









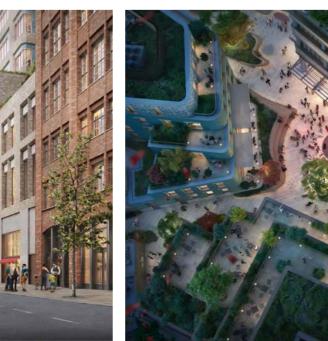
Shoreditch Works

Will it make London better? A 'critical friend' review

May 2025









Foreword

If Shoreditch Works, London can work

As cities age, their streets and squares get taller. In the twin cities of London and of Westminster, seventeenth century cottages on muddy lanes were replaced with four storey eighteenth century houses on paved streets. Many of these in turn were swept away for five or six storey Victorian offices with red brick and flamboyant, corbels, cornices and capitals.

Between 1900 and 1914, much of West London was rebuilt in Edwardian classical rococo, bigger and brassier and in Portland stone not stock brick or stucco. Further east, the city and Shoreditch grew instead into simple but pleasing warehouses with buff brick, Doric door surrounds and elegantly simple pilasters. The buildings on the Shoreditch Works site at 40 - 46 Scrutton Street and 13 - 19 Curtain Road are typical of the species.

But then urban history changed. First came the bombs in The Blitz and the subsequent doodle bugs and V2 rockets. Around half of the Shoreditch Works site was destroyed or badly damaged by 1945. However, thankfully, the perimeter of the urban block formed by Worship Street, Curtain Row, Scrutton Street and Holywell row was less badly damaged than the centre.

Next, post-war building was not always happy. Impoverished by rationing, undermined by material shortages and misled by a modernist design aesthetic which denied the primacy of the street, most 1950s and 60 buildings were shorter, plainer and less lovingly detailed than their Victorian predecessors. London was going backwards both in density and character. As one of the high priests of traffic modernism, Maxwell Fry, put it, architects should address 'ourselves only to those capable of understanding us, and let the rest go hang.' It was not a philosophy calculated to win widespread public support.

London's long boom over the last 40 years has changed the neighbourhood again. Many of our new buildings though much larger than the predecessors have been just as faceless. A London of fine Lego bricks has been replaced by one of crude Dupo bricks. Some of this site's near neighbours will scar the city lumpishly for many years. Joyfully, this development is different. Preserving all of the old buildings and improving and intensifying all of the new, the Shoreditch Works proposal is an exemplar. This is the way. This is the right approach to the growth and beautification of our capital city. The bricks and arches echo the past and speak to the future. Here is a place where we can mingle traditional wisdom with modern rebirth. Here is a place that 'fits in' and feels right.

Although funded by the developer, Create Streets' Three Eyes critical friend review in the subsequent pages is fully intellectually independent. As we have done for schemes the length and breadth of the land, we examine the design at the three scales of Bird's Eye (beyond the red line), Adult's Eye (streets and geometry) and Child's Eye (materials and design). We set out the considerable merits and (as you will see) the few demerits of this excellent scheme. Every word is our own.

The review shows, first and last, that when you make places better, people prefer it. Design is not subjective. There are predictable and fairly consistent relationships between how we design our streets and squares and the quality of the air we breathe, our propensity to walk, to speak to our neighbours and to feel safe as we move around our towns and cities. We have set out some of these relationships in our books such as Heart in the Right Street and Of Streets and Squares.

What people like is also highly predictable. The results of our proprietary Visual Preference Survey could not be clearer: 76 to 78 per cent support over three carefully controlled image comparisons consistent across all demographics of age, politics and place. This is the fastest path to growth: using new buildings to make old places better, as judged by the public.

At present, only two per cent of the British public trust developers to improve existing places with their works. And only seven per cent trust the planning system. These are, to put it mildly, not good statistics. If the British are to fall back in love with the future and if we are to improve the productivity, prosperity and beauty of our existing towns and cities, then schemes like this must become the norm, not the exception.

Let us hope that the planners and councillors of Hackney Council agree and that common sense, hope and 'love of London' can win the day.

Nicholas Boys Smith MBE Founder and Chairman, Create Streets

Executive Summary

The scheme is an excellent example of urban regeneration and re-stitching that should improve the prosperity, quality of life, liveability and beauty of this corner of London. In the round, it is to be highly commended. It repairs design scars left over since the war and intensifies London in precisely the right place. Studying the design history, it has clearly improved through the preapplication process and the designers, consultants and Local Planning Authority deserve high praise.

Drawing on our extensive, award-winning and international research into relationships between design and movement with prosperity, health, happiness, popularity, and support for development, we assess that its key strengths include:

 Creating a place that is very popular with the public across all demographics. Deltapoll conducted a statistically representative visual preference survey of the British public on behalf of Create Streets, sampling over two thousand respondents. The public were shown three pairs of before/after images showing existing conditions alongside proposed development views from identical angles, with carefully controlled variables including sky and lighting conditions, and foreground elements like cars and pedestrians. Respondents based preferences solely on visual comparisons, receiving no contextual information about the wider project beyond the paired images, ensuring unbiased assessment of the design placemaking and aesthetic qualities.

The results revealed considerable public support for the development's streetscape improvements and the benefit to its surroundings, with support ranging from 76 to 78 percent. Support was strong across all demographics by age, socio-economic status and political views. Support was particularly strong among younger adults.

- 2. Material improvements to the attraction of the streetscape improving the height, texture, variety in a pattern and material quality of buildings facing Scrutton Street, Curtain Road, Hollywell Row and Worship Street. The scheme wisely and well maintains all buildings that already improve the street and improves all those that spoil it.
- 3. More than doubling the level of usable internal space for offices, shops and residential use from 29,000 GEA sqm to 80,543 GIA sqm.



Figure i – Visual preference survey results. Respondents were asked: 'Here are two alternative designs for the same street in a city centre location. If you had to choose, and all other things being equal, which one of the streets do you prefer?'

- 4. Providing well designed new public space and artfully designed linkages through the urban block. (These could be too much if it were a purely residential-led scheme but are perfectly appropriate in the circumstances).
- 5. Creating some superb, colourful and textured new buildings within the block as well as on the streets. Most notably the Mason Building, which picks up some excellent recent precedents such as 40 Beak Street and Buckle Street Studios, and might even be said to be starting to create a new London typology.
- 6. Creating 78 new homes, 35 per cent of which will be affordable. London desperately needs homes, particularly when in such an excellently improved and well-connected place.
- 7. Funding improvements to the surrounding streetscape and public realm which are likely to be excellent given Hackney's track record in this department. Hackney's planting of over 5,000 new street trees has been exemplary.
- 8. Preserving and funding improvements to the important and attractive historic buildings, to all of the façades and most of the surviving interiors, above all important Webb Terrace which has been shabby for many years and will now finally be restored thanks to this scheme. This will be hugely welcomed by anyone interested in London's history.
- 9. Managing responsibly and well some of the challenges of wind and light that a higher density scheme and tall building unavoidably creates, notably the large bifold doors of the Verso Building and the setback above its urban room.

More widely, given the depressingly placeless, unpopular and bird-killing glass towers which have dominated most City and much City fringe development over the last 20 years resulting in heartless and windy streets, this is a very welcome departure from the norm, creating a new place which promises to rise above the windy and the dark. If delivered as promised, it will massively improve the existing historic streets and the important Webb Terrace.

Our main concern and suggestion is (as we understand it) more a consequence of London and Hackney's planning policy than a specific scheme design decisions. Given the desperate housing need in London and the relative adequacy of commercial space, we would have preferred to see a higher quantum of housing within the overall development. In the long-term, however, there is little to stop some of these buildings being repurposed to residential uses in generations to come. What is critical is repairing the damage of anti-street development two generations ago and creating better places for the future. This scheme achieves this superbly.

We have several other points of detail, but these are second order compared to the scheme's overall quality, and almost inevitable in a scheme of this welcome scale and complexity. None could even remotely be taken as a reason not to support this intensification and beautification of central London. We would recommend that:

- 1. The confusion of backs and fronts in the new Webb Mews needs to be fixed. This matters if the back gardens are to be used and to feel safe, particularly in such an urban context and particularly if children live there. We recommend that the fence and gate are made higher whilst remaining visually permeable.
- 2. Keep the texture inside the block. Some of the buildings within Rose Yard, such as the Mason Building, are superb. Others risk becoming bland, such as Holywell Court. Whilst we recognise that the interior of the block has been deliberately designed to be more modernist and even 'moderne' than the textured buildings facing the streets, there is a risk of the internal space becoming too bland and featureless. We would encourage more texture and glazing bars as is working so well on the surrounding streets.
- 3. Greater attention should be paid to how street life can be encouraged when there is no programming or in poor weather conditions. Given the limited uplift in residential capacity and the wider area's existing commercial focus, ensuring that the inner courtyard area remains attractive and welcoming outside working hours, when there is no programming or when the weather is cold/wet, is a concern. We suggest paying more attention to lighting and planting levels and the design of outdoor space at the Verso Building's base.



Contents

- 1. Report status
- 2. Our research base
- 3. The 'three eyes' framework
- 4. Bird's Eye strengths and areas for improvement
- 5. Adult's Eye strengths and areas for improvement
- 6. Child's Eye strengths and areas for improvement
- 7. Visual preference survey
- 8. Conclusion

Appendices: extracts from relevant Create Streets underpinning research

- i. Appendix i: the value of mingling homes, offices and shops (from Move Free and Beyond Location)
- ii. Appendix ii: the value of historic streets and buildings (from Beyond Location)
- iii. Appendix iii: the health, value and popularity of greenery (from Of Streets and Squares)
- iv. Appendix iv: the attraction of enclosure (from Of Streets and Squares)
- v. Appendix v: the value of clear backs and fronts (from Beyond Location)
- vi. Appendix vi: the predictability and importance of attractive facades (from Of Streets and Squares)
- vii. Appendix vii: visual preference survey methodology
- viii. Appendix viii: Deltapoll visual preference survey results

1. Report status

This note summarises our assessment of the proposed design of Shoreditch Works development in Hackney, London. The assessment is focused on the masterplan and material contained within the Design and Access Statement (September 2024), Shoreditch Works Social Value Framework, South Shoreditch Island Site: Historic Analysis (April 2021), draft Future Shoreditch Area Action Plan (AAP) (September 2024) and Hackney Local Plan 2033 (adopted July 2020). The Design and Access Statement and Historic Analysis were provided by Linea Properties.

For full transparency, this report has been commissioned and paid for by Linea Properties. However, it is fully independent. Beyond provision for factual corrections, editorial control has remained completely with Create Streets throughout.

2. Our research base

Our research into the relationships between urban design with elements of wellbeing, sustainability and prosperity combines primary 'big data' research and extensive literature reviews. It is mainly summarised in three books and two reports. These are:

- Boys Smith (2016), *Heart in the Right Street*.
- Boys Smith, Toms, Venerandi (2017), Beyond Location.
- Boys Smith, lovene, Seresinhe (2019), *Of Streets and Squares.*
- Broad et al (2023), *Greening Up*. See chapter one.
- Boys Smith, Noble, Milner, Vadera (2024), Move Free.

