DESIGNING THE Compassionate City

CREATING PLACES WHERE PEOPLE THRIVE

JENNY DONOVAN

ROUTLEDGE

Designing the Compassionate City

Designing the Compassionate City outlines an approach to urban design that is centred on an explicit recognition of the inherent dignity of all people. It suggests that whether we thrive or decline—as individuals or as a community—is dependent on our ability to fulfil the full spectrum of our needs. This book considers how our surroundings help or hinder us from meeting these needs by influencing both what we can do and what we want to do; either inspiring us to lead healthy, fulfilled lives or consigning us to diminished lives tainted by ill health and unfulfilled potential.

Designing the Compassionate City looks at how those who participate in designing towns and cities can collaborate with those who live in them to create places that help people to accumulate the life lessons, experiences and achievements, as well as forge the connections to meet their needs, to thrive and to fulfil their potential. The book explores a number of inspiring case studies that have sought to meet this challenge and examines what has worked and what hasn't. From this, some conclusions are drawn about how we can all participate in creating places that leave a lasting legacy of empowerment and commitment to nurturing one another. It is essential reading for students and practitioners designing happier, healthier places.

Jenny Donovan is the Principal of the Melbourne-based urban design practice, Inclusive Design. She set up the practice to focus on and advocate for urban design that emphasizes improved social outcomes. Her work spans urban and landscape design, social and environmental planning and neighbourhood renewal in Australia, the UK, Palestine, Ireland, Ethiopia, Kosovo and Sri Lanka.

"In an age of global markets and instantaneous international communication, it's easy to assume that where we live and how we interact with our physical surroundings is becoming less important to our personal fulfilment and societal contribution. In fact, the opposite is the case—contact with nature and contact with our neighbours is consistently shown to underpin our health and happiness. This book offers important and timely insights into the need to design cities that recognise our fundamental biological and psychological needs and the built characteristics that might help us meet these needs."

—Graham Duxbury, Chief Executive, Groundwork UK

"For students and practitioners of urbanism, Jenny Donovan restores faith in the potential of people to 'spread their wings'—given a little time, space and help—to create places which nurture life in the round. This stimulating handbook speaks of 'inherent dignity', 'emotional capital', and 'the importance of belonging'. A door bangs open when we think of weighing hope and happiness and 'the uniqueness of everyone's perspective' with the grinding commercial viability issues to which the built environment professions have been subjected in recent years."

—David Lock CBE, founder of David Lock Associates

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Creating Places Where People Thrive

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4 What Makes a Place Nurturing or Neglectful?

As observed in the last chapter, our lives are influenced in many different ways by the messages we receive from our surroundings. This chapter maps my understanding of the key variables that determine whether these messages point people towards needs-fulfilling behaviours or away from them. The list is not exhaustive nor is it suggested that each of these factors will exert an equal and consistent influence in all circumstances. In a system as complex as a city, which is part organic and part mechanical and has so many linked and reciprocating 'moving parts', the relationship between these factors is one of constant change. In different circumstances they can work in concert or act independently. All the variables influence the relationship that people have with their surroundings but some act more on the hardware, some more on the software and others on the orgware (Figure 4.1).

Our Choices of Ways to Move Around

A place is nurturing when it makes it easy for people to get to all the places they need to go in ways that are intrinsically beneficial to their well-being and do not diminish other people's well-being. A place is neglectful when it traps people in a particular location and/or demands that nearly all trips incur significant environmental, social and economic costs.

Unless we are determined to live a hermit-like existence of monastic austerity, it is very unlikely that we will be content to stay in the one place forever, no matter how well designed it is. However, as Charles Montgomery observes in *Happy City*: "*we all live in systems that shape our travel behaviour. And most of us live in systems that give us almost no choice in how to live or get around*" (2013a).

Our surroundings nurture us when they facilitate us to access the places where we can meet our different needs as they rise to the top of our priorities. However it is not just the ability to move that is important in making a place nurturing, it is also the way we move. As noted in Chapter 2, we need to have physical activity. Without it we become more vulnerable to a wide range of illnesses including Ischaemic heart disease, stroke, type 2 diabetes, kidney disease, osteoporosis, coleo-rectal cancer and depression (Australian Institute of Health and Welfare 2012). These risks should not be underestimated. Inactivity is as important as unhealthy diets and tobacco use as a modifiable risk factor for chronic diseases (WHO undated). Across the world inactivity accounts for 9 per cent of premature mortality or 5.3 million deaths annually (Min Lee et al. 2012) and in 2013 was estimated to cost INT$67.5 billion through healthcare expenditure and productivity losses (Ding et al. 2016).

This cost is easy to avoid. A study in New York found "*investments in bicycle lanes come with an exceptionally good value because they simultaneously address multiple public health problems. Investments in bike lanes are more cost-effective than the majority of*

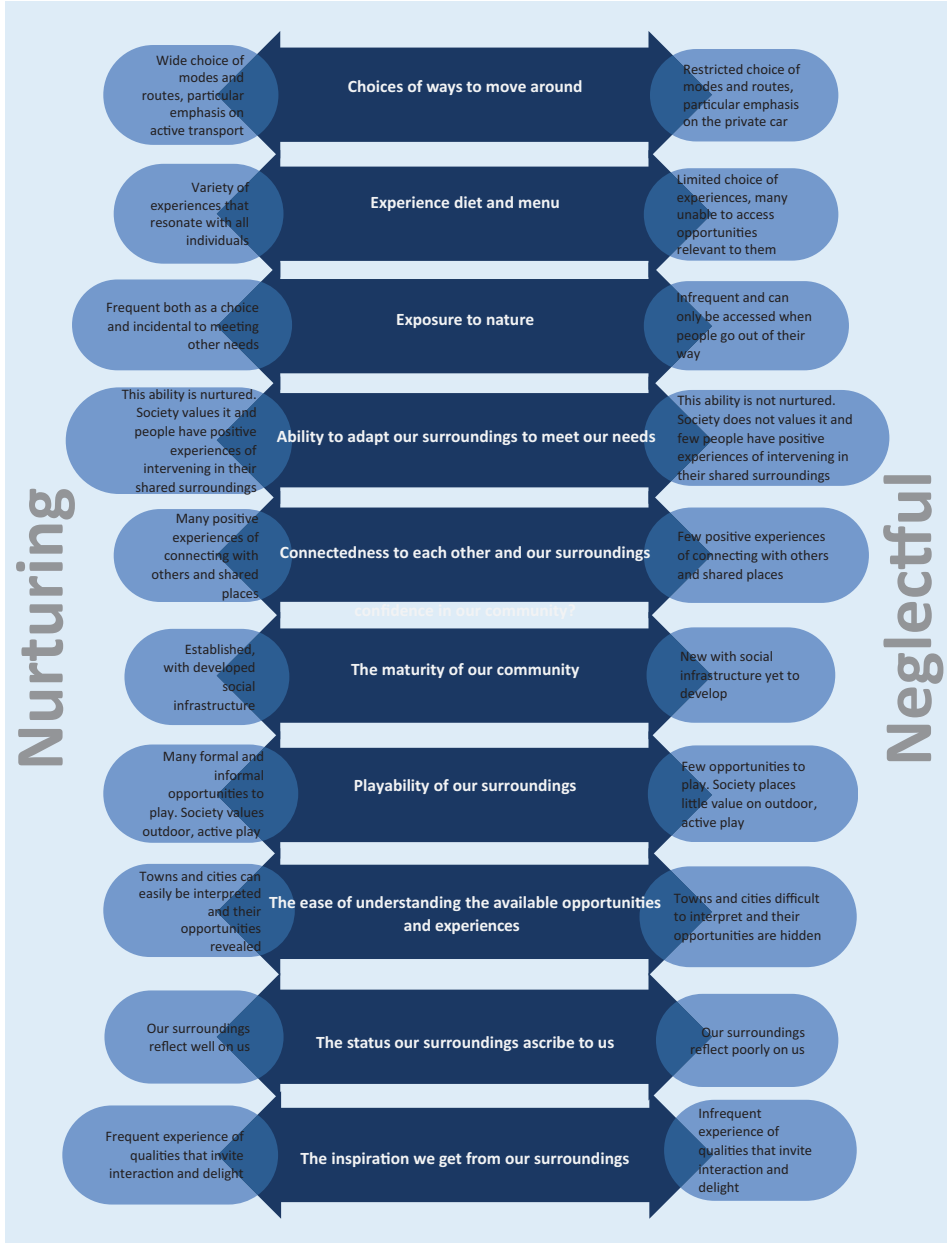

Figure 4.1 The Variables That Influence Whether a Place is Nurturing or Neglectful

preventive approaches used today and are many times more cost effective than treating the diseases that arise from inadequate activity" (Gu et al. 2016).

Physical inactivity is induced by lifestyles that present few demands for physical exertion (International Obesity TaskForce 2002). Active transport (trips that have a significant component of walking and cycling) and by extension public transport (which also

typically involves a walk or a cycle at either end of the journey) can help address this issue. Active transport is also more accessible—more people can walk than drive—and, as noted in Chapter 3, it integrates us better with our surroundings and the people with whom we share those surroundings.

There is also much to be said for active transport apart from its benefits to the person walking or cycling. It is less resource intensive than travelling by private motor vehicle, demanding much less space and requiring much lower inputs of energy (Mason 2000). It results in much fewer contaminants than would occur if these trips were made in a car (Australian Government Department of Environment and Heritage 2005). Consequently replacing vehicle movements with active and public transport can be intrinsically beneficial to society at large as well as the walker or cyclist. As a result places that facilitate people to get to and between the diverse settings they have to get to in order to meet their needs by active transport are much more nurturing than places that don't.

The characteristics that encourage or discourage active transport have been explored by many authorities. Although the research findings are not entirely aligned, there seems to be broad agreement that rates of active transport are influenced by both qualitative and quantitative factors. Sallis et al. (2016) found that the "*design of urban environments has the potential to contribute substantially to physical activity*". The Department for Transport (UK) found that "*high quality design of townscapes and rural transport infrastructure can help to encourage walking and cycling*" (DfT 2004). Safety is important and its absence can be a powerful deterrent (Bhalla 2014). In terms of specific characteristics, most authorities agree that active transport-friendly places are typically compact, built at high(er) densities and diverse in land uses, and so offer correspondingly short distances to destinations such as shops, parks, etc. They are places with direct walking and cycling routes, places with good infrastructure on the journey (good paths, seats, lighting, etc.) and at the journey's end (showers, lockers, bike racks). They are places which offer walkers and cyclists legible and pleasant surroundings which feel safe.

Unfortunately, the mono-use, car-dominated suburbs that are surrounding many cities in an ever-thickening band create communities with unsafe, unattractive public realms, dominated by busy roads and fast traffic. Cars, whilst offering the promise of liberation for their users, entrap non-users, who are often hemmed in by barriers of busy roads and isolated by the low densities that car usage makes possible. This low density of housing is echoed in a low density of destinations such as shops, parks and other shared facilities which are spread thinly throughout (sub)urban areas, putting most of them a considerable distance away from most of the people they serve. The combination of long distances and unpleasant, unsafe walking and cycling journeys leaves their inhabitants in little doubt that active transport is not just less appealing but often prohibitively difficult and unwise. In the face of such messages, the walker or cyclist will need to be determined to ignore what their surroundings are telling them and walk or cycle anyway. The rest of us will weigh the balance of influences and decide to drive or do without. Those who live in such places and can't drive (either because of age, medical condition or poverty) and those who won't drive are effectively trapped where they are and denied access to the opportunities available to more mobile peers. Either way, people living in places where their fundamental choice is either travel by car or don't travel are less likely to be adequately active. This is an outcome observed in both developed and developing countries (Kjellstrom et al. 2007).

