truly* new cities, which coped with very rapid rates of population increase by spreading outwards through the replication of dispersed suburbs of single-family houses (Frost, 1991).

Fishman (2002: 58) has pointed out that Howard's idea of the “boundedness” of a city reflected significant depth of thinking about urbanism and was central to his conceptualisation of the garden city, yet was an area in which imitation often failed to properly reflect the original model. Building on the neglected work of 19th century economist Alfred Marshall and the American reformer Henry George, Howard challenged the idea that continuous growth and increasing scale should be the measure of a city's success. For Howard (1902: 9), the greenbelt around the garden city helped ensure its bounded quality, and as noted above, was of immense practical use in maintaining a productive spatial, environmental and economic relationship with the town it served. Of course the problem of sprawl, loss of agricultural land and food security are still issues that confront us – undoubtedly more so given climate change – and in looking at how Howard's ideas were applied in other places and renewed interest in garden cities today, how to respond spatially, socially and environmentally to the ever-growing megalopolis provides a critical context which I will return to.

In the USA by the late 19th century there were a number of examples of bounded towns with garden city like attributes that had arisen independent of Howard's work and demonstrated some of the strengths of urban containment. The later aircraft industry focused settlements on the edge of Los Angeles showed some similar characteristics (Hise, 1997). Yet over the course of the 20th century both the rise of mass car ownership, and changes to the structure of consumption, overtook bounded city approaches in most urban development shaping. As Fishman (2002: 64) argues, so keen were garden city-new town proponents to distinguish their model from the traditional city that went before it that they under-emphasised the garden city’s bounded nature and emphasised instead “loosening urban textures in favour of models drawn from the small town or the suburb”. And the attempts to find space for cars from the 1920s onward (in the Radburn layouts of Clarence Stein and Henry Wright for instance) made those models even more anti-urban (ibid). New Towns, in particular, failed to achieve either the density or walkable scale that would allow them to work in the way that the garden city did. As Hall and Ward (1998: 53) show, the New Towns movement and establishment post war in the UK was a direct result of the success of garden cities and suburbs, but the twenty-eight built, especially the latter ones (the Mark Twos and Threes), were very much shaped around private car use and this was for many urbanists part of their problem. There is a deep irony that Howard's ideas have often been called upon to defend suburban sprawl when he so ardently planned what Mumford (1946) called “a compact, rigorously confined urban grouping” (Fishman, 2002: 62). As Southworth and Owens (1993: n.p.r.) explain in relation to their morphological work on American urban fringe locations:

The form of the contemporary suburb is not a completely new invention but has roots in early models for ideal suburban communities such as the Garden City schemes of Ebenezer Howard and Raymond Unwin and the neighborhood unit of Clarence Perry and Thomas Adams. However, the Garden City ideals of a communal, self-sufficient satellite city set within a greenbelt of parks and farms seem to have been completely lost, as have notions of walkable, transit-supported living within convenient mixed-use neighborhoods and communities. High land values and pressures for development have eroded or completely obliterated most greenbelts. What has survived from these models is the residential district of primarily single-family homes, set on a green plot of land, within a short distance of an elementary school...The problems of design and development at the urban edge are apparent at all scales, from individual house lot to entire subdivision or community.

The garden city – selective borrowing

Once proposed, in the particular form laid out by Howard, the garden city concept really took off. Neither Howard nor his publisher expected the book (or his ideas) to receive much notice but by 1914 it had been translated into a number of languages and there were garden city associations in eleven countries. In fact, *Garden Cities of Tomorrow* was one of the best selling books on town planning in the 20th century and thought to be among the most influential (Parsons and Schuyler, 2002). The 20th century also saw the development of a rich set of worked examples of garden city and garden suburb inspired developments in practice. Miller (2002) notes that

Garden cities and garden suburbs were a dominant theme in community planning throughout the twentieth century. Ebenezer Howard's garden city at Letchworth and Henrietta Barnett's garden suburb at Hampstead, London, attracted international renown and emulation, beginning before 1914. The design standards proved adaptable to private development, model industrial villages, public housing, and state new towns. Today, the ideas of Howard, Raymond Unwin, and John Nolen are providing the basis for sustainable development and the New Urbanism movement.