Heart in the Right Street analyses the relationship between pace with health and happiness. Beyond Location examines the relationship with value and prosperity. Of Streets and Squares examines the relationship with popularity. Greening Up reviews the evidence on the consequences of greenery within urban streets and Move Free reviews the evidence on the consequences of multimodal movement. Shorter summaries or more specific analysis is also available in a range of articles in peer reviewed journals. These include:

- Boys Smith, Toms, Venerandi, (2018), 'What kind of neighbourhoods will people pay more for?', (2018), *New Design Ideas*, Vol.12, No.2, pp. 62-75.
- Boys Smith, Toms, Venerandi, (2018), 'Beyond location', *Land Journal*, April-May 2018, pp. 12-14.
- Chavez, Milner 'Architecture for architects? Is there a 'design disconnect' between most architects and the rest of the non-specialist population?', (2019), New Design Ideas, Vol. 13, No1, pp. 32-43.
- Boys Smith, 'Turning everywhere into somewhere: how can we plan for a happier and healthier future?', (2021), *Journal of Planning Law*, Issue 13, pp.4-28.

3. The 'three eyes' framework

3.1 Introduction to the `three eyes' framework

This assessment makes use of the proprietary Create Streets 'Three Eyes' framework which is an assessment tool Create Streets have developed to assesses the quality of existing and proposed places. It is based on our research as outlined in section 2. It is based on the following three scales:

- Bird's Eye. Layout and connectivity beyond the site boundary red line.
- Adult's Eye. Geometry, parking, street typologies and buildings.
- Child's Eye. Materials, details, street furniture and greenery.

The diagram on the next page outlines in further detail the elements that make up the 'Three Eyes' framework and form the basis for the structure of this report.

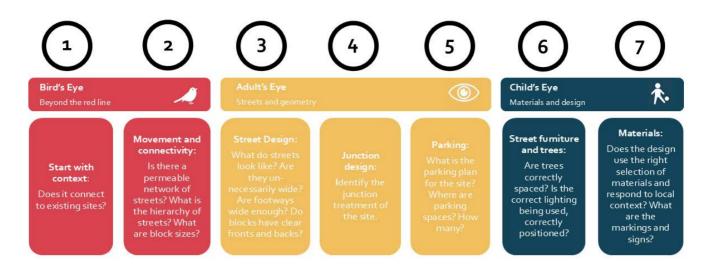
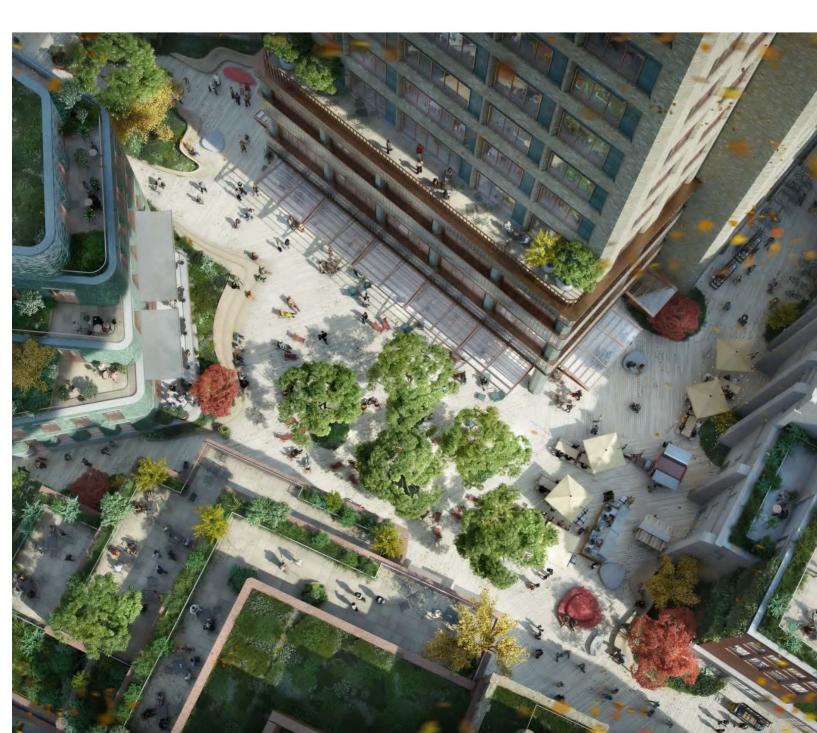


Figure iii – Three eyes framework



4. Bird's Eye strengths and areas for improvement

4.1. Strengths

- Shoreditch Work is intensification of activity in the right place. As an area of very high Public Travel Accessibility Level (PTAL 6) within the Central Activity Zone this is a case book example of where we should be creating homes, offices and activity. New homes and offices in this location encourage sustainable living patterns and more productive growth and interaction. (See appendix i.)
- 2. Shoreditch Works helps restitch London. It preserves all existing streets, enhances them visually (see also points 3 and 4 below) and creates new intra-block links located on Scrutton Street, Curtain Road, Holywell Row and Worship Street. Space Syntax analysis was used to improve permeability with new access points and public passages towards Shoreditch High Street, Old Street and Liverpool Street aligning with desire lines. Pedestrian sightlines were validated by Space Syntax analysis intersecting at Rose Yard, the proposed central space.

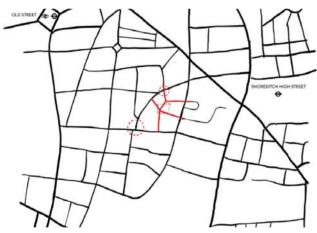


Figure iv – New pedestrian routes help re-establish the block's urban grain

3. Shoreditch Works repairs scars left over from World War II. Over 80 years ago this part of London, like so many, was badly bombed. Much of the site, particularly in the centre and to the north, was destroyed or damaged beyond what was judged to be reparable. Adjacent areas were also cleared. In an era when London's population and industry were declining, when building materials were initially rationed and when architectural design stressed a lack of detail much of the consequent rebuilding was too low and too poor quality for such a central site. This development is an opportunity to right those wrongs and repair scars after nearly 80 years. Certainly, in areas of high prosperity like central London, most people appear to prefer, and often pay more for, neighbourhoods with more historic fabric and buildings. (See appendix ii.)



Figure v – Bomb damage map, 1945

4. Shoreditch Works creates new public space. There is currently 76 sqm existing public realm on site, little more than a patch of pavement. Shoreditch Works will create an additional 2,764 sqm of new accessible public realm creating 2,840 sqm in total. This is a very material 36-fold increase. This new high quality public realm, crucially with greening integrated throughout, will lead to a more attractive, liveable and prosperous place. (See appendix iii.)

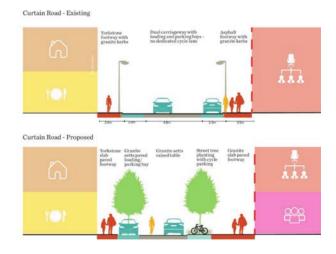


Figure vi – Curtain Road Street Sections

4.2 Areas for Improvement

The development is likely to be a net-positive for the 1 area although a question remains about the quality of the inner courtyard and lanes after-hours, during poor weather or when there is no programming. It is clear a lot of work has gone into the design of the central Rose Yard area and the 'urban room' with feedback from various consultations resulting in design changes. These include better integration of the 'urban room' into the public realm through folding glazed doors. The current proposal also identifies the crucial role programming will play in activating the space. However, given the limited uplift in residential capacity and the wider area's existing commercial focus, ensuring the inner courtyard area remains well used outside of the working day, when there is no programming or when the weather is cold/wet, is a concern.

Recommendation one: We suggest being clearer in the documentation about the level and quality of lighting within the public realm. Ensure that planting levels do not create a security concern. To build trust with those viewing the DAS, you might wish to consider including a render showing the Verso Building's base with the folding doors closed. What will be the quality of the place then?

2. The playground space tucked behind Holywell Court feels like an afterthought. While we are conscious that there is off-site play space provision close by for children 11+, it is positive to see natural and doorstop play elements aimed at younger children, even though this development may not appeal to those with young families. However, the placement of these spaces leaves them largely overshadowed.

The courtyard play space adjacent to Holywell Court in particular is tucked away between buildings and accessed via a long narrow alley. Although there is passive surveillance from immediately adjacent residential buildings it is isolated from key routes and activity.



Figure vii - Isolated play space behind Holywell Mansions

Recommendation two: Ideally, we would recommend shifting the buildings to closein the space, and moving the playground to a more public, less constrained and better overlooked location. We do not think this is a 'killer issue.' The development can cope with this approach, but change would improve the scheme's future flexibility and longevity.

- 3. It is very positive that the development is creating more homes. It would have been encouraging to see even more. With 38 existing homes on a 1.4-hectare site, the site's density at present is 27 homes per hectare. This will increase to 78 homes with a density of 55 homes per hectare. This is low for central London. The average across Hackney is 200+ homes per hectare with an average of 241 homes per hectare in neighbouring Tower Hamlets. We recognise that there are policy reasons for this.
- The 2021 London Plans 'Central Activities Zone' (CAZ) is an employment led policy and encourages dense, mixed-use developments.

- The 'City Fringe Opportunities Area' encompasses the London Boroughs of Hackney, Islington and Tower Hamlets with a focus on employment in technology and sets out to deliver 50,500 new jobs and 15,500 new homes by 2041 across the entire area.
- Hackney's draft Local Plan policy LP27 requires 60 per cent employment space for designated 'Priority Office Areas' encompassing the Central Shoreditch Neighbourhood in which the site sits.

In short, we recognise the (in our view unfortunate) policy constraints that have led to this being a primarily commercial proposal. Proposed residential space accounts for 10 per cent of the development's Gross Internal Area which feels a shame for London more widely as there is such a desperate need for new homes and fewer strategic requirements.

Recommendation three: We would recommend the internal design of commercial space is approached wherever possible to facilitate future conversion to homes. We judge that at some stage in the future this will happen due to changes in planning policy and it would be good to maximise the ease with which future conversion can occur when policy encourages this move.



5. Adult's Eye strengths and areas for improvement

5.1 Strengths

1. The pedestrian-friendly street design will encourage walking, cycling and time spent in the public realm. The internal lanes are well designed, with high quality surfaces, and are for pedestrians only, enhancing the visitor experience. Undercroft passages prioritise visibility with frontages facing into them, some displaying art installations. These should maintain active frontages for a safe, welcoming feeling and an architectural rhythm with views inwards to pull passersby into the space. Enclosure ratios can greatly impact how comfortable we feel within a space, with wide, open areas or overly narrow streets typically making people feel uneasy. Appropriately enclosed spaces with commercial activity results in increased pedestrian traffic, and the lack of vehicular traffic cements Shoreditch Works as a place for people, creating opportunities for conversation and an improved sense of safety (See Appendix iv).

The planned new street trees and stone paving on Curtain Road, Scrutton Street, Worship Street and Holywell Row are to be welcomed. They will have a significant positive impact on the streetscape. These will not only boost the visual appeal of the streets, but improve a sense of place, help keep the streets cool in the summer and be more pleasant for pedestrians. Moreover, street trees and stone paving slow down traffic and create a more human-scaled environment. Hackney Council has a strong track record of such schemes, with examples including the planting of over 5,000 street trees, new granite setts on Daubney Road and a new stone paved shared space at Leonard Circus. The proposed designs at Shoreditch Works (raised tables, chicanes, pavement widening and new street trees) will contribute further to creating a highly walkable and liveable scheme.