The higher rates of accidents and pollution that car dependency brings are also having a significant and growing impact on the well-being of urban communities: "*over the last two decades, deaths due to road crashes grew by 46%. Deaths attributable to air pollution, to which motor vehicles are an important contributor, grew by 11%*" (Bhalla et al. 2014).

Accidents, injuries and pollution from vehicles contribute to six of the top 10 causes of death (ibid). The same report found that the burden of disease attributable to both road injury and air pollution from vehicles exceed those from HIV, tuberculosis or malaria (ibid).

Globally Haagsma et al. (2016) found that there were over 11 million road traffic accidents worldwide in 2013 that required in-patient hospital care and 1,396,000 people died from their injuries. This is over 16 times more deaths than any other type of transport accidents. Charles Montgomery notes, "*The WHO estimate that the cost of auto crashes in injuries, medical care and property damages exceeds $518 billion worldwide*" (Montgomery 2013a).

In relation to pollution:

> *It is well known that congestion and heavy levels of traffic have negative health implications; Public Health England, in a 2014 report, estimated that 5.6% of all deaths in over-25s in England were linked to air pollution, although the figures vary considerably by region. Heavy levels of traffic also contribute to noise pollution; about 10% of the UK population is thought to live in areas where daytime sound levels exceed those which the World Health Organisation considers detrimental to health, and 34% in areas where night-time sound levels exceed 50 decibels. It is known that continuous internal noise of over 30 decibels disturbs sleep.*
>
> (House of Lords 2016)

An extensive study by Chen et al. (2017) in Canada found that living close to heavy traffic was associated with a higher incidence of dementia.

The costs of living in places exposed to traffic are borne particularly by the most vulnerable in the community. Poorer people have less ability to compete for quieter, less congested and more salubrious places to live (Cucurachi 2013). The same study also found that children who lived in noisier neighbourhoods did less well at school and noted "*excessive noise runs like a loud thread through many of the UK's most broken communities.*" Older people feel the perceptions of danger from accidents more keenly than other sections of the community and this contributes greatly to the deterrents to venturing outside. However the resulting sedentary life and lack of physical and cognitive stimulation speeds up the aging processes and contributes to cognitive decline, loss of bone density and muscle tone (Mechling and Netz 2009). These in turn make older people more susceptible to injury and increase the sense of risk posed by their surroundings, and hence add to the reluctance to go out, fuelling a vicious cycle of decline.

Furthermore, even for those who can drive, if they live in low-density suburbs they may find they have to bear the personal and social costs that come from being bound to a time-consuming, sedentary and often stressful lifestyle; Charles Montgomery quotes a Swedish study that found "*that people who endure more than a 45-minute commute were 40% more likely to divorce*". He also noted other research that found that a

> *person with a one-hour commute has to earn 40% more money to be as satisfied with life as someone who walks to the office. On the other hand, for a single person, exchanging a long commute for a short walk to work has the same effect on happiness as finding a new love.*
>
> (Montgomery 2013a)

Concerns about traffic risks contribute to parents setting increasingly tight bounds for their children's independent mobility, reducing it significantly from the range enjoyed

by children of the same age in years past (VicHealth 2015). Children who are driven around more by their parents are less active and have less opportunity for free time and self-directed play (Gibbs et al. 2012; VicHealth 2015). Their relationship with their surroundings is highly mediated. Many potential learning and playing opportunities are compromised, as they are inadvertently trapped by fearful parents whose eyes and ears are attuned to seeing their surroundings as a threat, as observed by Rudner (pers. corr. 2013).

To relate this back to the framework of fundamental needs identified in Chapter 2, if we have only limited transport options, our ability to get to the settings where any of these needs can be met may be compromised. If active transport is not a realistic option for most of the trips we have to make or choose to make, our ability to meet our fundamental needs for physical activity, leisure and protection may be adversely affected. Table 4.1 shows some of the key factors that will influence whether the hardware, software and orgware of a place makes it harder or easier for these needs to be met.

Table 4.1 The hardware, software and orgware factors that influence how we choose to move around

Hardware factors that influence how we move . . .		*Software factors that influence how we move . . .*		*Orgware factors that influence how we move . . .*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Quality active transport infrastructure offering attractive, interesting, legible, direct routes that feel safe	Low-quality/ absent active transport infrastructure offering routes that are indirect, disconnected, illegible and feel unsafe	Walking, cycling valued	Walking, cycling, public transport not seen as realistic choices	Investment and promotion of active transport	Investment in private vehicle infrastructure
Quality public transport infrastructure	Low-quality or absent public transport	Public transport (and the people who use it) considered important	Public transport (and the people who use it) considered unimportant	Investment and promotion of public transport	Investment in private vehicle infrastructure
High-density, mixed-use environments that minimize distances to a range of uses and make active and public transport viable	Low-density areas of single uses that separate out activities and increase the average distances between activities	Walking and cycling seen as contributing to quality of life	Walking and cycling seen as chore	Political will to move away from primacy of private motor vehicle and look at changes in the way cities are designed and planned	No political will to move away from primacy of private motor vehicle or look at changes in the way cities are designed and planned

Our Experience Diet and Menu

A place is nurturing when it offers a wide range of relevant opportunities that support diverse appropriate and appealing experiences. A place is neglectful when it offers only scant or irrelevant opportunities and thus offers limited experiences or an excess of negative experiences.

Each of us have an 'experience diet'. This is the sum of the things we see, hear, smell, feel or do in our day-to-day lives. We select these experiences from the breadth of possibilities open to us, which is framed (partly) by the availability of appropriate settings to undertake different activities. The extent of all these possibilities is our experience menu. This idea is derived from Simeon Packard's concept of a 'play diet' (Play England 2008a). This is his way of describing the mix of play activities in which a child participates. Exposure to this idea—drawing a parallel with our food diets to emphasize the importance of getting quantity, variety and quality right—inspired me to observe that this was a useful way of explaining the importance of quality and quantity of experience in other aspects of our lives.

Just like a food diet, our experience diet can be good or bad. Also like a food diet, a good experience diet requires many different inputs and balance. Just like a food diet, the way you combine things is important and a little bit of what you enjoy has its place. Emily Ballantyne Brodie, an insightful friend, was telling me of her choices of cafés to visits with her young daughter. Her choice was "*the café that was all white bread, pasties and sugar with warm smiles from the staff and a child friendly attitude or the café that was organic but [where] the staff were rude/standoffish. We went to the 'white bread' café because it was more 'nourishing'*" (pers. corr. 2015).

Some people are fortunate to enjoy surroundings that offer a wide choice of pleasant and nurturing 'people' and 'place' experiences that they can move to and from as they wish. These people have no difficulty finding and enjoying a healthy experience diet from the extensive and well-presented experience menu offered by their surroundings. Others though may look around their surroundings and find they offer only limited, unappealing or unhealthy experiences. This paucity of opportunity and corresponding lack of choice diminishes the ability of the people who live there to exercise autonomy and live happy, fulfilled lives. Such places offer only a poor experience diet, lacking in the equivalent of variety, taste or nutritional value.

When our surroundings offer us too little stimuli, our experience diet is bland and limited. We become bored and over time our cognitive functions atrophy (Porteous 1977). Collin Ellard (undated) suggests that inadequate stimulation brings with it profound health impacts, stating that "*even brief boring episodes increased levels of cortisol, which fits well with other recent suggestions that there could actually be a relationship between boredom and mortality rates*". This is particularly the case for the vulnerable in our community.

A place with an experience menu that offers children little choice in their 'play diet' (Simeon Packard in Play England 2008a) denies them many potential developmental benefits that come from the diverse nature of play activities: "*Play is the way that children learn about themselves and the world they live in. In the process of mastering familiar situations and learning to cope with new ones, their intelligence and personality grow, as well as their bodies*" (Wheway and Millward 1997).

If older people find their (often quite limited) sharable surroundings lacking in relevant opportunities, then these places are unlikely to have sufficient appeal to justify the effort and time needed to make the journey. If they choose instead to stay at home, they are less

likely to get the mental and physical stimulation they need to counter the ravages of age (WHO 2007).

Collin Ellard noted:

> *boredom or inadequate stimulation can also lead to risky behaviour. Surveys among people with addictions, including substance and gambling addictions, suggest that their levels of boredom are generally higher, and that episodes of boredom are one of the most common predictors of relapse or risky behaviour.*
>
> (undated)

However it is not simply a matter of the more experiences a place offers, the better it is. We function best at the 'Goldilocks' amount of stimulation: not too much nor too little—and as in a food diet, what is too little or too much will be different for each of us, for the reasons outlined in the previous chapter. When our ability to process and respond to these experiences is exceeded, we risk being overwhelmed, triggering a stress response that brings with it a range of mental and physical health issues. Adli Mazda elaborates:

> *Living in an urban environment is long known to be a risk factor for psychiatric diseases such as major depression or schizophrenia. This is true even though infrastructure, socioeconomic conditions, nutrition and health care services are clearly better in cities than in rural areas. Higher stress exposure and higher stress vulnerability seem to play a crucial role. Social stress may be the most important factor for the increased risk of mental disorders in urban areas. It may be experienced as social evaluative threat, or as chronic social stress, both of which are likely to occur as a direct consequence of high population densities in cities. As for the impact on mental health, social stress seems to outweigh other urban stressors such as pollution or noise. Living in crowded areas is associated with increased social stress, since the environment becomes less controllable for the individual. Social disparities also become much more prominent in cities and can impose stress on the individual. . . . A recent meta-analysis showed that urban dwellers have a 20 per cent higher risk of developing anxiety disorders, and a 40 per cent higher risk of developing mood disorders. For schizophrenia, double the risk has been shown, with a 'dose-response' relationship for urban exposure and disease risk. Longitudinal studies on patients with schizophrenia indicate that it is urban living and upbringing per se, rather than other epidemiological variables that increase the risk for mental disorders.*
>
> (Mazda 2011)

The threshold of what represents too much exposure will vary depending on what we are exposed to. Many environmental contaminants such as lead, tobacco smoke or Radon gas (Wigle and Lanphear 2005) are so toxic that there is no safe level. However traffic, noise, light at night and danger amongst other largely unescapable facts of urban living can add to our stress once certain thresholds are reached. Over exposure to these stimuli and under exposure to experiences that can mitigate these negative impacts can add to our allostatic load—the cumulative physiological impacts on our bodies of dealing with stress over prolonged periods. This can result in "*poor subjective health, disability, cognitive decline, cellular aging, diseases, death*" (Read and Grundy 2012). Research commissioned by the EU suggests that the social cost of noise and air pollution, including death and disease, could be nearly €1 trillion (University of Western England 2016).

Unfortunately the contaminants that form part of a person's experience diet are inequitably distributed: "*it is often society's poorest who live and work in the most polluted environments. Furthermore, these same people may be more impacted by pollution's damaging effects than more advantaged groups of society*" (ibid).

Assuming that some exposure is inevitable, "*the question is therefore how to mediate the bad and the excessive*" (Daly 2016). Mediating the bad and excessive stimuli requires enabling people to escape these stressful environments, minimizing exposure to them and/or enabling them to experience places that allow them to counter their detrimental effects. Experience and a wealth of research suggests that enabling people to enjoy nature offers a relief to the demanding and detrimental immediacy of many urban stimuli (Berman et al. 2008; Green 2015 pers. corr.) as well as being a positive contribution to a person's experience diet in its own right (explored in more detail in the 'Our Exposure to Nature' section later in this chapter).

To turn back to the experience menu, theoretically it is very extensive; with enough will and determination anyone can go almost anywhere and enjoy the opportunities that can be found there. In practice though our experience menu is limited to those experiences and opportunities that we consider to be practically accessible and worth the effort. Katherine Shaver (2005) observed that there are limits to how far people will go out of their way to enjoy a rewarding experience.