As well as examples in other parts of the UK, including developments in England and Scotland (such as Pollokshields in Glasgow) garden city ideas spread around Europe and the US, with Ward (1999) suggesting this was a process of acquiring modernity through the cultural importation and appropriation of planning models from elsewhere. Of European examples of influence, the German architect Heinrich Tessenow was among those who first planned and designed garden city inspired settlements; with Hellerau near Dresden thought to be that country's first garden city. Tessenow was also instrumental in the planning and house design of some highly regarded architectural expressions of garden city ideals elsewhere in Germany. In other parts of Europe, examples included garden cities built in 1923 in Russia, outside Moscow, at Kapyla near Helsinki in Finland in 1912, and in the 1930s in France, outside Paris (Goldschleger et al, 2006), although the *cité-jardins* built around Paris after the First World War had only a limited relationship to Howard's ideas. In the 1920s the Roman industrial neighbourhood of Garbatella experimental Garden City-influenced design was adapted for a Roman context and emphasised the concept's capacity to focus on working environments:

The first period of construction from 1920 to 1923 saw the Garbatella develop along the lines of Ebenezer Howard's model of the Garden City. While those who planned the neighbourhood continued to aspire to Howard's ideals, the Garbatella's rapid expansion (by 1930 it boasted the highest population density in the city) meant that it failed to live up to these aspirations. Despite increased population levels and the construction of larger multi-functional 'super-blocks', the architecture and planning of the Garbatella contributed to the fostering of a sense of community and a distinct Roman identity" (De Michelis, 2009).

In Asia, the Japanese Home Ministry published a book titled *Den'en Toshi* (Garden City) in 1907, introducing Howard's ideas to Japan, and built examples encompassed the city of Denenchōfu (Oshima, 1996) near Tokyo:

The first of these developments, Den'en Toshi (Garden City), was inspired by the British garden cities movement, although as Watanabe (1980) argues, little more than the name was really borrowed, as the towns so developed were primarily suburban real estate speculations which had neither the social ownership aspects of Letchworth, nor any semblance of independence from Tokyo where their residents worked. The model proved popular, however, and during the 1930s a considerable number of railway suburbs and university campus towns were built in open countryside within about 30 km from central Tokyo (Sorenson (2001: 15).

In Commonwealth countries, too, garden city ideas were gaining traction. In New Zealand of the early 20th century, fears of the kinds of overcrowding and related problems of the city that had occurred in the "mother country" led to a number of garden suburbs being constructed (Schrader, 1999). The garden city planner Charles Reade (1883–1933) was active in South Australia, the then Malaya and Northern Rhodesia, while Albert Thompson (1878–1940) was planning places in South Africa and Nigeria, transposing garden city ideas to a range of colonial urban circumstances. In Australia the diffusion of garden city ideas resulted in "garden suburbs in Sydney, industrial garden villages in Hobart and garden towns in the Murrumbidgee Irrigation Area in New South Wales" (Freestone, in Garnaut, 2006: xiv) including the Griffin designed Leeton. Reade designed parts of irrigation area towns in South Australia, with extensions to Berri and Wakerie and the new town of Barmera (Freestone, 1989: 132). In the 1920s (at least partly developed) model towns in rural SA included Thevenard, Peebinga, Kringin, Caliph, Wunkar, and Yinkanie (ibid: 138). And of course Canberra famously reflects garden city ideas among the influences on its city beautiful approach. Marion Mahony Griffin's wonderful drawings really helped, as Alasdair McGregor (2009: 133) notes:

One of the strengths of the Griffin plan was its easeful melding of Beaux Arts and City-Beautiful formality on one hand, with the more relaxed and intimate precepts of the Prairie School landscape and the liveable Garden City on the other.