2. Shoreditch Works is preserving all of the site's historically important buildings which are likely to be popular with the wider public. Nothing positive to the area is being demolished. 13 historically important buildings, including the Grade 2* and Grade 2 listed Webb Terrace and 103-5 Worship Street, as well as 24-

26 Holywell Row, 87-89 Worship Street, 40-46 and 52-56 Scrutton Road and 13-19 Curtain Road, are largely being preserved and restored. As discussed in 'Of Streets and Squares,' and supported by polling, people are shown to have a strong preference for traditional over contemporary architecture and 'a more visually complex and historically referenced style.' Complex but coherent façades are more visually pleasing and contribute to a sense of place. The buildings marked to be retained and refurbished serve as a connection to Shoreditch's history as a centre of commerce and housing. Care must be taken, however, to ensure that refurbishments are sympathetic to the original buildings as not to negatively impact their cultural and historical significance. (See Appendix ii.)

- 3. Seating is accessible for a variety of users. Seating is positioned at regular intervals with armrests and backrests to support those with mobility issues. Spaces are also integrated within fixed seating areas as to not isolate wheelchair and pushchair users. This is in line with British Standard 8300:2018 and positively contributes to an inclusive built environment.¹
- 4. The careful attention to massing and height will help to mitigate the negative impacts of wind and shading. Much attention has clearly been paid to minimising the impact of wind and overshading both within and outside the development with computational fluid dynamics (CFD) modelling and daylight analysis used to test the effect of proposed designs. Several measures, such as building setbacks and articulated massing, help to disrupt wind flow and allow for more daylight. Ensuring the centre of the block is a pleasant space to spend time will be essential to the success of the public realm.

1 'BS 8300-1:2018 promotes good practice design principles to ensure the external built environment, including streets, parks, landscaped areas, the approach to a building and the spaces between and around buildings, is inclusive and can meet the needs of all who use it, not only disabled people.' BS 8300-1:2018 Design of an accessible and inclusive built environment. External environment code of practice.



Figure viii - The large folding doors creating a canopy over the Verso Building

5. It is tall but not visually dominating. The reduction of the tallest building from 32 to 18 storeys is a positive development and although still very much a 'tower' it is not visually intrusive from most of the surrounding streets. The draft Shoreditch APP does have a maximum height policy in this area of 9 storeys (policy FSo8). However, this precedent has already been broken with nearby One Fairchild (27 storeys) One Crown Place (33 storeys), Principle Tower (50 storeys) and The Art Hotel (26 storeys). All have been consented within or partly within conservation areas. One Fairchild, approved in 2024, provides 34,000 sqm of office space, affordable workspaces, and improved pedestrian routes. One Crown Place integrates residential, office, and retail uses. Principle Tower is completely residential. The Art Hotel includes an art gallery and event space.

Given both the Government's and the Mayor's recent priorities for economic growth, we can support excellent tall buildings when they are well-designed and not visually dominating. As we shall see below (section seven) the increased height on this site would not appear to be a problem with the public.



18 storeys

32 storeys

Figure ix - A comparison of an earlier 32 storey proposal from surrounding streets with the 18 storey proposal which has been submitted for planning approval

5.2 Areas for Improvement

1. Define in greater clarity the status of the gardens (back or front) that separate Webb Mews and the Webb Terrace and 87-89 Worship Street and Marris Mews. As it stands, there is some confusion as to the designation of front and back along these rear lanes. It is important to delineate more clearly between the private and public realms to ensure that the spaces feel safe and not overlooked. Delineating between private and public realms helps create a sense of security for both residents and visitors, making it obvious who can be in a space. It is also associated with lower crime (see Appendix v) When boundaries are well-defined, private spaces feel (and often are) more secure and personal, while public spaces feel clearly public. This separation also reduces the likelihood of unintended overlooking and allows for passive surveillance.

This is compounded by the low fence that separates the private space from the publicly accessible Worship Alley. Although it is admirable that the back lane allows views of the Webb Terrace, it will still be visible even with a taller fence or wall. If they are back gardens, a low fence would not provide the level of security required for residents to feel comfortable, especially if children are present.



Figure x – Webb Mews as proposed in the DAS (top) and an alternative proposal with a taller, yet still visually permeable fence as suggested by Create Streets (bottom)

Recommendation four: We recommend raising the height of the fence and decreasing the visual permeability as shown in figure x. These are back gardens not front gardens. This is currently confused. Fortunately, this is easy to 'fix.'

5. Child's Eye strengths and areas for improvement

6.1 Strengths

- Low level planting is good for people and planet. The scheme uses Sustainable Drainage Systems (SuDS) such as rain gardens to intercept and drain water, reducing flood risk. This is particularly important in built up urban areas due to high amounts of hard surfacing causing surface run-off. As explored in Create Streets's reports Greening Up and Of Streets and Squares, there are many benefits to being amongst greenery including improved mental wellbeing, in addition to the environmental benefits. (See Appendix iii).
- 2. The well thought-through mix of building materials and textures will enhance the existing streetscape. The materiality of the buildings in the wider area is diverse, including masonry, stone, coloured ceramics, concrete, steel and glass. The palette suggested for Shoreditch Works distils these materials into those more recognisable of Shoreditch, with some highlight buildings and also 'good ordinary' buildings which don't look as if they are trying too hard. This is the right approach. Good streets need background buildings. (See Appendix vi.)



Figure xi – Mason Walk Section



Figure xii – The palette of materials in Shoreditch Works

A variety of materials can often devolve into an unpleasant mishmash but this does not happen here. Materials are carefully selected and harmoniously integrated. The materials complement each other in tone, texture, and proportion, creating a cohesive visual language rather than clashing elements. Thoughtful placement and a consistent architectural approach ensure that contrasts feel intentional, enhancing depth and interest without overwhelming the design. This should create a varied and distinct streetscape attractive to the wider public whilst creating a connection with the historic vernacular. In particular, the ceramic façade of the Mason Building adds colour and vibrancy while paying homage to the historic buildings of the area such as the Old Kings Head Pub. Research consistently shows that some colour in the public realm tends

to be popular with the public and can improve mental wellbeing. (See Appendix vi).

3. Acknowledgement of environmental impact through embodied carbon and the reuse of materials where possible. The site sets out to retain 48 per cent of existing buildings, which are to be restored, refurbished and/or incorporated. Materials from buildings marked to be demolished, such as structural steel, have been identified and will be re-used in the construction of new buildings. 95 per cent of demolition and construction waste is to be diverted from landfill. Alongside this, the use of high insulating materials, air source heat pumps and solar panels identify a clear commitment to sustainable development.



Figure xiii – Mason Building

4. The proposed buildings appropriately fit into the new London vernacular and indeed helps improve it. The new London vernacular is a contemporary architectural approach that draws on London's historic building traditions in a rather 'stripped down' fashion with good proportions, large windows though with less detail and fewer curves – both features the public

tend to like. New London Vernacular was influenced by the London Housing Design Guide (2010) and has been widely adopted for residential and mixed-use developments. At worst, it can be bland and appear 'value engineered.' When done well it is simple, generously proportioned and elegant.



Figure xiv – 197 Kensington High Street (Left) and 40 Beak Street (Right) by Stiff + Trevillion architects

What is particularly pleasing here is that the façade design is correcting some of the flaws often found in New London Vernacular. For example, the Mason Building uses colour and glazed brick as well as a simple, traditional façade pattern. This provides the colour, framework and interest that most people like. It also echoes other recent schemes across London such as 197 Kensington High Street and 40 Beak Street.

Similarly, the corner of Curtain Road and Scrutton Street deploys curves which again tend to be popular with the public and give façades a more biomorphic feel. (See Appendix vi).



Figure xv – The corner of Curtain Road and Scrutton Street is rich with curves

The glass blocks of the Verso Building are eclectic and provide texture in a way that can work for a more urban and high-density context. Again, this is not without precedent. Comparable recent examples include Buckle Street Studios and 14 St George Street.



Figure xvi – Buckle Street Studios by Grzywinski + Pons architects

6.2 Areas for Improvement

1. Keep the texture inside the block. Some of the buildings within the block, such as the Mason Building, are superb. Others risk being too bland, such as Holywell Court. Whilst we recognise that the interior of the block has been deliberately designed to be more modernist and even 'moderne' than the textured buildings facing the streets, there is a risk of the internal space becoming too bland and featureless. More glazing bars, cornices, bricks and well indented windows will help the new Rose Yard stand out from the crowd. This will be to the benefit of the scheme and those using the spaces. The least attractive new buildings are probably the new Webb Mews buildings, which are less symmetrical and textured than all the other proposed buildings. They fail to follow the industrial aesthetic of some or the curvaceous or coloured 'new London vernacular' of others. This is likely to be less popular with the public. (See Appendix vi).

> Recommendation five: More glazing bars, cornices, bricks and well indented windows will help Holywell Mansions present a more popular and people-friendly side within Rose Yard. Webb Mews would also benefit from border treatment along its west elevation to create a stronger buffer with the public realm.

2. Lift the ground floor storey's height. No doubt the design team have tried to limit the overall height of the buildings, but ground floors should be taller to give buildings a more recognisable base. Taller ground floors gift buildings a more robust base, meet our instinctive preference for visual stability and hierarchy and can improve the relationship with the street. The Urban Land Institute's "Building Healthy Places Toolkit" shows that these spaces encourage foot traffic and foster vibrant, active environments when used for retail or public spaces. Taller ground floors also promote visual connectivity, making buildings feel more open and inviting. With some limits they can also provide more flexibility for future adaptive reuse, allowing spaces to accommodate evolving commercial needs.

Recommendation six: Though we recognise that it may be too late, ideally we would recommend improving the quality of the Rose Yard-facing ground floor of Holywell Mansions by raising its height, adding more detail and using contrasting materials.



Figure xvii – Holywell Court (right) and Holywell Mansions (left). These are less successful with more repetitive façades and slightly 'squat' ground floors

7. Visual preference survey

7.1 Context

In March 2025, Create Streets commissioned the polling company Deltapoll to conduct a visual preference survey of 2,024 carefully sampled members of the British public with three groups of before/after images of the development.

Visual Preference Surveys are a technique that Create Streets has evolved over the last decade which involves careful 'A/B' testing of images to gauge the population's preferences. We have deployed Visual Preference Surveys in the UK and the US for research into design preferences and also to compare two approaches to the same site. More information on the methodology is available in Appendix vii.

For these surveys we were keen to understand whether the public preferred the neighbourhood before or after the proposed Shoreditch Works development. We used comparison images from precisely the same angle and distance. We carefully controlled for sky colour, number of cars and people in the foreground and lighting conditions. The three pairs of images were described purely as 'Image A' or 'Image B,' where A was the existing condition while B was an image of the Shoreditch Works proposal. A 'don't know' option was also provided. For each group, respondents were asked a deliberately neutral question:

'Here are two alternative designs for the same street in a city centre location. If you had to choose, and all other things being equal, which one of the streets do you prefer?'

7.2 Findings

The British public like the Shoreditch Works proposal. They overwhelmingly prefer Shoreditch Works to the streets' existing condition. For all three pairs of images, 76 to 78 per cent of the British public preferred the streets after the proposed development. Only 21 to 22 per cent preferred the status quo. Support for the nature of the improvement that Shoreditch Works brings to the streets is of a level that no political party could dream of achieving.

This preference for Shoreditch Works is highly consistent by gender, social status, voting behaviour and income. Strong majorities of all segments preferred the redevelopment.