A way to look at it is to consider every item on our experience menu as having a price tag. Evidently opportunities on our doorstep are easier to take up; they need little investment of time and are likely to be in a place you feel comfortable within—you might say they have a lower price—than opportunities in an unfamiliar place, with unfamiliar people an hour and two bus rides away. When the 'price tag' of walking, running, participating in community events or other nurturing activities makes them uncompetitive against less healthy, unfulfilling behaviours, then they are less likely to be taken up.

Other key factors that influence this price tag are our ability to compete economically for proximity to these desirable experiences, the impacts of others on our ability to enjoy these experiences and the density of experiences.

Places we enjoy, places that enrich us or places that offer convenience to important destinations do not only nurture people but also often attract a market premium as people compete economically to access these qualities. For example UK Environmental Development Agency Groundwork found that houses close to parks are on average 8 per cent more expensive than similar properties further away (Dobson 2012). As a result poorer people with less buying power end up in less supportive environments, 'priced out' of more nurturing places. Poorer people "*are getting pushed out of working class neighbourhoods that are 'good enough' to attract people and investment, while the poorest and most vulnerable neighbourhoods remain mired in persistent poverty and concentrated disadvantage*" (Florida 2015).

Equally, places that may potentially benefit and nurture a section of the community may be denied to them in practice when another section of the community dominates that space, effectively appropriating that place because of the way they act or are just perceived to act. When this happens, a positive experience for one group becomes a negative for another group, as young children may conclude if they find a playground dominated by older children (Rudner et al. 2011).

The value to cost equation is also sensitive to the saturation of experiences and opportunities. Experience and research (such as Leyden 2003) suggests that mixed-use, high(er) density environments are more likely to offer a rich variety of opportunities and experiences within walking distance.

Table 4.2 The hardware, software and orgware that influence our experience menu and diet

Hardware factors that influence our experience menu and diet		*Software factors that influence our experience menu and diet*		*Orgware factors that influence our experience menu and diet*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Diverse spaces, capable of multiple, valid interpretations and uses that can happen without conflict. Active transport investment to facilitate ease of movement to, from and between diverse places	Few spaces, each one dedicated exclusively to a narrow range of uses. Mono-use, low-density development that 'create a "50km/hour environment" and isolate people behind a wheel' (Jan Gehl)	Imagination and adaptability to see the potential in a range of different places. Respect for other users. Acceptance that space may be shared with people who may use it differently	Space seen in zero-sum terms, ours or theirs	Investment and management of space to accommodate multiple activities	Lack of investment in design to make places robust enough to accommodate multiple uses. Investment in security to keep out uses and activities that don't conform to narrow management expectations

To relate this back to the framework of fundamental needs identified in Chapter 2, our experience diet and menu influence our ability to meet all our needs, as they describe the range of opportunities available to us. Table 4.2 shows some of the key factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

Our Exposure to Nature

A place is nurturing when it allows us to interact with nature and neglectful when it separates us from nature.

Just as 'greens' are important in a food diet, green space and features are important in the experience diet. As noted in Chapters 2 and 3, it can help us deal with the stresses of city living. Marc Berman et al. (2008) suggested this happens because nature 'modestly' attracts people's attention, inviting us to enjoy it and giving us relief from other urban stimuli that 'dramatically' demand our attention. They noted that one doesn't have to be immersed in nature for nature to be restorative; simply looking at a natural scene can help. The beneficial impacts of exposure to nature impact upon many aspects of people's lives. People who can experience immersion in nature find it easier to be more caring and are better able to cultivate relationships (Weinstein et al. 2009). In 2015 Weinstein et al. also noted that exposure to nature is linked to improved community cohesion and reduces crime. Wolf (2010) suggested that "*public housing residents with nearby trees and natural landscapes reported 25% fewer acts of domestic aggression and violence*". A WHO report (2016) noted that there is also evidence that suggests the provision of new green spaces in disadvantaged neighbourhoods (e.g. greening of vacant lots) can reduce crime. It also

referred to Japanese studies that have demonstrated associations between visiting forests and beneficial immune responses, including expression of anti-cancer proteins (ibid).

Prospective passengers waiting at transit stations where they can see mature trees will perceive waiting time as less than those who can't (Lagune-Reutler et al. 2016). Wolf (2010) notes studies that found drivers who see natural roadside views show lower levels of stress and frustration compared to those in urban settings. A study by Naderi et al. (2008) found street-side trees significantly increased driver perception of the spatial edge and with it their perception of safety regardless of contextual environment. They found this leads to "*a reduction in driving speed in suburban landscapes for both faster and slower drivers*".

Several authorities note that exposure to nature is of greater benefit to those disadvantaged in urban communities. A paper by Jenny Roe and Peter Aspinall (2011) found that the restorative effects of a walk in nature was greater for people who had poor mental health than it would be for those who already enjoyed good mental health. Likewise a study by Jolanda Maas et al. (2006) found that people from less well-off sections of the community got a greater boost to their well-being from open space than those from better-off areas.

On the other side of the coin, the adverse effects of an experience diet deficient in nature was also borne out in a large epidemiological study (Mitchell and Popham 2008) that found that people who lived further away from natural places tended to have worse health outcomes than those who lived nearer them.

To relate this back to the framework of fundamental needs identified in Chapter 2, exposure to nature influences our ability to meet our needs for protection, understanding, leisure, participation and beauty. Table 4.3 shows some of the key factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

Table 4.3 The hardware, software and orgware factors that influence our exposure to nature

Hardware factors that influence our exposure to nature		*Software factors that influence our exposure to nature*		*Orgware factors that influence our exposure to nature*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Presence of nature green space easily found, nature emphasized and celebrated, natural processes revealed	No nature visible. Lights, noise, other sources of stress compete with nature for our attention and dominate, green space not easily found	Awareness of the benefits of experiencing nature	Poor awareness of the benefits of experiencing nature, emphasis on the difficulties of experiencing nature	Investment in design and long-term planning necessary for nature to survive, reach maturity and achieve its optimal contribution Clear and strictly applied laws to protect nature and ecological health	Emphasis on the quantitative aspects of creating the built environment to the exclusion of the qualitative Ambiguous, weak or poorly applied laws to protect nature

Our Ability to Adapt Our Surroundings to Meet Our Needs

A place is nurturing when it can respond to people's changing needs; either over time where the needs of the users change or concurrently where different users seek to use that space for different purposes. A place is neglectful when it offers experiences that are rigidly dedicated to a particular use and can't or won't change to accommodate people's needs.

Unfortunately, "*the dominant situation for modern life is individuals living in a setting which was not built for them*," according to Serge Bouleurline, quoted in Porteous (1977). If our experience diet is inadequate and we cannot find the experiences and opportunities that support our well-being in our experience menu, we need to change that menu. As explored in Chapter 2, the abilities to make things happen, feel a sense of control over one's life and take satisfaction from contributing to others' lives are intrinsically rewarding. Evidently, facilitating people to exercise a degree of control to meet their needs and contribute to their community could result in many different outcomes, depending on their needs, values and the resources available to make the changes. At one end of the spectrum (of all this may entail) are things such as being able to cast a careful eye over what goes on in a place; being able to move a chair to find a more comfortable or self-determined place to sit (Whyte 1980); painting a front door a particular colour; or planting a flower bed that expresses horticultural skill and brightens up the surrounding streetscape. At this smaller, fine-grained end of the scale, these interventions are self-evidently best undertaken by local people. At the other end of the spectrum are major infrastructure projects that require wholesale demolition and rebuilding. These larger, more capital-intensive interventions aren't those that you would want to leave to local non-professionals to just 'have a go at'.

Somewhere on this spectrum is a point at which responsibility to intervene goes from being best undertaken by civil society to being best undertaken by industry and government. In nurturing places, that point is higher than it is in neglectful places and people individually and collectively have more power and ability to self-organize to adapt their personal and shared surroundings should they wish to exercise this power.

However it should be noted that there will always be a point at which outside experts will need to exercise increasing control. Although the resources and insights held within a motivated and organized community can be significant, it is unlikely that they will encompass a strategic overview of the impacts of their interventions. There is also always the potential that a community might unknowingly appropriate resources that may best be shared or protected for future generations.

Furthermore, as Graham Duxbury of Groundwork (a federation of independent charities that seek to improve social and development outcomes in disadvantaged communities) told me (pers. corr. 2015): even if a community is given the right to make changes it may not have the ability. "*People have got used to dumbed-down design and poor quality engagement, sometimes people need help to imagine how things could be better*" (Duxbury, pers. corr. 2015). Consequently there will always be a need for respectful collaboration between professional outsiders, designers, planners, etc. and the community within which changes occur.

An inspiring example of this is found in the work of organizations such as Gap Filler that sprang up in Christchurch after the earthquakes of 2010–2011. Gap Filler is a "*creative urban regeneration initiative that aims to innovate, lead, and nurture people and ideas—contributing to conversations about city-making and urbanism in the 21st century*" (Gap Filler, undated-a). As well as creating their own unique projects, they provide advice, education and practical help for a range of installations, events, artworks and the

Figure 4.2 Dance-O-Mat
Source: courtesy of Gap Filler

creation of community spaces and temporary architecture. Their approach has cultivated a flowering of inexpensive, easily relocatable, quirky, innovative and delightful interventions to fill Christchurch's tragically vacated spaces.

One such project is the Dance-O-Mat (Figure 4.2). In 2012, in response to the lack of spaces to dance in the city post-quake and in an attempt to bring people, life and energy back to the central city, Gap Filler created an open-air dance floor that anyone can use. It features a coin-operated ex-laundromat washing machine that powers four speakers surrounding a custom-made dance floor. "*To use the Dance-O-Mat, people bring any device with a headphone jack such as an Ipod, phone or Mp3 player and plug it into the converted washing machine, insert $2 to activate the power and get dancing!*" (Gap Filler, undated-b). They go on to add,

> *The Dance-O-Mat was first located on a vacant site in 2012 and has occupied three different gaps in the city since then. This project in its first iteration was extremely successful, getting 600 hours of use at our best guess (based on the $2 coins collected) across 3 months.*
>
> (ibid)

Another is the *Think Differently Book Exchange* (Figure 4.3), a public book exchange located inside a recycled fridge on a cleared lot on the fringes of the city centre. It was created with minimal works from a discarded glass-doored fridge adapted for safety and with some minor landscaping works. It has been running since Sunday 17 July 2011 (Rachel Welfare, pers. corr.). Acknowledging its inspiration from a similar project in the UK, the

Figure 4.3 Think Differently 'Fridge Library'
Source: courtesy of Gap Filler

website states that "*the 'Think Differently' moniker was intended to attract books which readers/exchangers have found life-changing and challenging*" (undated).

> *The Book Exchange has shown its resilience through a number of setbacks. It was pushed over and one panel of glass broken in October, 2011, and suffered two further push-overs in its first year. The fridge was adapted with a stake at its back to stabilise it, and the glass doors were replaced with perspex. Nearly all of the books were stolen from the fridge twice, but the exchange continued with new books replacing the stolen ones. The local community responded to all acts of violence and theft quickly, showing how important the fridge has become, and continues to be.*
>
> (Gap-Filler undated c)

Our Ability to Influence the Design Agenda

Better-off communities tend to be better educated, more articulate and have greater experience of accessing decision-makers. Furthermore the professionals who make planning and design decisions will probably be better attuned to these voices. These people are after all from a similar social strata as the professional designers and planners. As a result these designers, etc. are more likely to share their interpretations of what is important and be swayed by their arguments. Thus people who live in wealthier areas are more likely to have experience of getting things done and of their views being taken into account. Unfortunately people who live in less well-off areas and are of different backgrounds may find they cannot attract the attention of those with power or skills to get things fixed, or if they do they are misunderstood and their priorities misinterpreted. They may also find they are not permitted to contribute themselves or are indeed able to do so. "*Designers are educated and articulate: many user clients are less educated and often inarticulate. This exacerbates the already immense social gap between them*," according to J Douglas Porteous (1977). This is a viewpoint backed up by the UK social policy think tank Demos, which found that those people in the worst socio-economic status communities get left out of the decision-making process or when they do receive attention it is not as wholehearted or appropriately applied as it would be for wealthier, 'more helpful/co-operative' communities. For people in disadvantaged communities, "*the social distance between planner and planned for is further widened by administrative distance*" (Porteous 1977). Furthermore, "*caught in a web of economic, social and political constraints, planners find themselves unable to respond to the needs of the users*" (ibid).