Returning to Reade's work, like other garden city developments primarily planned to house those on modest incomes (such as Kapyla in Helsinki, Finland and Orechovka in Prague, Czech Republic) Reade was responsible for Colonel Light Gardens, Adelaide's first garden suburb. A New Zealander, Reade was South Australia's original Governmental Planner (Tregenza, 1986) and was instrumental in introducing what was originally termed Mitcham Garden Suburb, renamed Colonel Light Gardens in 1921 to commemorate the state's pioneer town planner (Garnaut and Hutchings, 2003: 278). As Freestone (1989: 177) notes, Reade also designed garden city inflected subdivisions at Novar Gardens, Gallipoli Garden Village (now Allenby Gardens) and Galway Garden Suburb (now Marleston). Enabled by a Garden Suburb Act (1919), until its repeal in 1975 the garden suburb was administered by a commissioner who had both municipal and development corporation powers. Widely celebrated for its "overall physical planning, its urban design and its cohesive domestic architecture" (ibid) Colonel Light Gardens was constructed on a 120 hectare site

where people of all socio-economic groups would live as a community with no barriers in terms of access and no segregation on the basis of income. In its planning, Reade drew together the latest international practices in two-dimensional urban design and added living, community, business and recreation areas so that the whole formed a satisfactory pattern that has stood the test of time.

The entire suburb of 1200 houses is now listed as a heritage item at State and Federal level, but it is worth noting that later attempts to build new towns near Adelaide – Elizabeth to the north, and the planned (but never built) Monarto to the west – failed to live up to the livability level achieved at Colonel Light Gardens through its garden city influenced urban design, architecture and landscape qualities. Modelled on Hampstead Garden Suburb, but incorporating American inspired elements including a wide parkway, as Garnaut (2006: xiv) argues, Colonel Light Gardens has been viewed as a success story that undercuts the "conventional wisdom" that garden suburbs are an inferior version of the "real" garden city.

Elsewhere, too, garden city ideas were influential. Goldschleger et al (2006) note that the then Palestine was part of the wider take up of Howard's garden city ideas, and garden suburbs were initiated in Israel where the 1920s saw the development of a number of such neighbourhoods. For example, Patrick Geddes was commissioned in the late 1910s "by the Zionist Organization to design and plan the Hebrew University in Jerusalem, garden suburbs for the cities of Jerusalem and Haifa in 1920, and a number of settlements elsewhere in Palestine" (ibid: 59). The development of the garden suburb of Ahuza Herbert Samuel in the northern city of Haifa suggests that again a hybrid of influences were at work from colonial town planning, English Garden City and Suburb ideas and - intriguingly - concepts imported by Romanian immigrant leaders who planned to develop the suburb as a basis for settlement there (Goldshlager et al, 2006).

In Latin America, meanwhile, garden city models began to be invoked in places including Argentina, Mexico and Peru; and were influential in producing somewhat hybridised forms through a process of selective borrowing in places including Venezuela and Brazil (Almandoz, 2004). In Brazil, for example, Almandoz (2004) reports that Raymond Unwin and Barry Parker collaborated on designs for new *bairros* in Sao Paulo. Parker stayed in Sao Paulo from 1917 to 1919, and worked on

projects for the upper and middle classes, elaborating Unwin's original proposal for the site of Jardim America, a suburban neighbourhood with an innovative layout that included common areas and ample gardens in front of the houses (ibid: 446).

As Almandoz (2004: 448) explains

the renovation of layout, functional activities and architectural vocabulary made the new *bairros-jardins* appealing for a *paulista* [Sao Paulo region] bourgeoisie that wanted to leave behind the crowded centre, already swarming with newcomers from the Brazilian province and overseas.

While the majority of *bairros-jardins* ignored aspects of the garden city model that reflected Howard's social purpose, there were also examples where working class housing was integrated into the mix, such as at Recife's *Campino do Derby* (ibid). One of the most interesting hybrid garden city forms in Latin America was an example of the development of the industrial part of the garden city model:

There was also a combination of the garden-city idea with the neighbourhood unit in the case of Ruy de Viveiros Leiria's residential project for Vila Asuncao (1937), in the centre of Porto Alegre; towards the north, an industrial area was planned by Luiz Artur Ubatuba de Faria, combining elements from Howard's original proposal with the zoning of Tony Garnier's Industrial City (ibid).

The garden city distorted?