- Men and women agreed. For all pairs, preferences of men and women were nearly identical, with only one to two percentage points difference.
- People of different social grades agreed. For all pairs, preferences of Social Grade ABC1 and C2DE were nearly identical, within only one to two percentage points difference.
- The proposal enjoys nearly equal support from both Labour and Conservative voters. Support was slightly higher among those who voted Labour in the 2024 General Election on two out of three image pairs.
- People of different incomes agreed though with slight caution from those on lower incomes. For example, for the first pair, the redeveloped option B was preferred by 74 to 24 per cent of those with household incomes between £14k to £21k and by 80 to 19 per cent by those with household incomes above £48k. The second and third pairs had similar findings.

There was strong support for this development by a very large majority of London residents. Among London residents (265 out of 2024 respondents) a clear majority preferred the redeveloped street (option B).

- Image 1: Option B was preferred by 75 to 23 per cent of London respondents
- Image 2: Option B was preferred by 71 to 28 per cent of London respondents
- Image 3: Option B was preferred by 77 to 22 per cent of London respondents

Although everyone was supportive, the young were particularly supportive. Clear majorities of all age groups preferred the redeveloped (option B).

 Image 1: Option B was preferred by 81 to 17 per cent from ages 18-24 and by 70 to 26 per cent by those aged 65+

- Image 2: Option B was preferred by 77 to 22 per cent from ages 18-24 and by 69 to 27 percent by those aged 65+
- Image 3: Option B was preferred by 85 to 14 per cent from ages 18-24 and by 65 to 33 percent by those aged 65

A confident decision. Finally, only 1, 2 or 3 per cent of the public selected 'don't know.' Nearly everyone had a clear point of view. This is consistent with the confident and quick views that most people visually form of what they like or do not like.



Fig xviii– Results from visual preference survey first pair (Curtain Road) showing the existing street (left) and redeveloped street (right)



Fig xix – Results from visual preference survey second pair (Scrutton Street) showing the existing street (left) and redeveloped street (right)



Fig xx – Results from visual preference survey third pair (junction of Curtain Road and Scrutton Street) showing the existing street (left) and redeveloped street (right)

7.3 About Deltapoll

Deltapoll is an independent public opinion consultancy that was founded in 2018 by Joe Twyman and Martin Boon, two of the United Kingdom's most high profile and respected opinion pollsters. The company provides high quality quantitative and qualitative services to help explain the nature and depth of public opinion.

Deltapoll offers the full suite of data collection methodologies using random and quasi-random methods to select survey respondents. For online surveys - including our weekly online omnibus service – we select panel providers based on their reach, quality and cost effectiveness. Survey respondents are selected at random on a project-by-project basis, screened for geodemographic representation and subject to tight quality assurance process.

8. Conclusion

We conclude that although there is scope for tactical improvement, the scheme's overall strategy and rich façade design represents an excellent example of urban regeneration and restitching that should improve the prosperity, quality of life, liveability and beauty of this corner of London. In the round, it is to be highly commended. It repairs design scars left over since the war and intensifies London in precisely the right place. Studying the design history, it has clearly improved through the pre-application process and the designers, consultants and Local Planning Authority deserve high praise.

Our main concern and suggestion is more a consequence of London and Hackney's planning policy than a specific scheme design decisions. Given the desperate housing need in London and the relative adequacy of commercial space, we would have preferred to see a higher quantum of housing within the overall development. In the long-term, however, there is little to stop some of these buildings being repurposed to residential uses in generations to come. What is critical is repairing the damage of antistreet development two generations ago and creating better places for the future. This scheme achieves this superbly.



Appendices

Appendix i: the value of mingling homes, offices and shops (from Move Free and Beyond Location)

More successful town centres and high streets intermingle homes and offices with shops. This provides resilience. It also provides a 'convenience' local market in which people can walk or cycle around the corner to nearby shops. This does not appear to have been extensively studied. However, there are convincing anecdotal and some empirical reasons to have confidence that homes boost the productivity, prosperity and resilience of nearby shops. Jane Jacobs, in her now famous 1961 book, *The Death and Life of Great American Cities*, argued that a rich diversity of uses is essential for city streets' vitality, in contrast to the twentieth century modernist orthodoxy of zoning commercial and residential areas.² Recent research has borne this out. In 2016, Italian researchers were able to demonstrate statistically significant links between mixed use neighbourhoods and urban vitality, as measured through the levels of mobile phone activity.³ A high diversity of uses, particularly the presence of venues as cafes, restaurants and bars, the presence of a dense grid of streets, and higher concentrations of people were found to correlate strongly with 'urban vitality.' The vibrancy of London's numerous mixed use high streets, places of high activity and movement with a diverse range of uses, makes the same point. Around 40 per cent of Londoners (three million people) live on or within 200 metres of a high street, and more people are employed on London's high streets than within the central areas of the West End and the City of London.⁴

Why mixed neighbourhoods can be good for you. Traditional street patterns are normally advocated alongside a more mixed-use development pattern with greater intermingling of residential and non-residential uses. The logic is similar. Intermingling is intended to reduce the number and length of journeys required. And this does seem to happen. Locating homes, shops and places of work in close proximity to each other permits more journeys which are shorter and requires fewer longer ones. It is easy to walk a few blocks to work. It is hard to walk across the city. It also helps people to combine trips, such as shopping or commuting when retail and employment uses are close together. A range of (mainly American) studies have linked combined land use with lower levels of pollutants, shorter car journeys and greater use of non-motorised trips. In one study, 'residents of mixed use neighbourhoods took non-motorised modes 12 per cent of the time compared to 4 per cent of trips in single use communities.'⁵ Encouraging more people to work near to where they live reduces transport needs. Proximity to other types of mixed use (such as a good neighbourhood school) brings an obvious utility to residents. Does this feed through to value?

The value of mixed neighbourhoods. As Keith Bartholomew and Reid Ewing pointed out, anecdotally one would assume so given the number of homes which are advertised as being within walking distance of shops, school or local town centre. And there clearly is a market for it. American stated preference surveys, for example, show that while only 39 per cent of Americans say they currently live in a mixed-use neighbourhood, 58 per cent say they would like to. By contrast, 60 per cent of Americans say they currently live in a residential only neighbourhood. But this represents the ideal for only 42 per cent.⁶ There would appear to be a clear gap between where people live and where they would like to live.⁷ This does seem to filter through to higher values – in some, though not in all neighbourhoods.

² Jacobs, J (1961) The Death and Life of Great American Cities

³ De Nadai, Marco & Staiano, Jacopo & Larcher, Roberto & Quercia, Daniele & Sebe, Nicu & Lepri, Bruno. (2016). *The Death and Life of Great Italian Cities : A Mobile Phone Data Perspective*. WWW '16: Proceedings of the 25th International Conference on World Wide Web. 10.1145/2872427.2883084. 4 Carmona, Matthew. (2014). London's local high streets: *The problems, potential and complexities of mixed street corridors*. Progress in Planning. 38. 10.1016/j.progress.2014.03.001.

⁵ Ewing, R. H., & Kreutzer, R. (2006). Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared For the LEED-ND Core Committee. Organisation for Economic Co-operation and Development.

⁶ Planetizen, (8 June 2016). What Millennials Want, and Why it Doesn't Matter. http://www.planetizen.com/node/86755/what-millennials-want-and-why-it-doesnt-matter, [Online; accessed 21-April-2017]

⁷ Some academics have argued that there is a disconnect between stated preference and revealed preference on this subject. Even if this is true (which is disputed by others) that there is some level of disconnect seems hard to argue with. For example see, Jarvis, H. (2003). Dispelling the myth that preference makes practice in residential location and transport behaviour. *Housing Studies*, 18(4), pp. 587-606. Levine, J. and Frank, L. (2007). Transportation and land-use preferences and residents' neighborhood choices: the sufficiency of compact development in the Atlanta region. *Transportation*, 34(2), pp. 255-274.

It is the nature of the surrounding neighbourhood that matters as well as the nature of the mixed use. It has echoed the evidence on accessibility and rail transport and value and probably for similar reasons. Properties located immediately next to non-residential uses seem typically to have a value discount. They suffer from the noise or increased traffic. Properties slightly further away have a value premium. They benefit from the improved ready access to shopping or entertainment. One 2007 study by John Matthews and Geoffrey Turnbull already cited was particularly clear about the impact in more walkable neighbourhoods:

'The negative externalities associated with retail uses (noise, light, traffic, trash, etc.) depress the price of immediately adjacent houses by as much as \$14,453, while the accessibility benefits result in a \$9,675 premium. The negative effects fall off quickly with distance, though, and at approximately 235 ft. from the retail use, they are overwhelmed by the accessibility effects.⁷⁸

Appendix ii: the value of historic streets and buildings (from Beyond Location)

The heritage premium is more important than the new build premium. In every city studied, proximity to a listed building was associated with more additional value than the premium associated with a newly built home. A home closer than average to a listed building in London is worth 10.3 per cent (or £49,770) more than one that isn't holding everything else equal. This is equivalent to £141.83 of additional value per metre. The equivalent new build premium is only £8,795. Beauty, a sense of place and the confidence that it will not be destroyed bring real and predictable value.

How does heritage impact value? In Henrik Lönnqvist's 2015 literature review, he concluded that houses located in architectural heritage sites and historic properties were, on average, worth more than others. One American study it is true found no price premium for a house located in a historic district compared to a similar house outside the district.⁹ However, at least five US and four non-US studies have shown a heritage price premium although in some cases it has been difficult to control fully for all variables of the urban landscape and for differing running costs and tax status. The size of the effect varies and can be reasonably assumed to vary with overall demand, the local market and the stringency and cost of relevant preservation rules.

Richard Cebula's 2009 study of 2,888 detached homes in Savannah was able to control for most elements of urban form (though not for the nature of the street grid).¹⁰ It found that properties located within the Savannah Historic Landmark district came with a 20-21 per cent real price premium. This was more than the price premium associated with living opposite a river or lake (14 per cent). It was three times as great as the value discount from living on a busy street (7 per cent). In other words, other things being equal, a historic building on a busy street was valued as much as a non-historic building overlooking a lake or river. In contrast, actual designation of the house itself as a national historical landmark was only associated with a 1.7 per cent premium. It seems reasonable to assume that the additional management costs nearly outweigh any additional status benefit. It may also be the case that the look of the neighbourhood is more important than that of the actual home.

Savannah is well known for its historic built environment. Perhaps its quality and the attraction of Savannah as a place to live to those who particularly value historic buildings mean that this result is an outlier? The wider evidence would imply not. Heritage designated areas are normally associated with very measurable price advantages. For example, a 1997 study of a similar historic district in Sacramento housing market found a

⁸ Summary in Bartholomew, K. and Ewing, R. (2011). Hedonic price effects of pedestrian-and transit-oriented development. *Journal of Planning Literature* 26.1, pp. 18-34.

⁹ Asabere, P. K., Hachey, G., & Grubaugh, S. (1989). Architecture, historic zoning, and the value of homes. *The Journal of Real Estate Finance and Economics*, 2(3), pp. 181-195.

¹⁰ Cebula, R. J. (2009). The hedonic pricing model applied to the housing market of the City of Savannah and its Savannah Historic Landmark District. *The Review of Regional Studies*, 39(1), 9.

premium of between 10-17 per cent. A 2001 study of ten cities in Texas found that historic areas were significantly more valuable in eight of them and that the value uplift was between 5 per cent for Dallas and 20 per cent for Nacagdoches. The simple average percentage uplift was 12 per cent and the simple average value uplift was \$6,694. ¹¹ A 2005 study into the value of a historic district in Memphis, Tennessee found not just that properties in historic districts were worth more (a price premium of 18 per cent) but that they appreciated in value faster. ¹²

Robert Shipley made a similar study in Canada, researching the effects that heritage designation sites had on house price trends in six different cities of Ontario: London, Ottawa, Guelph, Port Hope, St. Mary's and Kitchener. ¹³He analysed 3,000 housing transactions over a 20-year period from 1976-1997 and found that nearly 60 per cent of properties in designated areas performed better than the average price trend across the period.