I saw this myself when I worked in a London borough and noticed that the worst-maintained park with the lowest level of provision was in the poorest part of the borough. I asked a colleague who led the open space design program and whom I knew to be a competent and caring landscape architect why this was so. He said with genuine hurt: "*we did that park up twice and it was vandalised, f**k 'em. They will only vandalise it again if we do it up. Better to spend the money where it can make a difference.*" Already disadvantaged, this sense of distance between designers and 'designed-for' meant that the local neighbourhood had to make do with a less inviting or inspiring park than those enjoyed in more salubrious areas.

Experience suggests that for most people their ability to adapt their surroundings and set the agenda is influenced by the default positions of the people doing the design for them. This is informed by personal values, experience and the day-to-day realities of life of the professional designer or the people who have our ear. We know what we know and often, if no one draws our attention to an issue outside our familiar world, we might miss it. Even if we know of an issue (for example the need for play or to cater for disabled access), if we haven't children or don't personally need universal access, we can overlook it or ascribe it only with attention needed to meet the guidelines. This means that some issues are more likely to be at the forefront of our attention to the detriment of others that subconsciously get put down the list of priorities. In relation to play, Beunderman et al. (2007) observed, "*over the past decades, two other uses of the public realm have been consistently privileged above play: cars and commerce*".

To relate this back to the framework of fundamental needs identified in Chapter 2, the degree to which we are able to tailor our surroundings influences our ability to meet any or all our needs. Furthermore, the action of tailoring our surroundings (if our designers help us!) may in itself contribute to meeting our needs for understanding, creation, freedom and the expression of our identity, our ability to give and receive affection, to

participate in society and to protect ourselves. Table 4.4 shows some of the key factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

Our Connectedness to Each Other and Our Surroundings

A place is nurturing when it provides people with ample, low-risk opportunities to form a bond with each other and their surroundings. A place is neglectful when it offers few or irrelevant opportunities for these connections to form and grow.

These connections are of profound importance, "*a healthy built environment is one which connects citizens together to create a sense of community*" (Thompson and Kent 2014). In the compassionate city, people can choose and modify the types and depths of the connections they make with each other and with their environment to create the networks they need. Without these connections, people become cut adrift from society and cannot contribute to nor benefit from their community's social capital. Unfortunately, "*we have created human societies where it is easier for people to become cut off from all human connections than ever before*," according to George Monbiot writing in *The Guardian* (Oct 2014). This isolation can have profound effects on people's mental and physical well-being and has been linked to a compromised immune system, high blood pressure, heart disease, stroke risk and ultimately premature death (Valtorta et al. 2016).

Charles Montgomery states that

> *Simple friendships with other people in one's neighbourhood are some of the best salves for stress during hard economic times—in fact, sociologists have found that when adults keep these friendships, their kids are better insulated from the effects of their parents' stress.*
>
> (2013a)

He adds that friendships enhance not just the quality of life but its quantity: people who enjoy connections with those around them sleep better, consistently report being happier, are better equipped to tackle adversity and live longer (ibid). Qualls (2014) reported a meta-analysis of 148 studies that found "*a 50 percent increase in survival of people with robust social relationships, regardless of age, gender, country of origin, or how such relationships were defined*".

These benefits accrue at many different levels. A review of international evidence undertaken to prepare Melbourne's Metropolitan Plan in 2011 found that broad and inclusive community networks have a significant impact on social and economic outcomes, including:

- Individuals benefitted from better physical and mental health; positive parenting and improved child development; success at school; better employment outcomes; and more positive aging (less institutionalization and better cognitive functioning);
- Communities benefit from the spread of information and innovation; greater social cohesion; effective control of negative behaviours; resilience to disasters and improved ability to turn assets into outcomes.

(Pope and Zhang 2011)

This research found that networks are built through participation. It noted that participation, and opportunities for participation, are not evenly distributed across Melbourne, with the lowest rates in lower socio-economic areas and areas of recent urban expansion.

Table 4.4 The hardware, software and orgware factors that influence our ability to adapt our surroundings

Hardware factors that influence responsivity . . .		*Software factors that influence responsivity . . .*		*Orgware factors that influence responsivity . . .*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Evidence of positive change	No evidence of positive change	Confident and articulate community members Positive experience of having made a difference somewhere within the community Co-operation	Unconfident and inarticulate community members Absent or bad experience of trying to make a difference Conflict, disillusionment and cynicism	Role of community enshrined in planning framework	No role for community in planning framework
Easy to adapt places	Places with every characteristic locked in and unchangeable without outside expert help	Technical and design skills held within the community to make some changes happen (subject to consideration of official views and the needs of other communities) Designers with an ability and inclination to understand the community's design agenda	Community hold few technical or design skills Designers with little ability or inclination to understand the community's design agenda	Community empowered and their contribution is respected and celebrated	Community not empowered and/or are unable to gain the necessary permissions.
Diverse spaces, capable of multiple, valid interpretations and uses that can happen without conflict	Few spaces, each one dedicated exclusively to a narrow range of uses	Imagination and adaptability to see the potential in a range of different places Respect for other users	Space seen in zero-sum terms, ours or theirs	Investment, promotion and management of space to accommodate multiple activities	Lack of investment in design to make places robust enough to accommodate multiple uses Investment in security to keep out uses and activities that don't conform to narrow management expectations

Yet it is not simply a matter of the more connections the better. Unwanted connections are distressing. Nicola Bacon (2010), writing for the UK Social Issues Think Tank the Young Foundation, found that "*experiments to force people to interact with their neighbours have not been a success. Choice is key. A massive study of the 1970's British 'good neighbours' schemes ended with a simple conclusion that 'good fences make good neighbours'*." The New Zealand Ministry for the Environment quotes research by Shehayeb that found that people interact more when they have the choice to avoid it (NZ Ministry for the Environment 2005). As such the compassionate city is about giving people agency to determine their preferred form and amount of interaction, who they interact with and what role they play in their community.

Another dimension of connectedness comes from the bonds that people have with their surroundings. As noted in Chapter 3 many people invest great emotional capital in their surroundings, valuing them for what they represent, their utility or their intrinsic beauty. Nurturing places are informed by processes that respect and consider the value of this bond when making decisions about how to meet emerging challenges and evolving expectations. Neglectful places ignore the nature of this bond and allow things to be built that give no consideration of the emotional connections that people have to a place. This is a view reflected by Ken Worpole and Katharine Knox in their insightful study for the Joseph Rowntree Foundation of the social value of public spaces. Regeneration strategies that "*override or fail to take into account local attachments to existing spaces and places may undermine local communities in the longer term*" (2007).

Jane Frances Kelly et al. (2012) stressed the importance of the streets outside our homes as settings for these bonds to form, noting it is "*on the street that we are most likely to meet those who live closest to us—our neighbours*".

However, although important, for most people the street outside their house will inevitably not be able to meet all their social needs. For example it is unlikely that any street, no matter how well designed, will meet the requirements of most organized team sports. Given the diversity of any community, the diversity of preferences within a community and the varied specifications of places to facilitate different activities, this suggests that nurturing places should provide a wide variety of accessible and adaptable spaces and facilities.

The Importance of Trust

Trust is a precondition to connecting, it provides reassurance that the people around us add to our experience of the public realm and are potential helpers rather than a potential threat. It helps us satisfy our need to be around other people and makes chance encounters something to be welcomed rather than feared. These interactions provide the basic foundations upon which social connections can flourish; as Jane Jacobs put it, "*the small change from which a city's wealth of public life may grow*" (quoted in Kelly et al. 2012). Trust is influenced by social processes (Wilkinson and Pickett 2010) and city form: "*People who live in mono-functional, car-dependent neighbourhoods outside urban centres are much less trusting of other people than people who live in walkable neighbourhoods where housing is mixed with shops, services and places to work*," according to Charles Montgomery, writing in *The Guardian* (2013b). Charles Montgomery also noted that people were more trusting in environments that were more open and where passive surveillance from surrounding properties was possible (2013a).

In the neglectful city, trust is less well embedded in the social fabric and fear of what other people will do weighs heavily on the balance of influences and cultivates a sense of 'stranger danger'. This contributes to some people and particularly women choosing not to pass through some areas and only visit other places during daylight hours, isolating them

from the opportunities they may otherwise enjoy. It also contributes to the pressures that reduce children's independent range (Kepper et al. 2016), which brings with it many and significant attendant health and developmental issues (Rudner et al. 2011). People in places lacking in trust may understandably seek to protect themselves from others and retreat into secure environments. Once there they look around their homes and workplaces and incrementally make design decisions that end up defining the public realm by the security infrastructure of walls, fences, shutters and surveillance equipment. In doing so they can blight their surroundings and deny themselves a significant area of opportunity to connect with other people.

Blight

Intentionally or unintentionally, some uses and activities blight the space around it, negating its potential to meet people's needs. Perhaps the most significant blighting of space arises from the speed, volume, danger and intrusion of vehicles on many streets. Their dominance forces life indoors or to the peripheries of shared space, diminishing the setting for community life and with it people's ability to form and nurture friendships (Hart and Parkhurst 2011). Another significant type of blight comes from a fear of what other people might do in a place (Montgomery 2013b). In their insightful study for The Joseph Rowntree Foundation, Holland et al. found that "*places acquire reputations (fairly or unfairly) that persist and affect whether and how people use them*" (2007). Nurturing cities seek to allow places to be shared by diverse users without any group or use inadvertently tainting that place for other users. Neglectful cities do little to stop this blight and allow people or uses to deny the enjoyment of places to other people or uses. This might be seen as a 'zero-sum game' situation in which the benefits gained by one person or group are only achieved by a loss to another.

It should be noted though that taking effective control of a place by a group need not always be a negative thing. As Holland et al. noted in their study of Aylesbury in the UK, "*in addition to the social function of public spaces, some people use them for privacy or to support a sense of territorial ownership—this particularly applies to groups of young people and marginalised groups*" (2007). The study goes on to note they observed the tendency of people to yield this control to other people or groups at different times, so that places were shared, just not at exactly the same time. The report then suggests that policy-makers can support this by encouraging diversity and harnessing people's tendency to 'self-regulate' to avoid conflict. They further add that over-regulated environments are not conducive to vibrancy and integration (ibid).

To relate this back to the framework of fundamental needs identified in Chapter 2, our connectedness to each other and to our surroundings influences our ability to become settled in a place and enjoy a sense of belonging. Specifically this may help us meet our needs to develop a unique identity, participate in society, and earn and offer affection to others; this also offers us a sense of protection from belonging to something bigger. Table 4.5 shows some of the key factors that will influence whether the hardware, software and orgware of a place makes it harder or easier for these needs to be met.