As garden city ideas permeated urban development practice worldwide, there was also some thinning out of the model, with garden suburbs seen as a more acceptable and practical solution than the development of whole cities (Harrison, 1976). It might reasonably be suggested that there is a difference between 'selective borrowing' of garden city ideas, and claims for garden city status that represent a kind of greenwash for urban developments which have few of their salient characteristics, and may even be used to pursue extremely questionable aims. Theorists have noted the various ways that Howard's original, radical proposals were unpicked, with the garden city "stripped of its original and radical content" (Freestone, 2002: 73); coming to be associated, for instance, with eugenics (Voigt, 1989; Currell, 2010) and with Nazi planning ideology (Fehl, 1992). The garden city model was even evoked by the arch modernist, Le Corbusier, for his *Ville Radieuse* of 1935 in which he referred to high-rise developments as vertical garden cities. Some of the examples just discussed show that diffusion, if not distortion, was occurring from early on in the trajectory of garden city development.

In contemporary urban practice we are seeing the rise of urban forms including gated communities in a wide variety of locations which often claim garden city like attributes. But are these really anything to do with the kind of garden city principles alluded to earlier – and why are they emerging? Birch (2002: 174) tries to make sense of this complex history by dividing American responses to the garden city model into five planning generations. 1900-1930 constitutes the first generation, exemplified by Radburn and other cities and suburbs directly influenced by Letchworth and Welwyn Garden City. The 1930-1950s period of greenbelt towns is understood as the second generation, while the 1960s-1970s is the third era, comprised of new towns including those which were modernist in style or shaping (such as Reston and Columbia). From the 1960s to the present is defined by 'condo' developers, and finally, the 1980s to the present is situated as the era of Smart Growth and New Urbanism.

As cities grew in scale, and urban form moved from urban to suburban and then from post urban to megalopolitan in nature, it might be thought garden city ideas would be completely left behind. Yet in some ways new urban forms were solidly rooted in their suburban antecedents (Teaford, 1997). Greg Hise (1997: 11) has argued cogently that edge city style spatiality can be traced back in conceptual terms to the garden city and planned urban industrial dispersion. Surveying the nature of 21st century post-urban space may suggest the employment of garden city or suburb descriptors and actual examples are part of an

ad hoc, laissez-faire urbanism. The result is a mix of stuff all over the place...in other words, left to its own devices this is what a modern, car-oriented, telecommunications-rich society would naturally generate (Marshall 2009: 243).

And this brings us on to the gated community as garden city – a form which has arisen in a wide range of urban and conurbation circumstances – and, it is argued, reflects a hyper-individualised, private-realm focused culture in practice (Calthorpe, 1993). So-called privatopia (McKenzie, 1994) demonstrates that elements of Howard's garden city vision were transmogrified into an urban spatiality which at once plans for building entire communities yet turns its back on the public realm. By 1998, it was estimated that around 16 million Americans were residents of master planned and gated communities (Low, 2003), including upmarket golf course focused developments (Sorkin, 1992). Those with economic resources have withdrawn from a range of external threats (or perceived threats) including fear of crime, and in the pursuit of particular leisure interests. Among numerous other places, gated communities are mushrooming in the USA (Blakely and Snyder, 1997; Webster, 2001; Macionis and Parrillo, 2007), in Canada (Grant, 2005), in the *poselki* or planned developments around Moscow (Blinnikov et al, 2006), in the Arabian Peninsula (Glasze and Alkhayyal, 2002; Glasze 2006); around Chinese cities (Pow Choon-Piew, 2009), in South Africa (Gnad, 2002; Landman, 2002), Ghana (Grant, 2005), India (Falzon, 2004), Indonesia (Leisch, 2002), Australia (Burke, 2001; Rofe, 2006; Costley, 2006), the UK (Atkinson and Tranter, 2011), and Latin America (Coy, 2006) including Argentina and Brazil (Caldeira, 2000).

In China's experience of this phenomenon, it has been argued that the leisure-focused gated community reverses the paradigm in which leisure and tourism are byproducts of urbanisation processes, to one where they become "producers of specialised urban development" (Giroir, 2007: 236). And within this widespread urban movement a green or parkland setting is a key attribute and one in which the notion of the garden city is often directly invoked. As Le Goix, and Webster, 2008) note

The issue is not really the gates, it is the fragmentation of the urban governance realm into micro-territories. Some have called it the medievalisation of the modern city. Others see it as a shift back to something more natural, after a 20th century experiment in municipal socialism: yielding back to the market certain municipal management functions.