From the limited work to date, a similar pattern seems to emerge in Europe. A Dutch team analysed housing sales in the Dutch city of Zaanstad. They found that homes with architectural heritage status themselves were over 25 per cent more expensive than other homes. They also concluded that each architectural heritage site located within a 50-metre radius of a home increased its price by 0.28 per cent.¹⁴

An indicative non-controlled British survey carried out by Nationwide in 2014 implied a very clear premium for historic properties that far outstripped that available to new builds. ¹⁵ The greatest premium (34 per cent) was for Jacobean homes. The increase commanded by new builds was only 8 per cent. As in the US, clearly there is something that older homes and neighbourhoods can deliver which newer homes struggle to match for all their improved efficiency and lower running costs. Is it just the rarity? Or is it something else?

A substantive and important recent study by Gabriel Ahlfeldt, Nancy Holman, and Nicolai Wendland explored this in more detail. It examined the effects of British conservation area designation on English house prices by analysing 1,088,446 house sales between 1995 and 2010. ¹⁶ The authors combined a quantitative approach based on hedonic regression and a qualitative one based on interviews. The quantitative measures mainly focused on how distance from conservation areas affected the prices of the properties which lay within it. The interview questions focused on more 'volatile' concepts such as place-based identity and community cohesion. The study found an average price premium of 23 per cent for properties within designated conservation areas and of 16.5 per cent in areas prior to their designation. In other words, the certainty (or near certainty) that the characteristics of an area would be protected added about 40 per cent to the perceived value uplift of the conservation area. People are not just buying the current attributes of an area, but the expected long run set of attributes. The specific price premium also depended on various characteristics of the area. It increased with the size of a conservation area, the time since designation, and in suburban location.

External benefits increased with the mass of the built heritage. The price premium on the edge (o-50m) of a conservation area was around 10 per cent. This value doubled in the innermost zone to 20 per cent. Just outside a conservation area (o-50m), there was still a significant premium of 5 per cent. The external premium fell to zero around 700m away from conservation area. Again, we are finding that proximity matters.

¹¹ Leichenko, R. M., Coulson, N. E., & Listokin, D. (2001). Historic preservation and residential property values: an analysis of Texas cities. *Urban Studies*, 38(11), pp. 1973-1987. The averages are not adjusted for the number of homes studied in each city. There was no statistically significant 'disamenity' from the remaining two areas.

¹² Coulson, N. E., & Lahr, M. L. (2005). Gracing the land of Elvis and Beale Street: historic designation and property values in Memphis. *Real Estate Economics*, 33(3), pp. 487-507.

¹³ Shipley, R. (2000). Heritage Designation and Property Values: is there an effect?. *International Journal of Heritage Studies*, 6(1), pp. 83-100. 14 Lazrak, F., Nijkamp, P., Rievald, P., & Rouwendal, J. (2011). *The market value of listed heritage: An urban economic application of spatial hedonic pricing. Research Memorandum*, 27, pp. 2011-27.

¹⁵ Nationwide (2014). House Prices: What Adds Value? http://www.regenerate.co.uk/House%20prices_what_adds_value.pdf, [Online; accessed 21-April-2017]

¹⁶ Ahlfeldt, G. M., Holman, N., & Wendland, N. (2012). An assessment of the effects of conservation areas on value.

Authors also found a positive appreciation trend over time for locations inside and near a conservation area. Prices of properties within a conservation area increased at a rate that exceeded the control group (comprised of all available sales prices across in England outside conservation areas) by 0.2 per cent per year. Property prices near a conservation area increased at a premium of about 0.1 per cent per year. In the associated surveys, strong values were attached by all respondents (whether 'deprived' or 'not deprived') to greenery, peaceful residential environment, easy commutes, presence of amenities, distinctiveness, and attractiveness. ¹⁷ Satisfaction with the built environment was higher in less deprived areas. Community feeling and neighbourliness was highly valued in more deprived neighbourhoods. Most residents saw their areas as expensive or very expensive. Most homeowners predicted the prices of their properties would increase in value or remain stable in the near future. In more well-off conservation areas, there was a feeling that the expense of the area was driving exclusivity and gentrification. For the same areas, people also felt that designation brought price stability. In areas of greater deprivation, there was a strong feeling that price exclusivity brought a 'better' class of residents.

Following on from this study, Gabriel Ahlfeldt and Nancy Holman researched the effects of conservation areas on house prices in England of nearby properties through two measures of architecture quality: distinctiveness and attractiveness of buildings. ¹⁸ The authors adopted a quantitative method based on interviews to obtain information on attractiveness and distinctiveness from more than 500 residents in 47 conservation areas. For conservation areas considered 'distinctive,' authors found an average positive price effect of about 10 per cent. For the most distinctive of the conservation areas, the price premium reached 12 per cent. The difference between a 'not at all distinctive' property, and a very distinctive property was just over 25 per cent indicating the positive effect of conservation areas and of specifically inhabiting a distinctive building whilst being surrounded by other historic buildings.

We are not aware of any studies that specifically examine the differential impact of heritage areas to the wealthy and the less wealthy. However, we think it is reasonable to assume from common sense and the research to date that historic neighbourhoods are particularly attractive to the relatively more prosperous for whom the higher running costs are not problematic.

Of course, the economic value of older buildings can run beyond the value premium of living in or near them. 'Heritage' is a key component of many countries' tourism 'brand.' To take the example of the UK, 30 per cent of overseas visitors cite heritage as the biggest single motivation for their visit to the UK. This is the largest single factor for non-business visitors and is for a country that is only ranked 5th out of 50 nations in terms of being 'rich in historic buildings and monuments' and 6th for 'cultural heritage.' There were about 15,392,000 heritagerelated international visits in 2014. International tourists spent £9.9bn on heritage-related visits in 2014 according to research by Oxford Economics. Older buildings typically in older neighbourhoods, also seem particularly attractive to higher margin and more creative sectors of the economy. Such firms can afford the higher rents. But perhaps such firms also judge that older buildings' qualities will be attractive as they attempt to encourage highly skilled workers to work for them. ¹⁹

Appendix iii: the health, value and popularity of greenery (from Of Streets and Squares)

The presence of greenery in the urban environment tends to have a positive impact on our mental and even our physical health. This has been widely demonstrated and is both a psychological and a physical phenomenon. Researchers, such as Jun Yang and David Nowak, have found that the presence of greenery can help in keeping down pollutants.²⁰

^{17 &#}x27; Deprived' and 'Non-deprived' were taken from the 2007 Indices of Multiple Deprivation.

¹⁸ Ahlfeldt, G. M., & Holman, N. (2016). Distinctively different: a new approach to valuing architectural amenities. *The Economic Journal*.

¹⁹ Historic England (2016). Heritage counts 2016. London: English Heritage. El Beyrouty, K., & Tessler, A. (2013). The Economic Impact of the UK Heritage Tourism Economy.

²⁰ Yang, J., McBride, J., Zhou, J., & Sun, Z. (2005). The urban forest in Beijing and its role in air pollution reduction. & Nowak, D. J., Crane, D. E., & Stevens, J. C. (2006). Air pollution removal by urban trees and shrubs in the United States.

Rome-based Anna Chiesura, and the Swedish researchers Anita Gidlöf-Gunnarsson and Evy Öhrström, found that greenery can reduce noise pollution.²¹ It can also induce more physical activity – as shown by Billie Giles-Corti and Melvyn Hillsdon and their teams.²²

A 2002 study, by the British Urban Green Spaces Taskforce, found that 46 per cent, out of 515 respondents, used green spaces more than once per week.²³ Greenery seems also to positively impact the psychophysical status of city dwellers by lowering levels of stress.²⁴ At least ten studies have now shown a link between regularly looking out at an attractive green environment and mood, stress, recovery from mental fatigue and wellbeing.²⁵

Though not strictly a matter of public space, the most well-known (and one of the first) studies was carried out by Roger Ulrich in 1984:

'Records on recovery after cholecystectomy of patients in a suburban Pennsylvania hospital between 1972 and 1981 were examined to determine whether assignment to a room with a window view of a natural setting might have restorative influences. Twenty-three surgical patients assigned to rooms with windows looking out on a natural scene had shorter postoperative hospital stays, received fewer negative evaluative comments in nurses' notes, and took fewer potent analgesics than 23 matched patients in similar rooms with windows facing a brick building wall.²⁶

These benefits carry through into the measurable wellbeing of residents. There is excellent recent evidence that (at least in prosperous areas) well-managed communal gardens can be positively associated with high levels of neighbourliness, activity and community awareness.²⁷ And at least eight studies have shown some level of vegetation, near to buildings, can be associated with lower levels of expected crime, fear of crime or with lower levels of residents' violence.

More strikingly, a study of one of the US's poorest districts (98 apartment buildings, in the 1940s Ida B. Wells public housing development in Chicago) showed how buildings, without trees and greenery around them, suffered from predictably more crime than buildings with trees and vegetation. This was true even when building height and size were controlled for. Levels of vegetation explained as much as 7-8 per cent of variance in crime, block to block. Academics believe that this is due both to the calming effect of greenery and to its association with greater outdoor use of spaces.²⁸

We pay more for urban greenery, especially when it is close to us, or scarce

People are normally more rational than they are given credit for. Other things being equal, most of us will normally pay more for a property that has a small garden, or easy access to a town square or park. One of the most comprehensive of the many studies into the relationship between greenery and value, was carried out

28 Kuo, F., Sullivan, W. (2001), Environment and Crime in the Inner City: does Vegetation reduce crime?

²¹ Chiesura, A. (2004). The role of urban parks for the sustainable city. & Gidlöf-Gunnarsson, A., & Öhrström, E. (2007). Noise and wellbeing in urban residential environments: The potential role of perceived availability to nearby green areas.

²² Giles-Corti, B., Broomhall, M. H., Knuiman, M., Collins, C., Douglas, K., Ng, K., ... & Donovan, R. J. (2005). Increasing walking: how important is distance to, attractiveness, and size of public open space? & Hillsdon, M., Panter, J., Foster, C., & Jones, A. (2006). The relationship between access and quality of urban green space with population physical activity.

²³ Dunnett, N., Swanwick, C., & Woolley, H. (2002). Improving urban parks, play areas and green spaces. London: Department for transport, local government and the regions. (p. 35).

²⁴ Hartig, T., Mang, M., & Evans, G. W. (1991). Restorative effects of natural environment experiences. & Conway, H. (2000). Parks and people: the social functions. The regeneration of public parks.

²⁵ For a more extensive discussion of the evidence linking greenery and mental wellbeing see, Kuo, F. E., & Sullivan, W. C. (2001). Environment and crime in the inner city: Does vegetation reduce crime

²⁶ Ulirch, R (1984), View through a window may influence recovery from surgery. This is a brilliant piece of research which carefully chose 23 pairs of patients controlling for their condition, lifestyle and even nurse so that their windows remained the main variable.