Our Confidence in Our Community

A place is nurturing when its occupants feel assured they are being well looked after and can conclude that their investment of emotional capital in the area is shared and justified. In such places, people feel that they are not exposed to unnecessary risks, everyone will be

Table 4.5 The hardware, software and orgware factors that influence our ability to connect with one another

Hardware factors that influence connectedness		*Software factors that influence connectedness*		*Orgware factors that influence connectedness*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Community life isn't forced out of the public realm by traffic Passive surveillance of shared space to ensure it feels adequately safe Comfortable and appealing shared environments that increase the chances of people staying in a place long enough to bump into someone they know	Traffic-dominated streets No passive surveillance of shared space Places that don't support incidental social interaction	Risk and fear put in context Positive experiences of interactions on balance	Risk and fear not put in context, given great and disproportionate significance Negative experiences of interactions on balance	Risk and fear put in context Security measures discrete	Risk and fear not put in context, allowed to dominate Security measures dominant and a priority
Changes retain and enhance the qualities broadly valued in the community that influence place attachment Diverse spaces, capable of being shared for multiple, valid interpretations and uses that can happen without conflict	Changes retain and enhance the qualities broadly valued in the community that influence place attachment Few spaces, each one dedicated exclusively to a narrow range of uses and users			Emotional attachment to a place considered in design decisions Investment and management of space to accommodate multiple activities in spaces	Emotional attachment to a place considered in design decisions Lack of investment in design and management to make places robust enough to accommodate multiple uses without conflict Investment in security to keep out uses and activities that don't conform to narrow management expectations

treated fairly, that their rights will be respected and that they collectively have the capacity to respond to existing and emerging challenges. A place is neglectful when it gives people little reason to invest emotionally in the people around them or the place they share.

We don't experience our surroundings as a snapshot in time. Places have momentum. Our towns and cities and the communities that occupy them are dynamic systems, always responding to changing environmental circumstances, expectations, demographics, political and economic pressures, technological possibilities and fashions. The legacy of observed change in the past and the promise of more in the future will draw people to a conclusion about whether this change is good or bad and will bring with it a perception that things are getting better or worse.

This awareness provokes a response. For example in many countries the perceived risk from traffic accidents is increasingly compelling more and more parents to drive their children to school in bigger vehicles. This further increases the number of vehicles on the road in the morning peak and so increases the risk of accidents, leading to a vicious circle in which the obvious solution (to drive) only makes the problem worse. Parents grow more concerned, more time pressures are added to their lives and children are denied the health and social benefits of making their own way to school (Basbas et al. 2011).

Furthermore, as noted previously, people become used to the way their surroundings are and even positive changes, if poorly considered, explained or executed, can erode people's comfortable and familiar sense of their community and leave them with a sense of '*solistalgia*'—a "*homesickness felt at home*" (Glenn Albricht, quoted in Seed 2008), separated by time rather than distance from a place that resonated with them and to which they can never return.

Experience suggests that places that are felt to be in decline produce a sense of *'why bother?'* and foster a reluctance to invest capital, emotional or financial, in their community. Denied the motivation that comes from hope, decline is hastened and the sense that investing in that community will be unrewarded is reinforced.

However, this downward momentum can be challenged. The inventive responses to the NZ Canterbury earthquakes of 2010 and 2011 provide some inspiring examples of how urban design can be used to re-instil confidence that a better future isn't just possible but is being actively achieved.

One of the features of the tragedy was its selective destructiveness. "*Churches, pubs and chimneys*" bore the brunt of the earthquake (Councillor Claudia Read of Christchurch City Council pers. comm.), denying the region many of the typically older, grander, often brick buildings that had been the traditional centres of community life. Christchurch city centre was particularly badly affected; it was the scene of most deaths and for 28 months all, and then parts of it, were a 'red zone' considered too dangerous to re-occupy. During this time, 80 per cent of its buildings were cleared or demolished (Re:Start website, undated). The denial of the city centre for such a long period threatened to unravel the fabric of the city's shared identity and its social infrastructure as people began to go to a variety of suburban centres to meet the needs they had previously looked to the city to meet.

The city responded to this challenge with a number of innovative and thought-provoking design responses. Perhaps the flagship project was Re:Start, a retail and open space development deep within the abandoned CBD constructed of shipping containers (Figure 4.4). This sought to reverse this drift to the suburbs and growing sense that the city centre's abandonment was permanent with a powerful built statement that captured the community's imagination. Paul Lonsdale, manager of the trust that developed the centre (The

Figure 4.4 Re:Start

Re:Start the Heart Trust) told me how the development was intended to represent a big vote of confidence in the city centre. It sought to enable people to overlay new and positive memories of the CBD over the sad ones of the past and rekindle the sense that the CBD was a source of civic pride and the natural place to shop and socialize. Although at the time of writing the development was approaching the end of its lease (February 2017), it has proved effective and popular. Tim Hunter, chief executive of Christchurch and Canterbury Tourism noted that the complex had soon become "*an essential part of the city's international image and reputation*" (reported by Tess McClure and Cecile Meier 2013).

Paul Lonsdale told me that critical to achieving this was the commitment, hard work and vision of the city's Property and Building Owners group and the developers, the way it was built and its design features. The developers demonstrated a mastery of the theatrical to capture the public's imagination: all the containers arrived on one ship as if relieving a besieged city to create a media-friendly, identifiable 'start point' for the project. From that day to opening the construction took only 61 days, creating a sense of rapid and positive change. The design (by the Brisbane office of Buchan Architects) uses bright colours and cantilevered stacked containers, as well as incorporates new and existing landscaping to create a 'wow' factor and provide a focus for renewed civic pride. The use of shipping containers allows the development to morph easily to accommodate the rebuilding process. Furthermore the size of the development, offering over 50 retailers and facilitating the return of the iconic Ballantynes department store as an anchor, created a critical mass of activity that has drawn people back into their city centre. As such the project provided an impressive symbol of Kiwi resilience, a welcome boost to the community and an

Figure 4.5 Albion Square

important symbol of recovery. It has also provided an icon for a new Christchurch that has allowed it to challenge its staid, conservative reputation, or throw off its 'conservative veil', as eloquently put by Paul Lonsdale (pers. corr. 2015).

The nearby port township of Lyttleton had also been severely damaged in the earthquakes, losing much of its historic centre and challenging people's sense of confidence in the future of their community. The development of Albion Square (named after the pub that had stood on the site) offers another example of creating a symbolic and practical statement that said the decline had stopped and a more hopeful future was a possibility. The project did this by adding an urban square to the range of spaces the township offers, filling in a long-identified gap in provision and reconciling diverse civic and recreational uses. It is finished to a very high standard to make a strong contribution to the streetscape and creates a memorable image for the township with the towering Port Hills as a backdrop to the activity and visual interest of the square (Figure 4.5).

The Importance of Safety

A sense of safety or its absence is a powerful motivator on our behaviour (Bhalla et al. 2014) and has a major impact on the confidence people have in their community. As noted in Chapter 3 an absence of safety is felt most keenly amongst the more vulnerable sections of the community. It can be a significant deterrent to doing things such as walking, cycling, interacting with others or even just leaving the house. This brings with it a range of health impacts. A study by Putrik et al. (2015) that explored associations between certain features of neighbourhood environment and self-rated health and depressive symptoms in

The Netherlands found that residents of unsafe communities were less likely to report good health and had a higher incidence of depressive symptoms.

In a report commissioned by the World Bank to investigate the burden of disease from motorized transport, Kavi Bhalla pointed to research that found the provision of safety infrastructure for walking and cycling is amongst the most important ways to encourage active modes of transport (Bhalla et al. 2014). The same report noted the growing body of literature that suggests that reassuring people that active transport wasn't prohibitively risky had both physical and psychological components, requiring "*an integrated approach that includes providing safe infrastructure such as sidewalks and bike lanes, supportive land use planning, and advocacy and education*".

The Importance of Social Capital

An important contributor to a sense of confidence in one's community is social capital. A study by Weel and Akçomak (2008) of the relationship between social capital and crime in The Netherlands found "*that higher levels of social capital are associated with lower crime rates*". They suggest this is because

> *an individual is less likely to commit crime if his peers and the community he belongs to punish deviant behaviour. If one individual decides not to commit crime, it is less likely that others will do so, which creates an external effect of one person's behaviour on the others.*
>
> (Weel and Akçomak 2008)

The Importance of the Rule of Law

Good urban design will take time to maximize its social returns and justify its cost to the community. This can be one week for a pop-up park, one season for a community garden or many generations in the case of significant street trees, and somewhere in between for the buildings and infrastructure that need time to cover their construction costs, find acceptance and support, and weave themselves into the social fabric. If people and communities are to feel comfortable making an investment that will only pay a dividend far into the future they need the reassurance that it enjoys and will continue to enjoy the reliable protection of fair and consistently applied laws. As Richard Horton (2016) puts it, the rule of law is not just about respecting statutes passed by a legislature, it is far more important than that. It is a quality of the political culture that places great significance on good governance, independent accountability and respect for certain rights. He goes on to reflect that

> *The greater the attention societies gave to ideas of liberty, justice, and respect for persons—in other words, to the intrinsic value of individual human beings—the more those societies created the conditions, incentives, and obligations for governments to invest in the value of individual human beings.*
>
> (Horton 2016)

He adds that this commitment finds expression through investments in health, education and social protection (Horton 2016).

Resilience and Vulnerability

Resilience is "*the ability of a system, community or society exposed to hazards to resist, absorb, accommodate and recover from the effects of a hazard in a timely and efficient manner*" (UN Office for Disaster Risk Reduction 2007). Places lacking resilience will be less able to cope with the disruptions brought about by existing and emerging challenges. Awareness that there will be risks—some that can be foreseen and some that can't—will create uncertainty. This can weigh heavily on people's minds and act to deter people from investing emotional and physical capital in their community or re-invest it after disruptive events for which they were unprepared (Parkinson 2000).

Resilience comes from the ability to adapt to changing circumstances. This requires that people can access the resources of materials, wealth, innovation and skills to make any necessary adjustments to the way they live, how they derive a sense of self-worth and the rules that govern their lives. Vulnerable communities are those that are exposed to a high risk that the foundations of their well-being and valued assets could be lost to them. This can happen through disasters, conflict, economic or social change that might make a community's familiar and valued ways of living obsolete or otherwise inadequate.

Resilience is strongly influenced by social factors. There is a weight of evidence that suggests that the more equitable a community is the more resilient it is (Wilkinson and Pickett (2010). Communities with higher levels of social capital tend to recover more effectively, efficiently and quickly after disasters (Dash 2009; Vedantam 2011; Aldrich undated). According to Aldricht (undated): "*Three mechanisms allow these tightly knit communities to bounce back: information, collective action, and connections.*"

Furthermore, communities with strong social capital enjoy an enhanced sense of assurance that conflicts can be overcome: "*Strong attachment and involvement in community matters also leads to strong social bonds by which conflicts are resolved in a more peaceful way compared to communities with weak social bonds*" (Weel and Akçomak 2008).

To relate this back to the framework of fundamental needs identified in Chapter 2, the reassurances offered by a place influence our ability to be able to predict with reasonable confidence what a place will be like in the future. This will allow us to make self-determined, well-informed plans about how to invest in our surroundings and protect what is important to achieve life's goals. Thus it can influence our ability to meet needs relating to protection and identity. Table 4.6 summarizes some of the key factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

The Maturity of Our Community

A place is nurturing when it has developed a rich network of formal and informal networks and people have been able to forge connections with each other and with the place. A place is neglectful when it has not adequately matured enough to provide these things.