Yet, as Webster (2001: npr) argues, the gated communities of today are above all an urban development product and Howard was similarly an inventor of just such a private product that appealed to urbanites:

Prevailing social problems and popularist social-reform ideas aside, the kernel of Howard's invention was a proprietary community that challenged the conventional wisdom about the location, governance and financing of cities. The product was aimed at urbanites – producers and consumers, factory owners and homeowners – who wished for a cleaner, more healthy and efficient living and working environment. It is in this sense that modern proprietary communities are kin to Howard's Garden Cities.

Webster (2001) in fact takes the view that,

If Howard had lived a century later in newly industrialising China or Indonesia – countries facing many of the blights of late nineteenth century Britain - he might well have invented the gated city, proprietary suburb or condominium apartment complex. He was a popularist and he would have been quick to see the massive middle-class market for living in residential clubs. Where his social sympathies would have lain in the ethical debate about private communities and social exclusion is impossible to say. He was a pragmatist and would no doubt have invented innovative housing schemes for the poor as well as for the professional classes if he had saleable ideas. He might well have considered it vital to make urban living comfortable for the professional classes who generate much of the wealth that brings national prosperity – a prerequisite for sustained poverty reduction.

Garden cities revived?

Today our issues in relation to urban growth are well known, with the expansion of conurbations that swallow up huge swathes of land and resources creating places that may offer desirable individual living environments but impose high sustainability costs at societal level which are externalized on to others and the future. In this splintered (Graham and Marvin, 2001) or scattered urbanism of what Kunstler (1994) calls the “geography of nowhere”, traditional notions of concentric rings of urban development have given way to more friable places that can no longer be understood as bounded localities (Phelps et al, 2006). This also means that the boundedness of Ebenezer Howard's garden city again has a particular resonance as

now our challenge is to escape from the low density “anti-city” (to use Mumford's term) that has sprawled out over whole regions and has de-concentrated the central cities far more radically than the garden city activists ever envisioned (Fishman, 2002: 59).

Given this context the question is whether the garden city model can challenge and improve on the nature of contemporary urban development or be situated as part of the problem? Could it perhaps contain elements that are both part of the problem and of the solution? There has clearly been renewed interest in the idea of the garden city as a form of urban shaping within Hertfordshire, in the UK more generally and internationally as one possible response to worsening urban conditions and prospects. More positively, Ward (1992: 1) argues that Howard's ideas are being rediscovered and re-examined because of resurgent interest in the kinds of communities and neighbourhoods he advocated.

Within Hertfordshire, the University of Hertfordshire, which is located in the New Town of Hatfield close to Welwyn Garden City, was a co-sponsor of a substantial charrette (intensive design and engagement) process led by Andres Duany of Duany Plater-Zyberk, which produced the *Hertfordshire Guide to Growth* (2008). This offered scenarios with worked designs and retrofit proposals for the future growth of the county of Hertfordshire, including extensions of garden city settlements, ‘satellite’ garden villages and even new Garden Cities. These scenarios were seen as a way of both exploring housing and mixed-use community development needs and minimising impacts on, and exposure to, climate change, as well as supporting improved quality of life. There was a strong focus on resource use

including rural landscapes and agricultural land needed for food security. The scenarios were situated as offering a kind of urban village model rather than a more suburban spatiality which constituted the 'business as usual' form of city building implicated in producing sprawl, edge cities, edgeless cities and wider conurbations. It was argued at the time that developing just one new garden city could deal with the county's housing requirements in a sustainable way that avoided some of the economic, social and environmental issues that emerged in relation to the spatiality of post war New Towns:

Indeed, a New Town of 100,000-140,000 dwellings could absorb the growth of Hertfordshire well into the mid-century. There is a long history of New Towns in Hertfordshire. The County is home to the first and best known garden cities in the world, Letchworth and Welwyn, as well as several of the most important New Towns from the postwar period. Whilst the garden cities have been judged successful, the New Towns are not necessarily considered to be so, and have damaged the reputation of New Towns as desirable Scenarios for growth. Nevertheless a new town on a revised model, incorporating all that has been learned, should be considered as it would have many positive consequences.