²⁷ Andersson, J. (2015), "Living in a communal garden" associated with wellbeing while reducing urban sprawl by 40%: a mixed-methods cross-sectional study.

by the American researchers Keith Bartholomew and Reid Ewing. They undertook a wide literature review, encompassing several factors in different geographic contexts, affecting property prices.²⁹ They concluded that price premiums were normally associated with properties located close to protected open spaces and that the size of the monetary benefits partially depended on the size of the open space, on its proximity to central areas and on the density of its surrounding neighbourhood. Denser neighbourhoods valued it more and proximity was often more important than size. Another extensive literature review, by Henrik Lönngvist, published in 2015, generally confirmed Bartholomew and Ewing's overview, though stressed that there were exceptions when greenery was associated with anti-social behaviour or congestion. ³⁰ It found that fully-grown trees located within the curtilage of a property had positive effects on house prices. Distance really matters. Walking to greenery is best of all. The study found that recreational areas provided monetary benefits, if they were located within walking distance of a dwelling. Views of natural amenities predictably increased house prices. To cite just one example, of the importance of proximity over size, Benjamin Bolitzer and Noelwah Netusil carried out an analysis of 16,402 transactions, from 1990 to 1992, in Portland, Oregon, US, using hedonic regression.³¹ They found that proximity mattered more than size. On average, homes located within 1,500 feet of any open space sold for 3.2 per cent more than houses located beyond this threshold. The size of these open spaces was found to have a predictable, though very modest, impact on house prices. Every one hectare increase only corresponded to an additional premium of 0.04 per cent.

The best approach to urban greenery is little and often

And yet, of course, it is not as simple as this. The first problem is that greenery that is too thick, or which might potentially harbour criminals waiting to pounce, can frighten, create stress and indeed correlate with higher crime. At least eight studies have shown high levels of general fear, or fear of crime, associated with denser vegetation, specifically in parks, and more generally. To cite one summary of the evidence;

'In safety ratings for 180 scenes of parking lots, the more a photo was covered by vegetation, the lower the perceived security. And in research examining fear of crime on a university campus, dense understories that reduced views into areas where criminals might hide were associated with fear of crime. In these and other studies, view distance seems to be an important factor. Fear of crime is higher where vegetation blocks views.⁷³²

This would appear, at least on occasions, to be rational.

'Not only has dense vegetation been linked to general fears and to fear of crime in particular, but two studies have pointed more directly at a facilitative role of vegetation in crime. In the first study, park managers and park police indicated that dense vegetation is regularly used by criminals to conceal their activities ... In the second, ... automobile burglars described how they used dense vegetation in a variety of ways, including to conceal their selection of a target and their escape from the scene, to shield their examination of stolen goods, and finally, in the disposal of unwanted goods ...The clear theme in all these studies is that dense vegetation provides potential cover for criminal activities, possibly increasing the likelihood of crime and certainly increasing the fear of crime. Large shrubs, underbrush and dense woods all substantially diminish visibility and therefore are capable of supporting criminal activity.⁷³

29 Bartholomew, K. and Ewing, R. (2011). Hedonic price effects of pedestrian-and transit-oriented development.

30 Lönnqvist, H. (2015). On the Effects of Urban Natural Amenities, Architectural Quality and Accessibility to Workplaces on Housing Prices-an Empirical Study on the Helsinki Metropolitan Area.

31 Bolitzer, B., & Netusil, N. R. (2000). The impact of open spaces on property values in Portland, Oregon.

32 Kuo, F., Sullivan, W. (2001), Environment and Crime in the Inner City: does Vegetation reduce crime? The studies being summarised are: Schroeder, H., & Anderson, L. (1984). Perception of personal safety in urban recreation

sites. & Nasar, J. & Fisher, B. (1993). "Hot spots" of fear and crime: A multi-method investigation.

33 Kuo, F., Sullivan, W. (2001), Environment and Crime in the Inner City: does Vegetation reduce crime? (p.345).

As the Chicago Ida B. Wells study showed, this is not always true, but it clearly can be true. In a telling illustration of the capacity of vegetation to be threatening, as well as restorative, when a resident was shot in a communal garden, on the South London Aylesbury Estate, his body lay undiscovered for 24 hours.³⁴

A second problem is that managing greenery can be expensive. When the Ida B. Wells development, discussed above, was first built, all the courtyards had trees and grass, but 'over time, many of these green spaces have been paved in an effort to keep dust down and maintenance costs low; this paving has killed many of the original trees.'³⁵ There is evidence that green space is degrading into hard, paving for reasons of economy, in the UK at present.³⁶ Clearly, designing beautiful green space only for it to grow into potentially threatening vegetation, or be cut down to barren paving, is not much of a success. But, certainly communally, the type of biologically complex, parkland or mini-parkland that seems to optimise both what people like, and in which they best relax, is not necessarily cheap to manage. No one can honestly guarantee that there will be a budget, or the social capital, for the management of a given portion of green space indefinitely. Private developments can be mismanaged. Public budgets can be cut. Communal gardening schemes can wither and die.

Thirdly, even if well-maintained, green space clearly needs to be used and seen to be effective. This is not just a matter of landscape management and the need for well-maintained not overly-dense vegetation. It is also a matter of urban form and town-planning. Greenery that is too big, too rare and too far from the home, may not be used. An indicative survey of dozens of New Yorkers found that none of them had been to Central Park in the previous week.³⁷ By contrast, there is some evidence that the actual experience of gardening, of physically engaging with the soil, brings the most benefits.³⁸

UK focus group research, by Ipsos MORI, also shows that, given the choice, most people would rather have access to modest private gardens that they can use effortlessly every day and which seem to work better in managing family stress and wellbeing. Ipsos MORI found that 'private gardens were preferred to shared gardens' and that typical British apartment block residents 'appreciated that the properties were set in a natural area, [but] they felt that this space was difficult to use as a personal outdoor area, as sharing the area with others did not tend to work well.'³⁹ Parents had the strongest preference for private gardens. One interviewee commented: 'I would like my living space to lead onto my garden. At the moment I'm upstairs and the garden's down. My son is a terror, he needs space to run but I don't always want to be out in the garden.'⁴⁰

The implication of this is that the way to maximise the positive impact of greenery is to see it, even feel it, as regularly as possible. This is a natural consequence of, and corollary to, maximising the number of houses and modest mansion blocks with, by implication, modest, but frequent open spaces. Many of the flats that have been found to be meaningfully associated with less good mental health outcomes had no private gardens.⁴¹

One study found that looking out on greenery, from your window, rather than other people's walls or windows, sharply increases the perception of space and privacy.⁴² Large parks are great for those who live by them, have to pass through them, or have the leisure to visit them. They are not so helpful for everyone else. Evidence suggests that people will frequently go to an open space, if it is less than 2-3 blocks away (about 225m), but very sharply less

- 34 Boys Smith, N., Morton A. (2013), Create Streets. (p. 41).
- 35 Kuo, F., Sullivan, W. (2001), 'Environment and Crime in the Inner City: does Vegetation reduce crime?
- 36 Jones, M. (2012) High density housing the impact on tenants.

- 38 Guitart D., Pickering C., Byrne J. (2012), Past results and future directions in urban community gardens research. Urban Form, Urban Green. &
- Pillmer, K., Fuller-Rowell, T., Reid, M, Wells, N. (2010), Environmental outcomes and volunteering over a twenty year period.
- 39 RIBA (2012), The way we live now. (p. 49, p. 52). This evidence is less robust than most of the sources cited in this survey.
- 40 RIBA (2012), The way we live now. (p. 53).

³⁷ Montgomery, C. (2013), Happy City. (p.121). This evidence is less robust than most of the sources cited in this survey.

⁴¹ For example, see, Weich S, Blanchard M, Prince M, Burton E, Erens B, & Sproston, K. (2002). Mental Health and the Built Environment: Cross-sectional Survey of Individual and Contextual Risk Factors for Depression.

⁴² Day, L. (2000), Choosing a House: the relationship between dwelling type, perception of privacy and residential satisfaction.

frequently if it is further away.⁴³ For maximum impact, public green space needs to be frequent, close and modest in size. As we have seen, in Ipsos MORI focus groups, many (particularly parents) would trade off maximum green space in favour of immediate access to private green spaces.⁴⁴ The evidence also suggests that streets' trees are a 'no regrets' move. Over many years, a combination of poor maintenance, pollution or traffic engineers' concern over safety, killed off older trees and prevented newer ones being planted. We could not have got it more wrong. To take the point on safety first, the key determinant to how fast we drive is not the speed limit but how safe we feel. The rational response to obstacles on an urban street - such as trees - is to drive more slowly. This is precisely what we do. One study found that the presence of trees, on an otherwise similar stretch of urban street, reduced speeds by 7 to 8 miles per hour.

This makes streets safer. A study of five arterial roadways, in central Toronto, found that mid–block car crashes declined by between 5 and 20 per cent, in areas where there were features, such as trees or concrete planters, along the road. Similarly, urban 'village' areas in New Hampshire, containing 'on–street parking and pedestrian-friendly roadside treatments,' were 'two times less likely to experience a crash' than the supposedly safer roadways preferred by most transport engineers. Several other American studies corroborate this.⁴⁵

But the benign impact of street trees on public wellbeing appears to be much more profound. Urban trees improve air quality.⁴⁶ They moderate heating and cooling energy use.⁴⁷ And people aesthetically prefer streets with trees.⁴⁸ Above all, and perhaps astonishingly in the complexity of human life, street trees have a measurable effect on human health, even taking into account income, age and education.

One recent Canadian study is incredibly compelling. It was able to map the precise location of 530,000 Toronto trees and compare them to the health records of 30,000 Toronto residents. They found that 'people who live in areas with higher street-tree density reported better health perception and fewer cardio-metabolic conditions, compared with their peers living in areas with lower street-tree density.'⁴⁹

The comparison took account of age, income and education levels and was able to quantify the impact:

'Having 10 more trees in a city block, on average, improves health perception in ways comparable to an increase in annual personal income of \$10,000 and moving to a neighbourhood with \$10,000 higher median income or being 7 years younger.⁵⁰

An equally recent London study found an association between the density of street-trees and the rates of antidepressant prescribing:

'After adjustment for potential confounders ... we find an inverse association, with a decrease of 1.18 prescriptions per thousand population per unit increase in trees per km of street (95% credible interval 0.00, 2.45). This study suggests that street trees may be a positive urban asset to decrease the risk of negative mental health outcomes."⁵¹

In short, at multiple levels, the evidence for regular green spaces and for street trees would appear to be highly compelling.

44 RIBA (2012), The way we live now. (p. 49-53).

47 Akban, H., Pomerantz, M. & Tana, H., (2001). Cool surfaces and shade trees to reduce energy use and improve a 48 Smardon, R. C., (1988). Perception and aesthetics of the urban-environment - review of the role of vegetation.

49 Kardan, O. et al., (2015). Neighborhood greenspace and health in a large urban center.

50 'Scientists have discovered that living near trees is good for your health', Washington Post, 9 July 2015.

51 Taylor, M. Wheeler, B., White, M., Economou, T., Osborne, N. (2015) Research note: Urban street tree density and antidepressant prescription rates—A cross-sectional study in London. (p. 174–179).

⁴³ In a 1971 California study trips per week to a small local part fell from over 19 a week at one block's distance, to an average of barely more than zero per week at more than four blocks' distance. Alexander, C. (1977), A Pattern Language (p. 305-308).