The bonds that connect us to each other and our surroundings take time to grow. As put most eloquently by American author Wallace Stegner:

> *A place is not a place until people have been born in it, have grown up in it, lived in it, known it, died in it—have both experienced and shaped it, as individuals, families, neighborhoods, and communities, over more than one generation.*
>
> (undated)

Table 4.6 The hardware, software and orgware factors that influence the confidence people have in their community

Hardware factors that influence our confidence in our community		*Software factors that influence our confidence in our community*		*Orgware factors that influence our confidence in our community*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
All built form demonstrably accords with key planning requirements (e.g. heights and setbacks) for that area to create a built landscape that reflects even-handedness and equality before the law	Exceptions to key planning requirements for particular developments that give that development a particular economic or other advantage	Understanding of relevant planning provisions and their rationale Integrity of the planning and development process valued and protected	Lack of understanding of relevant planning provisions or their rationale Corruption in the development and planning process	Transparency in development decisions Recognition of the importance of natural justice Planning rules balance flexibility and certainty Clear rules about what gets built and what doesn't Clear rules about the circumstances that justify departing from the planning and development rules	Opacity in development decisions No recognition of the importance of natural justice Planning rules too rigid or too vague Poorly articulated rules about what gets built and what doesn't Vagueness about the circumstances that justify departing from the planning and development rules
Significant investment in education and a wide range of social facilities for people to develop their skills, resources and social capital	Little investment in education and a limited range of social facilities for people to develop their skills, resources and social capital	Experience addressing many challenges in life directly or within a community (rather than through outside help) Significant social capital, personally held skills and resources and awareness of others' skills and resources	All challenges met through outside help Little social capital, personally held skills and resources or awareness of others' skills and resources in the community	Investment in responding to emerging challenges such as climate change Cultivation of resourcefulness in the community and support for the development of a wide range of social networks	Little investment in responding to emerging challenges such as climate change Poor cultivation of resourcefulness in the community and little support for the development of a wide range of social networks
Observed enhancement of physical and social qualities that are considered important to the community	Observed erosion of physical and social qualities that are considered important to the community	Sense that planners have integrity and can be trusted Widely held perceptions that participating in community engagement sessions is worthwhile Widely held perception that people are listened to and the reasons for changes are understood	Sense that planners have little integrity and cannot be trusted Widely held perceptions that people are not listened to and the reasons for changes are not understood.	Sincere efforts made to engage the community in the design process and decisions explained	The community are not engaged in the design process in any meaningful way
Change is explained in a way that is accessible to members of the community affected	The community are not engaged in the design process and changes are not explained in a way that is accessible to members of the community affected				

New communities are often blighted by the inadequacy of such connections. In the UK, '*new town blues*' was the term coined to describe the "*loose grouping of mental health vulnerabilities experienced by New Town residents*" (Goh and Bailey 2007). Many of them experienced disruption, loneliness and dashed hopes, where the familiarities of past connections were well known but no longer available and the connections of the future had yet to emerge and possibly would never emerge. This is both a hardware issue and a software issue: the hardware is difficult to provide when the population numbers just don't exist to support the necessary services, clubs, shops and facilities needed to catalyse connections; and it is a software issue as people don't have enough experience of their new neighbours or knowledge of the opportunities of their surroundings to make the necessary connections.

An example of the cost of inadequate and unformed connections in a community's software comes from a study that sought to examine why the residents of Cambourne, a new settlement of 3300 dwellings in Cambridgeshire in the UK, suffered a disproportionate amount of mental health issues. The study by the Cambridgeshire Primary Care Partnerships attributed this to social links that had been frayed when people moved and had not yet been re-established in their new community. The report found: "*Planning for the hard infrastructure alone would never build a community and that it would only be done by a matrix of formal and informal opportunities or supported activities*" (Goh and Bailey 2007).

To relate this back to the framework of fundamental needs identified in Chapter 2, the more mature a community is, the more developed the settings and opportunities for needs satisfaction are likely to be. This may be neighbours who know one another and look out for each other or parks with established landscapes or a variety of services, community groups and societies. The more deeply embedded this social infrastructure is and the greater the experience of people benefitting from it, the more that community is likely to

Table 4.7 The hardware, software and orgware factors that influence the maturity of a community

Hardware factors that influence the maturity of the community		*Software factors that influence the maturity of the community*		*Orgware factors that influence the maturity of the community*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Social infrastructure well established	Social infrastructure not established or only established after a considerable period	Strong sense of community	Weak sense of community.	Policies and tenure favour stable populations and low turnover of inhabitants High priority for social infrastructure	Policies and tenure favour high turnover of inhabitants Low priority for social infrastructure
Physical infrastructure to cater for all ages and allows people to age in place	Physical infrastructure to cater for only one age group	Experience and familiarity with opportunities of the place	Little awareness of the opportunities of the place	Age and family-friendly policies allowing multiple generations to share the community	Little support for families and the elderly

offer a wealth of '*well-worn paths*' to beneficial outcomes. As such this variable may influence our ability to meet our identity, participation and protection needs. Table 4.7 shows some of the key factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

The Playability of Our Surroundings

A place is nurturing when it offers children *and* adults opportunities to have fun, either as an end in itself or as an added bonus to doing needs-fulfilling things. A neglectful place offers few opportunities to do things for fun and makes meeting needs unnecessarily tiresome.

Playing is an essential part of a balanced experience diet. Fun and play are an end in themselves and a means to an end, supporting many different aspects of emotional, cognitive and physical development (Play England 2008b). The term 'play' encompasses a very wide range of activities that children and young people do when adults aren't telling them what to do. Play can happen in a wide variety of different settings and take many forms, far more than the activities that most adults will consider when they think about play. It can be entirely in one's head or have an obvious external expression. Play can be individual (observing, sitting, daydreaming, imagining). It can be social (for example team games, role-playing, problem-solving and imitation). It can be active (ball games, running, sliding, jumping, swinging, skipping, hopping, bouncing). It can be cognitive and creative (making or destroying things, planning things, problem-solving, exploring, discovering and other related activities) (adapted from City of Marion 2008). It can be more than one of these things at any time and can move between different types of play in a single session.

The compassionate city is intrinsically playable and offers us all plentiful opportunities to have fun whilst engaging with the world around us. It provides catalysts to "*let the play out*" (Paul Longridge and Mark Mitchell, pers. corr.). This can happen in a range of ways; it might be by creating a sense of reassurance so carers are happier to let children out to find their own opportunities, or it may be by providing features that invite active interaction with the place or other people or fire an individual's imagination.

The compassionate city embeds playability into otherwise mundane (but needs-fulfilling) activities and offers fun as a reward for undertaking activities that may benefit us but may otherwise not be so appealing. For example getting adequate exercise can be a chore when it is monotonous and repetitive, but when it is achieved as part of a game or sport, the balance of influences may change and the hard work may become a less significant factor, counteracted by the fun. The *Fun Factory* provides an expression of this idea. Although an attempt at 'stealth' advertising by a car manufacturer, it has a very powerful underlying message that "*something as simple as fun is the easiest way to change people's behaviour for the better*" (Fun Theory website, undated). An example of the Fun Theory is the experiment conducted in 2009 where steps in a metro station in Stockholm were adapted to become working piano keys in an attempt to encourage people not to use the escalator. The promise of fun (offering the 'hidden' health benefits of exercise) proved effective in changing people's behaviour "*Turning a set of subway stairs into a real-life piano make people 66% more likely to use them*" according to Herchmer (2012). The idea inspired many other similar interventions (Figure 4.6).

Another example of emphasizing fun is found in the work of Edi Rama, former mayor of Tirana in Albania from 2000–2003. Seeking a way to regenerate the capital and shake off both its communist-era drabness and avaricious capitalist excesses, he initiated a program of reclaiming public space from illegal commercial construction and painting buildings in

Figure 4.6 Piano Staircase
Source: courtesy of istock

bright colours (Figure 4.7). The program was a distinctive and striking rejection of both excess and repression at a profound emotional level, effectively seeking to change the DNA of the city. Sophie Arie writing in *The Guardian* (2003) reported Edi Rama as saying that "*cheering Albania up is the key to its social, economic and political renaissance and to changing the country's international image as the 'land of prostitutes and illegal immigrants'*". She goes on to add that polls found that "*around 80% of Albanians approve of the facelift Rama has given their capital city*" (ibid).

On my visit in 2016 I noted these civic interventions had been maintained (Figure 4.7a) and the idea adopted by individuals (Figure 4.7b). Reflecting on the legacy of the time, Edi Rama observed that the colours cultivated a new and deeper connection between people and place: "*Once the buildings were coloured, people started to get rid of the heavy fences of their shops. In the painted roads, we had 100% tax collection from the people, while tax collection was normally 4%*" (Jason Farago, in *The Guardian* 2016).

Another good example of incorporating playability into the built environment can be found in Warin (wombat), a sculpture in Melbourne's City Square (Figure 4.8). Warin is one of Melbourne's best-loved works of public art. Constructed of river red gum (*Eucalyptus camaldulensis*) wood, it is of a colour, shape, size and material that invites people to find delight in it. For children this comes from the subconscious invitation it gives them to clamber all over it, adorning it with their presence. For adults who would typically be more reluctant to climb on it, the sculpture offers delight in its texture and beautiful form. According to the artist Des McKenna his design reflected his desire that it would be "*just the right height for children and young at heart to sit on and feel*" (pers. corr. 2015).

In the neglectful city fun is not valued and play—in particular active, outdoor play—happens less, frozen out by an inadequacy of inviting, safe opportunities. Not so much because of children's reluctance to play—children will play almost anywhere, inspired by their imaginations (see Chapter 2)—but because their parents or guardians increasingly interpret places as threatening (Clements 2004; Planet Ark 2011) or prioritize other activities and actively deter children from playing.

To relate this back to the framework of fundamental needs identified in Chapter 2, the promise of fun may tip the balance and influence us to participate in a range of activities we may otherwise not do. This may allow us to benefit from the protective advantages of exercise, learn about ourselves and the world around us, test and develop our skills, benefit from the satisfaction of little achievements and provide opportunities to interact with other people. It can provide an outlet for us to express ourselves. Thus it can influence our ability to meet our needs for physical activity, leisure, understanding, creation, identity, freedom and protection. Table 4.8 shows some of the key factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

The Ease of Understanding the Available Opportunities and Experiences

A place is nurturing when it is legible and clearly communicates to the people who share it the options available to them. A neglectful city obscures its assets and opportunities and fails to share its stories.

An individual's ability to take up opportunities available to them is to a large extent dependent on their ability to read their surroundings and understand what those opportunities are. Kevin Lynch's influential and insightful book *The Image of the City* (1960) sheds a light on the processes by which the visible city becomes embedded in people's

Figure 4.7 Examples of the Repainting of Buildings in Tirana (top) and an Example of the Private Colouring It Inspired (bottom)

Source: Shutterstock 585399503 and author

Figure 4.8 Warin
Source: courtesy of Belinda Strickland

awareness, helps people orientate themselves and help people get a sense of where they should go or avoid. Although *The Image of the City* has been criticized for relating only to the visible expression of the physical city, ignoring the messages of our other senses (de Lange 2009), it is useful in the way it spans and links the hardware and software of the city and provides a helpful language by which we might articulate the social landscape.

Kevin Lynch suggests that people make sense of the city with

> *a generalized mental picture of the exterior physical world that is held by an individual. This image is the product both of immediate sensation and of the memory of past experience, and it is used to interpret information and to guide action.*
>
> (1960)

He suggests that clear cerebral maps of the urban environment protect a person against the fear of disorientation and bring with them a sense of emotional security, allowing a person to experience the city at ease.

He categorizes the components of a city (Figure 4.9) that form this mental map as: (1) Paths: these are routes along which people move throughout the city and from which they experience it; (2) Edges: these are boundaries that create discontinuities in the urban fabric; (3) Districts: areas that share a common set of characteristics; (4) Nodes: these are strategic focus points such as squares and junctions that provide points of orientation and that can be occupied and passed through; and (5) Landmarks: these are distinctive points in the landscape that allow people to orientate themselves, usually experienced externally.