Since 2008, certain structural elements have changed, including the abandoning of growth targets; and the advent of the National Planning Policy Framework (NPPF) and the new Localism and Decentralisation Act coming into force. Yet similar issues for the county remain: how to deal sustainably with pressures and requirements for growth; how to improve resilience in relation to the environment, and the social and economic life of the county; and how to harness the benefits of development while minimising any cost to communities. Against this backdrop it seemed timely to review where we have come from and consider directions for the future in relation to the county's future development in the light of the ideas generated by *The Guide to Growth*. A three-month intensive research project is underway to explore *The Hertfordshire Guide to Growth: Five Years On*.

Nationally in the United Kingdom, Garden Cities are back on the agenda. The current United Kingdom government mentioned garden cities positively in the National Planning Policy Framework where it stated it would support local councils that wish to bring into being a new generation of garden cities. The British Prime Minister, David Cameron, promised to "apply the principles of garden cities", including "more open space and characterful housing", as part of his government's overhaul of planning in England, noting that it was

important to create places where "people want to live". Some people feel we've lost the art of creating great places with the right social and environmental infrastructure. Certainly, mistakes were made in the [post-war] new towns, with the state deciding arrogantly what people ought to like. But in the last century, private and social enterprise also created places like Hampstead Garden Suburb, Letchworth and Welwyn Garden City - not perfect, but popular - green, planned, secure, with gardens, places to play and characterful houses; not just car-dominated concrete grids (Cameron, 2012).

Through its housing strategy, too, the government's Housing Minister argued that "we need imaginative proposals to come forward which get us back to Howard's original ideas" and went on to invite "the Town and Country Planning Association (which grew out of the original Garden Cities Association) to start a discussion with developers, investors, designers, local authorities and, most importantly of all, community groups, to reinvent the garden city for the 21st century" (Shapps, 2011). The TCPA, perhaps unsurprisingly, wrote approvingly about the government's approach and future garden city opportunities:

We think this is the right approach. Over the last century the garden city ideals have proven to be outstandingly durable. Today, we still face the primary challenges confronted by early garden city pioneers: meeting our housing shortage, generating jobs and creating beautiful, inclusive places. However, we also have the new challenges of globalised markets and the urgent need to adapt to and mitigate the effects of climate change.

With...strong reference towards these principles emerging in the coalition government's policies it is worth re-examining the original vision; garden cities combine the very best of town and country living to create healthy homes for working people in vibrant communities. The garden cities were

fired by a sense of idealism and enthusiasm, with numerous voluntary organisations. Today, we can go further. Creating garden cities can provide the opportunity and the economies of scale to truly fulfil the ambitions of sustainable development by delivering multiple benefits including social housing, zero carbon design, sustainable transport and local food sourcing.

New communities also offer a powerful opportunity to introduce governance structures that put people at the heart of new communities and hand over ownership of community assets. We are working with local councils, planners, investors and developers to explore the types of partnerships and model approaches for creating new garden cities and suburbs through the emerging policies. Our experts are exploring how we can reconnect people and planning, giving communities a stronger say and developers a greater certainty.

Setting out the benefits of comprehensive planning to create garden cities and suburbs today the TCPA (2013) called for vision, leadership and good governance; techniques to unlock land for new garden city developments; support for garden city friendly infrastructure for housing and jobs (and more widespread use of the contemporary versions of its original financing model that captures land value for residents); a focus on planning ahead through long term holistic master-planning; and increasing the planning, design and management skills needed to deliver on the garden city vision (and offer greater possibilities for including things like self-build and affordable housing schemes).