⁴⁵ Dumbaugh, E. (2006), Safe Streets, Liveable Streets.

⁴⁶ Nowak, D. J., Crane, D. E. & Stevens, J. C., (2006). Air pollution removal by urban trees and shrubs in the United States, Urban forestry & urban green. & Nowak, D. J., Hirabayashi, S., Bodine, A. & Greenfield, E., (2014). Tree and forest effects on air quality and human health in the United States. 47 Akbari, H., Pomerantz, M. & Taha, H., (2001). Cool surfaces and shade trees to reduce energy use and improve air quality in urban areas.

Appendix iv: the attraction of enclosure (from Of Streets and Squares)

Some designers have argued that the success of a street is determined by size and proportion. Can you see the sky? Does it feel dark and overwhelming, or dull and too stretched out? A street might be pleasantly wide. However, if surrounded by buildings which are too high, or too boring, it might feel shadowy or unpleasantly cavernous. On the other hand, it might have beautifully articulated façades, which are so low compared to its width, that it feels more like a pretty race track than a place to be. Medium-rise buildings, it has been argued, can imbue a street with a pleasing sense of enclosure, with dynamism and spatial continuity.

The architectural writer, Christopher Alexander, has argued that well-enclosed public spaces make us comfortable and that we are biologically programmed to seek the edge;

'The success of urban space depends on what can occur along its boundaries. A space will be lively only if there are pockets of activity all around its inner edges.⁷⁵²

A key metric for thinking about this is the street's height-to-width ratio. This is defined as the proportion of the width of the street to the height of the building. It is a measure of sense of 'enclosure.'

A good ratio positively influences human perception of the space – helping it feel safe and naturally constrained. A bad ratio might create a sense of claustrophobia (if too high) or dispersion (if too low). A British academic, Matthew Carmona, has suggested the following possible guidelines:

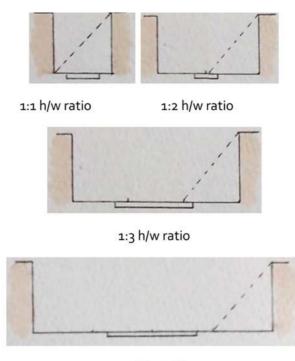
- A height-to-width ratio of 1:4 or above: more sky is visible than buildings so there is very little sense of 'enclosure;'
- A height-to-width ratio of between 1:2 and 1:2.5: the portion of sky and buildings visible are about equal leading to a reasonable sense of enclosure;
- A height-to-width ratio of 1:1 or below: means that it is not possible to have a comprehensive view of the buildings without looking up. This reduces light levels and, it has been argued, can induce feelings of claustrophobia. A ratio of 1:1 'is often considered the minimum for comfortable urban roads.'⁵³

This argument is based on studies of environmental perception, which have shown that the human field of view generally has a peripheral angle of view of 180 degrees horizontally and 150 degrees vertically, with a clear field of view of 27 degrees height and 45 degrees width. These angles decrease as speed increases.⁵⁴ We can see more broadly when we are standing still, least widely when we're zooming past.

52 Alexander C (1977), A Pattern Language: towns, buildings, construction. (Pattern 160, p. 752).

53 Carmona, M., Heath, T., Oc, T., & Tiesdell, S. (2012). Public Places-Urban spaces.

54 Lynch, K. (1958). Site Planning, 1962. Especially Chapter Five Visual Forms, and Chapter Eight. The Process of Site Planning. & Tunnard, C., & Pushkarev, B. (1963). Man-made America: Chaos or control? & Pollock, L. S. (1972). Relating urban design to the motorist: an empirical viewpoint. In Rapoport, A. (2016). Human aspects of urban form: towards a man—environment approach to urban form and design. (p. 181).



1:4 h/w ratio

Examples of strong, medium and low spatial enclosure.

A 1974 environmental perception study, by Professor Samuel Franklin and Scott Hayward, was the most robust we've been able to find. It concluded that a sense of enclosure did not depend on the size of space, but was determined by its height-to-width ratio. They randomly selected 20 undergraduate students. Observers were given twelve drawings of architectural spaces, four images of small size places (3x3m), four images of medium size places (6x6m) and four images of large size places (12x12m). For each set of images, four different height-to-width ratios were depicted: 1:1, 1:2, 1:3 and 1:4. Observers were asked to judge levels of enclosure on a ten-point scale, where 1 indicated minimum enclosure and 11 indicated maximum enclosure. The study found that:

- Increased height-to-width ratios corresponded to increased perception of enclosure. On the 1 to 11 scale, a 1:1 height-to-width ratio corresponded to an 8.6 mean rating of enclosure while a 1:4 height-to-width ratio corresponded to a 4.0 mean rating of enclosure;
- However, there was no significant influence of size on perception of enclosure, with only 0.9 points of difference between small and large places, 0.6 between large and medium, and 0.3 between medium and small ones.⁵⁵

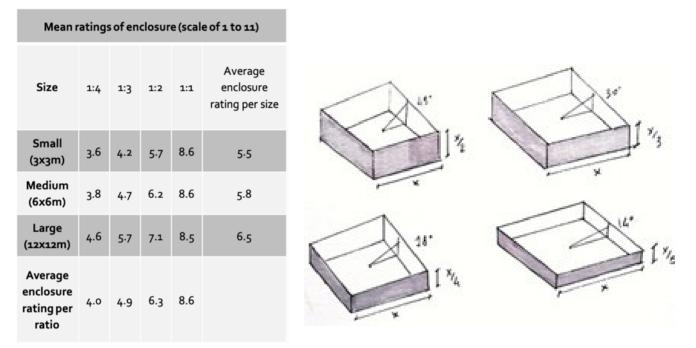
This positive association between higher height-to-width ratios and increased sense of enclosure was explained by the American architect and planner, Paul Spreiregen, in 1965:

'when a façade height equals the distance we stand from a building (a 1:1 relationship) the cornice is at a 45-degree angle from the line of our forward horizontal sight. Since the building is considerably higher than the upper field of forward view (30 degrees), we feel well enclosed.⁵⁶

55 Hayward, S. C., & Franklin, S. S. (1974). *Perceived openness-enclosure of architectural space*. 56 Spreiregen, P. D. (1965). *The architecture of towns and cities*. (p. 75).

But does this matter? Is it actually reflected in the reality of how streets 'feel' and how popular they are? Certainly, many popular streets have a ratio of between 1:1 and 1:1.5. In other words, the buildings are as high as the street is wide, or the street is not more than 50 per cent wider.

For example, John Massengale has argued that one of the key reasons that Manhattan's 70th Street, between Park Avenue and Lexington Avenue, is so attractive is due to its height-to-width ratio.⁵⁷ The street is just over 18m wide. The buildings are 4.5 to 5 storeys (about 16m) high. In other words, the ratio is very nearly 1:1.



Mean 'enclosure scores' on a scale from 1 to 11

Sense of enclosure and human field of view.

In his excellent book, Great Streets, Allan Jacobs surveyed 15 of the 30 streets he personally judged to be the most beautiful in the world. He found that most of them were in the range of 1:1.1 to 1:2.5 height-to-width ratio, with a building height of less than 30.5 metres.

Some streets had lower ratios, such as Via del Corso and Via dei Greci, in Rome, with 1:0.5 and 1:0.3 height-to-width ratios respectively. And some of them had higher ratios, such as the Champs-Elysees or the Paseo de Gracia, with height-to-width ratios of 1:3 and 1:5 respectively. Jacobs also argued that one reason why we often perceive a fine sense of enclosure, in a very wide street or boulevard, is the presence of one to four rows of closely-planted trees. These help visually to define the space.⁵⁸ Terraces also appear to help.

As well as trees, Allan Jacobs has argued that a terraced street, or buildings, with only minimal distances between them, increases the sense of enclosure. For example, some seven metres-wide residential Streets, off Fairmount Boulevard in Ohio have a strong sense of enclosure, as the buildings are nearly terraced with only 3 to 6 metres between them. They also have a row of regularly spaced trees on both sides.

57 Dover, V., & Massengale, J. (2013). *Street design: the secret to great cities and towns.* 58 Jacobs, A. B. (1993). *Great streets.*

In contrast, East and West streets in Litchfield, Connecticut, which are the same width, have much less sense of enclosure, as the buildings are 60 metres apart and trees are more scattered. Is that really as far as you can go without streets feeling overwhelming? Climate certainly matters. Successful streets in hotter climates are often very narrow, protecting pedestrians from a sun whose heat is less welcome.

Appendix v: the value of clear backs and fronts (from Beyond Location)

There is a growing corpus of evidence linking elements of the urban form with higher or lower crime. It is dangerous to over-simplify but it can reasonably be summarised that flats or terraced houses on what might be termed conventional blocks, with clear fronts and clear backs in a legible street network with better organised movement tend to be safer from property crime. Entrances and windows facing the street provide natural surveillance, keeping the streets safe.

Analysis (for example of urban blocks in Perth or London) has shown how such blocks with this clearer distinction between public and private, and with clear fronts and backs typically suffer from less crime.⁵⁹ Other studies have associated design 'features that allow unrestricted pedestrian movement through residential complexes' with higher crime or show how reducing multiple pedestrian permeability reduces crime.⁶⁰ The public realm (the street, the square) needs to be fully delineated from the private interiors of urban blocks with their private or communal gardens.

Busy, high-density and active façades are also associated with lower crime. Higher ground level densities of both dwellings and people reduce risk of crime. Some of the most statistically sophisticated and empirically farreaching recent research looking at links between crime levels with different types of urban form have found that in London increasing ground floor density reduced risk of burglary by 38 per cent for houses and 16 per cent for flats.⁶¹ Street segments with more than 25 dwellings, higher spatial integration and thus more movement potential, are associated with lower levels of burglary.⁶²

Living on traditionally conceived terraced streets isn't just good for you. It makes you safer. So do symbolic or real barriers which delineate between the street and semi-private or private space. Burglars use these as guides to risk and are less likely to burgle where distinctions are evident.⁶³

Appendix vi: the predictability and importance of attractive facades

It's a commonplace belief among designers that style is purely a matter of unknowable personal taste, with the sophisticate's preference for burnished steel as valid as (indeed more valid than) the petit-bourgeois liking for sash windows or red bricks. When receiving his 2017 Royal Town Planners Institute Medal in 2017, the well-known British architect, Sir Terry Farrell, dismissed the concept of 'beauty' as an appropriate theme for considering the future of London. Purely statistically, this would appear to be incorrect.

What most people like, architecturally, is remarkably predictable. For example, in every survey of British preferences that we have conducted, or have been able to find, there is either a strong, very strong or overwhelming preference for what might be termed 'a more visually complex and historically-referenced' style. People seem to care far more about a 'sense of place' (buildings should fit in with their surroundings) than a 'sense of time' (buildings

⁵⁹ For instance, see presentation made by Tim Stoner at 11-March-2014. www.slideshare.net/tstonor/tim-stonor-predictive-analytics-using-spacesyntax-technology

⁶⁰ Poyner, B., & Webb, B. (1991). Crime free housing. Oxford: Butterworth-Architecture.

⁶¹ Hillier, B., & Sahbaz, O. (2008). An evidence based approach to crime and urban design, or, can we have vitality, sustainability and security all at once. Bartlett School of Graduates Studies University College London.