Experience suggests that when these elements are clearly articulated in the urban fabric, the city becomes intrinsically legible and requires less additional interventions such as signs to give people the reassurance that they are heading in the right direction as they move through the city. This reassurance enables people to interpolate the gaps in their mind maps and explore, turning potentially sharable space into actively shared space, to relate it to some of the concepts introduced in the last chapter.

Table 4.8 The hardware, software and orgware factors that influence the playability of a community

Hardware factors that influence the playability of the community		*Software factors that influence the playability of the community*		*Orgware factors that influence the playability of the community*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Frequently accessible, high-profile, attractive, dedicated play areas Variety of 'loose-fit' open spaces to accommodate a range of activities at the same time or consecutively Frequent informal play opportunities such as street furniture and public art compatible with playing, by virtue of its material, location, form (wherever appropriate) Streets/lanes with low traffic volumes and slow traffic to accommodate street play Grid network allowing for streets to be closed for play events Trees, seats and other street furniture to allow comfort for the carer and non-playing child	Few, unattractive play areas Dangerous informal play opportunities Heavily trafficked streets No consideration of the comfort of attending carers and non-playing child	Belief in the importance of children's independent play and reassurance that the public realm is safe enough to warrant it Experience of others playing safely and happily in the public realm	Little belief in the importance of children's independent play or little assurance that the public realm is safe enough to warrant it Little experience of others playing in the public realm or advice that it is dangerous or 'not for nice kids'	Play seen as a priority and encouraged in adults and children	Play not seen as a priority and only tolerated or even discouraged

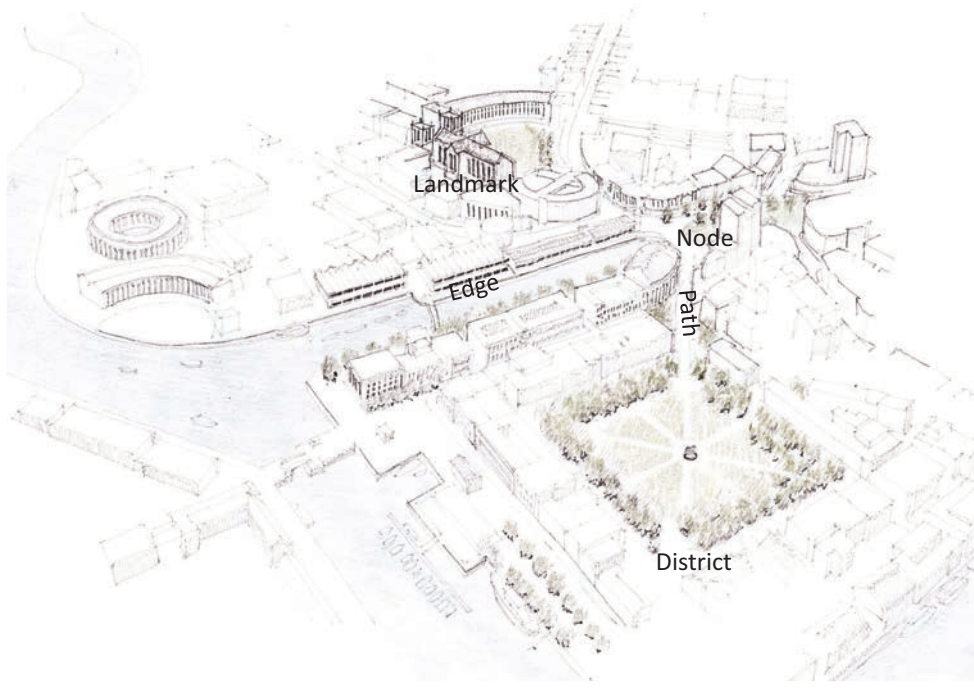

Figure 4.9 Examples of Lynch's Five Elements Based on Bristol, UK

Kevin Lynch's work was built upon by Ian Bentley et al. (1985) with their influential *Responsive Environments*. This book suggests that "*people can only take advantage of the choices which those qualities offer if they can grasp the place's layout, and what goes on there*." Based on their experience and interpretation of the research, they suggested a series of design techniques that reinforce the effectiveness of Lynch's five elements, making nodes more obviously node-like and landmarks more distinctive, for example. Their recommendations stressed the importance of design that was grounded on an understanding of how local people saw their surroundings and the visual conventions that allowed people to draw conclusions about the activities that take place in a building or area from its external characteristics.

However there is more to understanding a town or city than being able to place yourself geographically and locate activities within it. Any place is likely to have a wealth of historical layers (which may or may not have a physical expression) which may create emotional hotspots. The compassionate city nurtures its inhabitants by revealing those layers and allowing us all to look upon our surroundings in a way informed by this understanding. When we can place these layers in chronological order and understand the evolution of a place, we can interpret its momentum, giving us a sense of where it has come from and perhaps where it is going to go.

In the neglectful city these structuring elements are lacking or are obscured by poor, homogenous urban form or drowned out by an overload of information from such things as advertising or the demands of moving through congested cities. In such places mental maps fail to come into focus. People get lost, provoking "*the sense of anxiety and even terror*" that many people experience when they lose their way (Lynch 1960). Their occupants find that past beneficial experiences of places they have enjoyed cannot be 'topped

Table 4.9 The hardware, software and orgware factors that influence the ease of understanding a place

Hardware factors that influence how easy it is to understand an area		*Software factors that influence how easy it is to understand an area*		*Orgware factors that influence how easy it is to understand an area*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Buildings designed to reflect easy-to-understand conventions about the activities they offer Legible, easy-to-understand street network and signage Presence of distinguishing features (landmark buildings or spaces) visible at decision points such as intersections	Buildings designed with no regard to conventions about the activities they offer Illegible, difficult-to-understand street network and poor signage No distinguishing features at decision points such as intersections	Design processes give weight to understanding how people interpret their surroundings and the conventions about what particular building types and uses look like	Design processes give little consideration to understanding how people interpret their surroundings and the conventions about what particular building types and uses look like	Design guidelines stress importance of legible street network, good signage, conventions about the appearance of particular land uses and the responsibilities of high-profile locations in assisting wayfinding	Design guidelines define what is acceptable with no reference to legibility.
Physical markers for historical events	No physical markers for historical events	Significant historical awareness	Little historical awareness	History and heritage valued, researched and funded	History and heritage not valued, researched or funded

up' with further visits as the effort needed to find these places again remains stubbornly high, even after multiple visits.

To relate this back to the framework of fundamental needs identified in Chapter 2, The ease with which we can understand our surroundings influences our ability to take up the opportunities it offers and gain a sense of what it means to us. As such it may help meet our needs of understanding, participation and identity. Table 4.9 shows some of the key factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

The Status Our Surroundings Ascribe to Us

A place is nurturing when all of its inhabitants enjoy surroundings that reflect well on them and there is little that invites others to negatively stereotype them. A place is neglectful when it reflects badly on the people who share it.

How people are perceived matters. Wilkinson and Pickett (2010) suggest a characteristic of humanity is that we often have difficulty differentiating esteem and self-esteem and tend to take on board the judgements that others make of us: we are a failure if people think we are. Unfortunately the built environment that surrounds us and the activities it accommodates can give other people many messages that they will interpret as saying something about who we are. Where we live can make people form the view of whether we are likely to be trustworthy or not, rich, poor, working or unemployed, educated or not educated, locally born or an immigrant.

Josephine Parsons, writing in *The Guardian*, suggested such 'postcode prejudice' (Parsons 2016) creates an uneven landscape of opportunity and makes it harder for people in some areas to access the opportunities or benefit from other people's trust and acceptance than they would if they lived elsewhere. Speaking of the negative perceptions of Sydney's western suburbs, she notes that this "*postcode problem has created a class divide so great that it threatens to determine our potential*".

Similarly, in the UK, the inhabitants of many urban renewal projects found the strong association that these places had with crime and unemployment meant that an address in many of these places stigmatized their inhabitants (CABE 2008). Other people thought less of an inhabitant of these areas not because of what they had done but because of what they perceived people from these places to be like.

Table 4.10 The hardware, software and orgware factors that influence the status our surroundings attribute to us

Hardware factors that influence what our surroundings say about us		*Software factors that influence what our surroundings say about us*		*Orgware factors that influence what our surroundings say about us*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
Well-maintained and attractive surroundings	Poorly maintained and unattractive surroundings	Outsiders have positive experience of the people who live there	Outsiders have negative experience of the people who live there	Promotional campaigns to address stereotypes	Stereotypes left unchallenged
Proximity to centre of power or symbol of refinement (square, park, beautiful landmark building)	Distant from centres of power or symbols of refinement	Hope that a positive reflection can be maintained or a negative one will be improved	A sense that things are getting worse	Investment in developing a community	Investment in controlling a community
'Higher order' aesthetics, social or ecological objectives prominent in building design	'Lower order' security objectives dominant in building design	Perception that the people who live here are successful	Perception that the people who live here are failures	Well-maintained public infrastructure	Poorly maintained public infrastructure

To relate this back to the framework of fundamental needs identified in Chapter 2, the status our surroundings ascribes to us can impact our ability to self-determine our identity by influencing the faith other people are prepared to place in us. It does this when an association with a place brings with it pre-conceived ideas about what people from that place are like. It can close doors to people and deny them opportunities that they may have had if they came from elsewhere. In doing so it influences our ability to meet our needs to participate in society and forge our own identity. Table 4.10 shows some of the key factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

The Inspiration We Get From Our Surroundings

A place is nurturing when it incorporates design qualities that inspire and invite people to do things that support their well-being, not because they have to do them but because the quality of their surroundings provokes the desire to do so. A place is neglectful when it offers them little invitation to do these things.

What we do is to an extent defined by what our surroundings invite and inspire us to do. Play England (2008b) reported that "*animal research indicates that environmental enrichment (the provision of attractive stimuli in an environment) will increase play behaviours and thus enhance brain plasticity, reduce anxiety-like behaviour, promote physical activity and enhance immune systems*."

As explored in Chapter 2, our needs have a qualitative component. It is not enough to merely have quantitative access to the opportunities to meet needs if these opportunities are utilitarian and do nothing to provoke an emotional response in the visitor or invite them to make the effort to participate in the opportunities the place offers. This invitation happens when places provoke a sense of delight, awe, insight or sense of communion with other people—or the place—and in doing so provoke a desire to explore and share that place. Such places captivate us, lift our spirits, recharge our emotional batteries and move us, literally and figuratively, to do things we wouldn't have done and feel things we wouldn't have felt.

This strong motivational force can come most dramatically from experiencing places of sublime beauty, built and natural majesty, significant activities or events, and/or the company of interesting, fun, engaging people. When this inspiration is present and it fires us up to improve the way we look after the places we are responsible for, or makes people want to visit the local park, or play, interact with others and learn about the world, then it has helped people meet their needs. What gives a place such appeal is beyond breaking down into component qualities but it is important to stress it rarely (if ever) happens by accident. It can be created, enhanced or diminished by the way we design. Perhaps one of the most obvious examples of using the constructed environment to inspire people comes from the cathedrals, mosques, shrines and temples that have for millennia sought to use scale, drama, craftsmanship and a commitment to architectural beauty to set them aside from their surroundings and amplify a sense of spirituality and awe in those who visit them (Figure 4.10).