The UK has also seen various reports about possible new garden cities emerging, and some more definite press reports of new garden suburb development applications, despite a recent context of highly unpopular proposed 'eco-towns' such as Northstowe, and a downturn in the house building industry. The Daily Telegraph newspaper (2012) reported on a proposal to build up to 100,000 homes on greenbelt land in the Midlands near the controversial High Speed 2 rail route:

The plan...would exploit the new and highly controversial National Planning Policy Framework, which aims to simplify Britain's planning laws, increase economic growth and provide homes for Britain's booming population. If it goes ahead, the development would effectively obliterate the open countryside east of Birmingham to create Britain's longest continuous conurbation, stretching 40 miles from Coventry to the far side of Wolverhampton.

More recently (Bell, 2012) the TCPA unveiled a proposal to turn Heathrow into a new garden city with about 14,000 homes, were the airport's primary function to cease. The vision for Heathrow Garden City was inspired by the original garden cities at Welwyn and Letchworth, and the new settlement would be made up four garden suburbs and two urban villages, adding 400 hectares of landscaping and 35 hectares of open water. It would provide housing for more than 30,000 people, on-site employment for over 80,000 people, a retail park, a business park and an education campus with an engineering centre of excellence. Keeping Heathrow's current infrastructure,

Heathrow Garden City illustrates how the airport site could provide homes, employment and a full range of facilities and services served by good public transport, all set in an attractive landscape. The paper highlights how it would be designed to be beautiful, environmentally sustainable, socially successful, financially sound and democratically delivered and governed (Bell, 2012).

In the south east of England, near the Kentish town of Ashford, it was reported that a planning application for a 5,750-home, 415-hectare garden suburb development had been submitted to Ashford Borough Council. Proposed to be developed in four phases over the next two decades, it would contain three neighbourhoods, a high street, a secondary school, four primary schools, a park and green spaces, providing 1,000 new local jobs. The new garden suburb at Chilmington Green would be "connected to Ashford by a network of footpaths, cycle routes and buses, while a renewable energy strategy will meet part of its energy needs" (Berkin, 2012). Within Hertfordshire, meanwhile, a garden suburb proposal for a development to extend Welwyn Garden City to the south-east is noted in the Architect's Journal (Marks, 2013):

The studio's 'Birchall Garden Suburb' visioning statement and masterplan was influenced by Ebenezer Howard's and Louis de Soissons' original 1920s designs for the city. The masterplan features a large landscaped area outdoor alongside 2,500 new homes. The scheme includes a park, wildlife corridor and tree-lined streets in a bid to increase biodiversity. Direct public transport and cycle routes would link the development to the existing Welwyn Garden Suburb district.

Online commentators note the perennial problem of low housing densities and the apparent appearance of the discredited housing typology of deck access flats, offering an alternative place shaping prescription:

Is that really an extended balcony access block of flats in the top left? Surely in WGC of all places we can build streets of houses and not revert to 1950s high rise disaster flats set in unloved green space? Make the green space largely private and you don't have to charge a service charge to maintain it (badly, usually). If this land is available, why not build to a sensible suburban density with 20% single person/couple accommodation, 20% smaller terraces, 40% semis and smattering of detached, the balance for older/disabled people? (Moss, 2013)

Further afield a number of theorists and practitioners have noted how New Urbanist approaches to place shaping appear to reflect some of the best elements of the garden city model – working with the grain of a very private sector oriented development process but building in the spatial design strengths of walkability, good quality housing, proximity to services and employment – all with a view to reducing automobile dependence and mitigating climate change effects. In a Parliamentary background note in relation to Canberra, James (2012), for example, points out that the debate about future development has been characterised as urban consolidation versus garden city style growth, and that Canberra's particular brand of garden city 'borrowing' may be part of the problem. Instead, New Urbanist ideas could well help resolve the issue that:

Some Australian suburbs have tended to follow an old garden city style in the manner of the British Milton Keynes new town stereotype. The new urbanism encourages active street frontages, walking, interactions and community lifestyles, with a focus on compact urban form through regulatory changes, multi-use zonal redevelopments, public transport and building infill (James, 2012).

With demographic changes including ageing and the formation of more one and two person households, there is clearly pressure to build new development areas around Canberra. At the level of policy, Canberra's planning strategy (2012), though, appears to come to grips with the issues this creates in sustainability terms, and supports densification, rapid transit and walkability actions (Planning Strategy, 2012). However it is equally easy to see how garden city ideas might be invoked in the development process itself without much substance behind them in urbanist terms. For instance, as reported in the Canberra Times in June 2013, although the West Belconnen development of 4500 new homes is described as a sustainable community, with green energy, early public transport investment and plans to create a green corridor conservation area, accounts of its urbanism also suggest a largely residential dormitory community that will increase the city's sprawl, rather than one more substantially influenced by garden city ideas:

The development, which will be adjacent to Holt and West Macgregor, will extend Canberra's urban sprawl in the area to the NSW border but will not yet give the territory its first cross-border suburb" (Canberra Times, June 5th 2013).

Similarly, plans to develop several new suburbs in the Molonglo river valley area, following its devastation by bushfire, demonstrate a similar combination of garden suburb related strengths and weaknesses. Development here is proceeding according to an overall masterplan which stresses both environmental quality, and a capacity for social interaction that hints at Canberra's garden city influences. The documentation for the suburb of Wright,

for example, suggests a kind of garden city inflected, hybrid model in which there appears to be a strong integration with natural landscape features, relatively low residential densities and a gridded street network:

The Master plan for Wright embraces the natural environment, with wide tree-lined streets and recreational and cycle paths connecting the suburb to surrounding amenities such as Stromlo Forest Park, the Molonglo River corridor, the planned Coombs local shops and school, the National Arboretum Canberra and Civic Centre.

Wright's grid design creates a walkable neighbourhood that disperses traffic and reduces vehicle trip lengths which will reduce carbon emissions. It also means that the majority of dwellings in Wright will be within an 800m walk to high frequency public transport and a short walk to major parks (<http://www.molonglovalley.com.au/wright/>)

The impression given from these proposed new developments is an approach that owes more to the urbanism of the New Towns version of garden cities, with its relatively low density, detached housing and little attempt to develop either density gradients towards an active, employment focused centre or the level of transit orientation that would allow people to travel actively and minimise their car dependence. In garden city terms this suggests such development fails various tests in relation to provision of employment and retail space, local food production, walkable accessibility and so on. The overall Planning Strategy for Canberra meanwhile proposes that the city look for ways to re-urbanise its very low density urban form and connect its widely separated nodes of development with modes alternative to the car.

Garden cities in conclusion

So, in conclusion I return to the original question set out in this paper: in *shaping sustainable urbanism: are garden cities the answer?* The narrative of this paper suggests that Howard's ideas have been variously developed, borrowed, hybridised, distorted and rediscovered. Their reach has been undoubtedly broad, as examples from practice demonstrate very clearly. At the same time at least some of that application has ignored or minimised central aspects of Howard's garden city programme. More contentious elements, such as Howard's interest in communitarian ownership of land were conveniently ignored. The critical 'boundedness' of the greenbelt, which properly separated the new settlement from the 'host' city was lost. That greenbelt's crucial economic role in local food production and providing rental income for the garden city was overlooked. The proposals for electrically-powered public transport to link the garden city to other places, thus taming the smoke fiend, were replaced by place shaping which valorised car-based movement systems. The development of garden suburbs rather than cities proper saw various garden city principles left out of the place making that emerged. The higher residential densities and proximity to services that allowed walkability to be achieved, gave way to a very low-density model which reflected New Town versions of the garden city, owing their spatial co-ordinates to modernist place shaping perspectives. The rise of privetopia demonstrates how garden cities can be invoked in ways that lead to separate lives rather than fully engaged ones.

Despite all these problems and weaknesses in application, garden city ideals – including their land value aspects - still retain enormous appeal. Their interplay of landscape and urban spaces offers possibilities for important sustainability attributes like food production to be integrated into urban development; and other environmental elements including dealing with water and air quality to be better handled. At the physical place shaping level, they also have the advantage of being proved more politically acceptable than some other forms of planned towns and this suggests a willingness to include garden city inspired models in the panoply of urban development patterns that will inform our urban future. What garden city ideas require is an application that allows them to be sufficiently urban, compact, mixed, walkable and diverse to form part of resilient responses to rapid city growth deeply challenged by global threats including climate change.

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