Although not an exact match, there is considerable evidence that the motivational effect of design inspiration to enhance lives can be found in the broader factor of design quality and in particular quality landscape design: "*In a recent study in the Netherlands, de Vries et al. (2013) found an association between the quantity and, even more strongly, the quality of streetscape greenery and perceived social cohesion at the neighbourhood scale*" (WHO 2016). A study in Western Australia confirmed the differential attraction

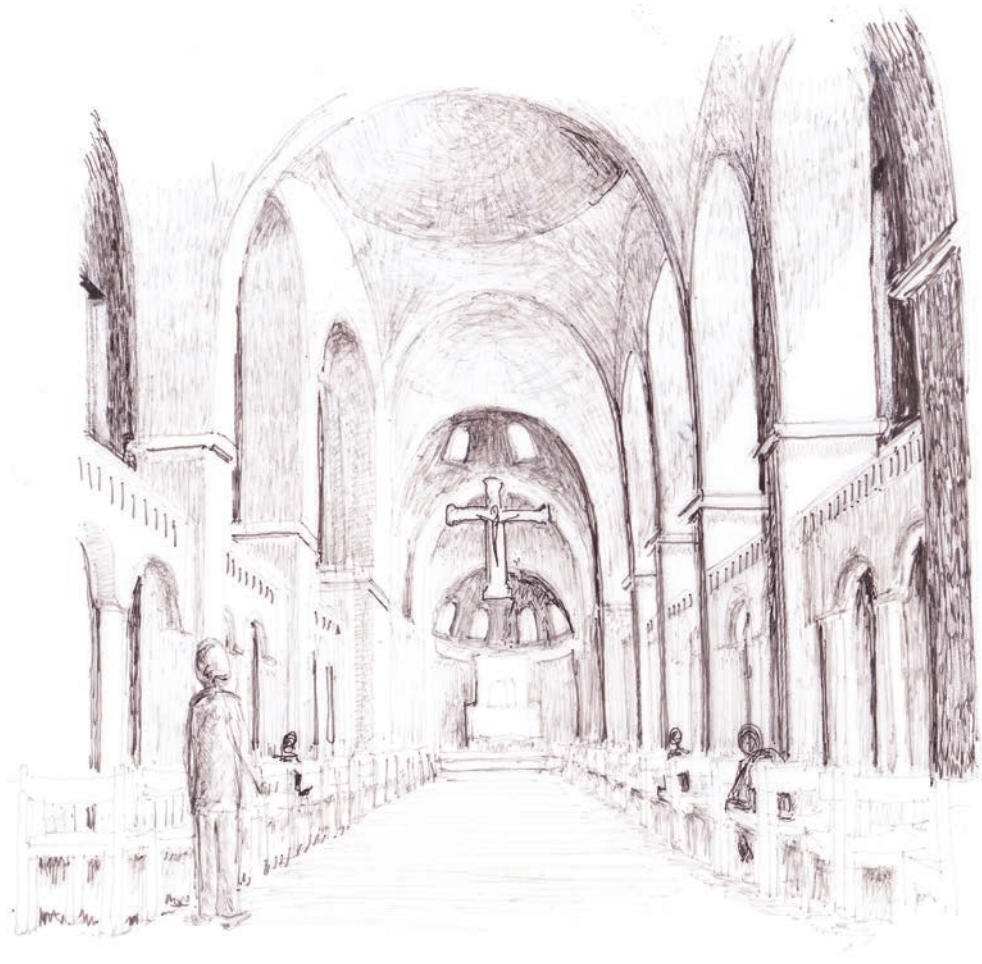

Figure 4.10 Westminster Cathedral

of high-quality open space over mundane spaces, noting that people will walk farther to access attractive, well-designed and large public open spaces (Giles-Corti et al. 2005).

This reflects research from Australia by Veitch et al. (2007), who found that the aesthetics of a park would influence children's desire to play there. Their study also states that "*one of the most common issues, especially for the children aged 8–12 years, was that they found the playground equipment uninteresting, not challenging enough, and primarily designed for younger children.*" They also found some children also commented that there was a lack of variety between playgrounds, with the same equipment often found in different parks. They noted that "*these concerns regarding the play equipment seemed to discourage some children visiting parks and resulted in the children preferring alternative activities*" (ibid).

To relate this back to the framework of fundamental needs identified in Chapter 2, the inspiration might be seen as a magnet that can be used to attract people to undertake any of the activities from which they can meet their needs. Table 4.11 shows some of the key

Table 4.11 The hardware, software and orgware factors that influence how inspiring our surroundings are

Hardware factors that influence the inspiration we get from our surroundings		*Software factors that influence the inspiration we get from our surroundings*		*Orgware factors that influence the inspiration we get from our surroundings*	
. . . in the compassionate city	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*	*. . . in the compassionate city*	*. . . in the neglectful city*
High quality of materials, craftsmanship and maintenance High standard of architectural design applied to social places	Low quality of materials, craftsmanship and maintenance Low standard of architectural design applied to social places	High standard of design effort demanded and given	Indifferent effort applied and generic design responses offered	Design processes, budgets and timelines reflect a commitment to design excellence, particularly at identified places of significance	Design processes, budgets and timelines reflect an acceptance and expectation of low-quality design

factors that will influence whether the hardware, software and orgware of a place make it harder or easier for these needs to be met.

The Social Gradient of Invitation

Simply put, the idea of 'the social gradient of invitation' is that a person's well-being, wealth and the design quality invested in their surroundings tend to be bound together, influence one another and are directly proportional. For the poorest and most vulnerable in society, these factors, or rather their absence, marked out by the variables noted in this chapter, typically work together to deny people an invitation to take up opportunities, which compounds disadvantage, locks people into diminished lives and denies them opportunities enjoyed by others.

According to Graham Duxbury, chief executive of Groundwork UK, economic disadvantage is echoed and amplified in a poorer quality public realm. Access to quality green space—"*for leisure, for exercise, for social contact—is one of the many things that mark out the haves and the have nots in society*" (Duxbury 2015). Another UK report found that "*at present, the distribution of areas with high levels of social exclusion typically coincides with areas of sparse green space which is of limited quality*" (House of Lords 2016). This inequity reflects research from the UK undertaken for the "*Urban Green Nation*" study by the Commission for Architecture in the Built Environment (CABE) in the UK in 2010 that confirmed that the quality of green space is worse in deprived areas than in affluent areas. This is despite the fact that other studies have found that whilst everyone benefited from equal exposure to green space, the lowest income groups benefited the most (Maas et al. 2006).

There is also a robust evidence base that suggests that the higher the quality of open space, the more likely it is to be used (CABE 2010). This report noted over 70 other studies that found that levels of physical activity were highest in those wealthier areas that

enjoy a high level of quality and quantity of open space. Although it is not suggested that poorer design in poorer places is the only factor influencing activity, the alignment between poverty and (in)activity is striking: "*The most deprived wards have only 40 percent of adults doing moderate physical activity regularly, while this rises steadily across the bands to nearly 60 percent in the most affluent wards*" (ibid).

Hence I would like to suggest there is a social gradient of invitation, echoing and perhaps amplifying the social gradient of health (Marmot and Stafford 2010). Communities of lower socio-economic status find their relative disadvantage compounded by surroundings that offer a lesser level of encouragement to do the things they need to do to nurture themselves. The spaces these poorer communities experience are more likely to be mundane and utilitarian, as well as lacking in the power to inspire genuine delight and to invite people to do things such as stay and play in these places. This is not to deny or ignore the very many noble initiatives by many agencies and individuals that seek to address this inequity; it merely notes that it is an issue.

This inequitable distribution of quality has huge health implications. Natural England has estimated that if each household in England was provided with equitable access to quality green space, then savings of £2.1bn could be achieved every year in averted health costs (quoted in the House of Lords 2016).

What Does This Mean for Urban Designers?

This inequity of inspiration and invitation offered by our surroundings is an important matter that should demand our attention. The importance of design quality suggests a line can be drawn between the investment of emotional capital by the designers and those who care for a place and the emotional response of the people who experience it. When a place is poorly invested with the care of these decision-makers, as explored in the section 'The Social Gradient of Invitation' earlier in this chapter, it is unlikely to inspire its potential users to engage with it. In such generic, poorly thought through, inadequately managed or 'designed by box ticking' places, the emotional responses of their users are likely to be indifference or avoidance. Many will be seduced by 'easier' (but not needs-fulfilling) ways to spend their time, as they are likely to look out their windows and conclude that it's preferable to stay indoors or only venture out in a car to further afield, more-appealing places. Furthermore, without other people sharing an activity in a neighbourhood, there is a lack of evidence that it is 'the done thing' in that community. For example, if you never see someone run or cycle or (for new mothers) see other mothers breast feed in public in your neighbourhood, you are less likely to consider it part of your experience menu. In such places if someone does choose to walk, cycle or play, breast feed in public or indeed participate in any of the activities that support health and well-being, they are doing so because they really want to do so rather than because their surroundings inspire the desire to do so.

Consequently places lacking in 'inspiration of place' are uncompetitive in attracting people's attention and the needs that they were designed to meet are more likely to go unmet unless an individual can summon up a great deal of personal motivation (Figure 4.11). Whilst some people will overcome these disadvantages and meet their needs by sheer will power, focus and dedication, others will give up, unwilling or unaware of the imperative to make different choices. These people are disadvantaged by their surroundings and the threshold of effort to achieve well-being is more difficult for them to reach (perhaps prohibitively difficult) than it would be for someone in an area offering more invitation.

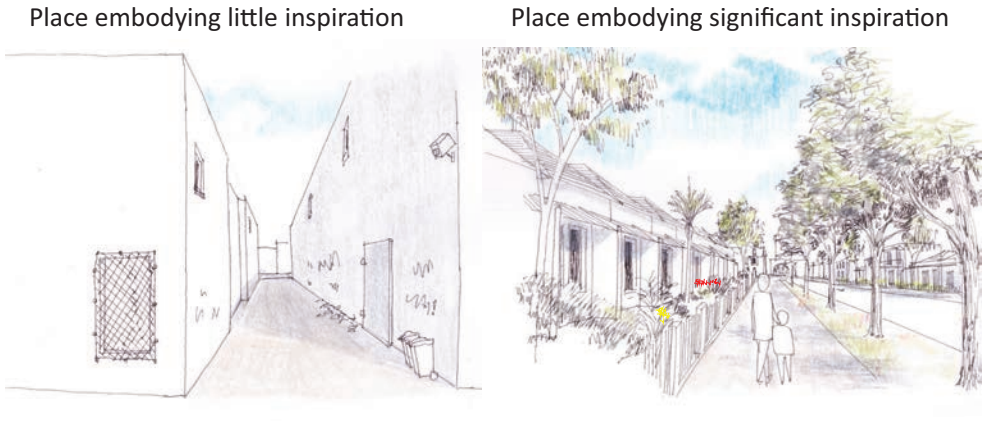

Figure 4.11 Places Offering Inspiration of Place Make Lesser Demands on Personal Motivation to Meet Needs

Repeated over a neighbourhood or even a city, this denies its occupants many opportunities and can reflect and reinforce other forms of division. Distance and inconvenience to access better designed, more inspired places create arbitrary barriers within and between communities, making winners and losers of their inhabitants.

Unfortunately disadvantaged communities lack the resources, power, skills and experience to demand things or make these things happen themselves or protect what they value (Duxbury, pers. corr. 2015). Urban designers can help by seeking to see the world through the eyes of those who experience that place, now and in the future. Given the diversity of needs and perspectives, urban designers should also seek to design places to meet multiple needs and deter activities that preclude needs satisfaction. This requires a design process that is informed by all potential users of the space, including those traditionally disadvantaged and marginalized as well as those not yet born. Realizing change in communities with limited access to resources also requires that designs can be implemented and maintained without big investments of money or expensive expertise and so are less dependent on big capital or technical skills that are normally in the control of power elites.

This plea for greater local control comes with an important caveat: it will always be necessary to consider broader issues rather than just a list of priorities established by a single community. In an interconnected world, we will always need to ensure that development to serve one community does not happen in a way that is unfair to other communities, now or in the future. Balancing the needs of the client community with those not yet born or who can't participate will always present a challenge that will call on all our creative and communication skills, particularly when it requires tempering the aspirations of the people who share a place in the here and now.

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