⁶² Hillier, B., & Sahbaz, O. (2011). Safety in numbers: high-resolution analysis of crime in street networks. In The Urban Fabric of Crime and Fear, pp. 111-137. Springer Netherlands. Hillier, W. R. G. (2012). Credible mechanisms or spatial determinism. Cities.

⁶³ Brown, B. B., & Bentley, D. L. (1993). Residential burglars judge risk: The role of territoriality. Journal of Environmental Psychology, 13(1), pp. 51-61.

must stand for today's zeitgeist). Starting with indicative evidence, back in 1989, 99 per cent of letters sent to the Prince of Wales, in response to his anti-modernist television programme, Vision of Britain, were supportive.⁶⁴ A 2001 BBC list of 'Britain's worst buildings' was entirely composed of modernist, or post-modernist, tower and slab blocks, dating from the 1960s to the present day.⁶⁵ A 2004 list of the ten worst and ten best buildings in Britain, spontaneously given by a sample of 2,000, also listed no recent building in the 'Best Buildings' list and named exclusively recent buildings among the ten worst buildings list.⁶⁶ A 2005 survey had very similar findings.⁶⁷

This evidence is obviously strongly indicative, rather than robust, but it is backed up by other data sources over many years. Research, from 1994, found that 67 per cent would 'prefer an older looking property or copy of an older design.' In 1997, the Halifax Building Society interviewed a sample of 302 intending and recent house buyers. Only 12 per cent wanted to buy a 'more innovative and up-to-date in appearance' new house. In 1998, a survey asked if 'old styles are right for new houses' and 'new houses should not imitate old houses.' 63.5 per cent thought old styles were right for new houses: 15.5 per cent did not. 54 per cent thought new houses should imitate old houses: 25 per cent did not. None of these questions, or surveys, had any visual prompts so different respondents will have interpreted them differently. Nevertheless, they paint a consistent picture of between 60-80 per cent support for a less self-consciously assertive approach to design. The only way of overcoming uncertainties in use of vocabulary is to use pictures. There remains a risk of bias, via choice of images, but choosing images from the same angle and distance in the same weather conditions, and with equal presence of trees or parked cars, should take account of that. At least five pieces of recent research have used fairly selected visual material, to assess architectural preferences, with consistent results.⁶⁸



Stylistic preference for commercial buildings was 77 (2 and 3) vs. 23 per cent (1 and 4).

64 Charles, Prince of Wales, (1989), A Vision of Britain. (p. 9). Of the remaining 1% half were qualified in their support and half were opposed. 65 Boys Smith, N. (2013), Create Streets. (p. 28).

66 Adam, R. (2005), Architectural preferences in the UK – a digest of the evidence. (p.1).

67 Hanley, L. (2007), Estates – an intimate history. (p.118).

68 See Boys Smith, N. (2016), *Heart in the Right Street*, Section 9.8 for information on the other three. There is a sixth survey in Airey (2018), *Building More*, *Building Beautiful*. This supports the thrust of the wider evidence though the images are not as controlled so it is not cited here.

To cite only the most recent two, in 2005, a YouGov survey sought to determine whether the British public prefered traditional or contemporary buildings for non-residential buildings; 77 per cent of respondents who selected a design, from a choice of 4, chose traditional architecture over contemporary styles. Only 23 per cent chose contemporary buildings. The survey asked 1,042 respondents to select a preferred building, from a choice of four, in answer to the question: 'Please imagine a new building is planned to be built near where you live. Four different designs are proposed. Please look at the designs below. Which one would you most like to be built near you?' The illustrations showed new buildings of a similar height, size and orientation to the street.

Some of the most recent evidence is from an Ipsos MORI poll, commissioned by Create Streets in 2015. It asked respondents if, in principle, they supported the building of new homes on brownfield land (previously developed but now vacant), near where they lived. The poll found that 64 per cent of adults supported the building of new homes, locally on brownfield land, and 14 per cent opposed. Respondents were then shown five photos illustrating different types of housing (figure below).

For each, they were asked if they would support or oppose the building of 10 similar-style homes in their local area. The most conventional in form, style, and materials won 75 per cent and 73 per cent support. (Of these, one might be termed 'modern vernacular' and one is what architects might condemn as 'pastiche.' But both have a complex and yet coherent pattern). Blander facades won 23 per cent and 34 per cent support. Designs that respond to people's preferences can materially change support for new homes. Among the 14 per cent who opposed building "in principle," half changed their mind for the most popular design option. ⁶⁹

Ipsos MORI Social Research Institute

CREATE streets

Q2 I am now going to show you five different types of new housing... to what extent would you support or oppose the building of new homes similar to the photo in your local area on brownfield land?



Stylistic preference for commercial buildings was 77 (2 and 3) vs. 23 per cent (1 and 4).

69 Ipsos MORI interviewed 1,000 adults aged 15+ across Britain, face-to-face, in-home in May 2015. Data is weighted to the known population profile. www.ipsos-mori.com/researchpublications/researcharchive/3586/Design-influences-public-support-for-new-build-homes.aspx Perhaps underpinning much of this research is a desire, in an international world, for home as a place of refuge. Research Create Streets conducted in 2014 for the Prince's Foundation for Building Community, based on participants in British community engagement projects over 15 years, implied strongly that most of us crave a 'sense of place' that, many feel, most contemporary housing just fails to provide.⁷⁰ Though it is not the focus of this study, pricing data widely corroborates this polling.⁷¹ So does our own work running dozens of visual preference surveys for, and with, neighbourhood and community groups up and down the country.

Living in places you find attractive is good for your mental health

But does any of this matter? Even if we can predict what most people will like, does it actually have any impact on their propensity to use space or to feel good using it. In fact, the potential importance of the beauty of urban areas, on health and happiness, is now starting to emerge from a growing list of metadata studies. As we have seen, an important recent British project, by Dr Chanuki Seresinhe, has used 1.5 million ratings of the 'scenicnesss' of 212,000 pictures, compared to self-reported health, to understand the relationship between how attractive a place is and physical and mental health:

'It seems to be that the beauty of the environment, as measured by 'scenic-ness', is of crucial importance. Our results suggest that the beauty of our everyday environment might have more practical importance than was previously believed.'

The team's colour analysis bore this out, finding that most scenic areas do not contain the most green, but rather high proportions of blue, grey and brown.'

This measurable emotional attachment to beautiful places would appear to have consequences. A 2011 survey, of 27,000 respondents in ten US cities, found stronger correlations between a place's physical beauty and people's satisfaction with their communities than any other attribute. It had, for example, a correlation of 0.56 with overall place happiness, 0.53 with city satisfaction and 0.51 on recommending a city as a place to live for family and friends. Factors such as 'overall economic security' came nowhere close.⁷²

A 2008-2010 Gallup survey, of 43,000 people in 26 cities, agreed. It found that residents' ratings of the aesthetic attraction of their cities and green spaces correlated significantly with their attachment to their city. This, in turn, correlated with GDP growth. In this survey, aesthetic attraction to their city came third in the pecking order behind 'Social Offerings' (what there was to do) and 'Open-ness' (perception of open-ness to different types of resident) as a predictor of attachment. However, it still ranked above education, basic services or safety.⁷³ A third study also found that a perception of beauty is significantly associated with community satisfaction and significantly more important than individual demographic characteristics. The 2001 Survey of English Housing found a strong relationship between place satisfaction and 'visual quality.' Those living in areas judged by an independent surveyor as having the best visual quality in England were the most satisfied with their area. Those living in areas with the worst visual quality were the most dissatisfied. 77 per cent of those living in the highest visual quality areas were satisfied with their area. In contrast, only 29 per cent of those living in the worst visual quality areas were satisfied with their area. Finally, a well-controlled 2015 Ipsos MORI survey found indicative associations between

70 See Prince's Foundation (2014), What People Want.

71 Boys Smith, N., Venerandi, A., Toms, K. (2017), *Beyond Location*. (p. 82-87).

72 Leyden, K. et al (2011), Understanding the Pursuit of Happiness in Ten Major Cities.

73 Soul of the Community Project, (2010), Soul of the Community 2010 Overall Findings. (p.9). Available at www.knightfoundation.org/sotc/overall-findings/

levels of perceived beauty, in residential areas, and physical and mental health. From the evidence on popularity, environmental psychology and 'scenic-ness', health and emotions, it is hard not to conclude that architecture and perceptions of beauty matter. However, this only begs the question: what elements of buildings do people find attractive and why?

Facades should have variety in a pattern

As long ago as 1961, the American urbanist Jane Jacobs argued that busy street facades with multiple uses, openings, variety and forms would attract more activity and encourage the sort of neighbourly interactions that strengthen social ties and provide increased natural surveillance.⁷⁴ Jan Gehl has used the distinction of 'walking architecture' versus 'driving architecture' to encapsulate this. 'Walking architecture' is readily appreciated at pedestrian speed or at eye level. It tends to be fine-grained urban and rich in details. 'Driving architecture' is characterised by simpler design, which offers unambiguous signals to those driving at speed.



'The best courtyards have many entry points, a view to the streets beyond, and enclosing walls that are fenestrated, not blank. These are used most often.⁷⁵

Subsequent research is justifying these concepts. Jan Gehl conducted the best-known studies and found that the 'treatment of the city's edges, particularly the lower floors of buildings, has a decisive influence on life in city space.' In many cities around the world, the most attractive shopping centres all share the same rhythms: 15 to 20 shops per 100 metres of street, which corresponds to new experiences for pedestrians every four to five seconds.⁷⁶

The evidence certainly seems clear that active, interesting facades promote street life, neighbourliness and even enhanced social support, and (in some cases) better physical health.

For example, in one Copenhagen study, two very different types of façade were compared. The first, the active façade, featured 'varied facades with many doors, visual contact between outside and inside and various functions.' The second, the more passive façade, was composed of 'uniform facades with few doors, blind or no windows and few or no functions.' Gehl's team then compared the number of people passing, their speed and the number of people who stopped, or turned their heads, on a series of summer days and autumn evenings. They found that:

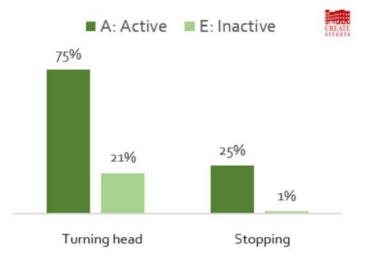
76 Gehl J., (2010), *Cities for People*. (p.75, 76).

⁷⁴ Jacobs, J. (1961), The Death and Life of Great American Cities.

⁷⁵ Alexander, C. (1977). A pattern language: towns, buildings, construction. (Pattern 115. P. 561).

- Pedestrian traffic was 13 per cent slower along the interesting facades;
- 75 per cent of people turned their heads, along the interesting facades, compared to only 21 per cent along the less interesting facades; and
- 25 per cent of pedestrians stopped in front of the interesting facades, compared to only 1 per cent in front of the sterile facades.

The chart below shows the results of the observations.



Percentage of people turning their head towards, and stopping in front of, the Active façade (A) and Inactive façade (E).



'Walking' (left) vs. 'Driving' (right) façade types.



Examples of active (left) and inactive (right) façade types.

In aggregate, Gehl's team calculated that there was around seven times as much activity in front of the active facades as the passive. Other studies, in Madrid, Melbourne and Stockholm had similar findings.⁷⁷ It isn't just that people stop more either. Sterile 'edges' have actually been proven to affect levels of sociability and helpful behaviour – all meaningfully correlated with wellbeing. A recent experiment, led by Charles Montgomery in Seattle, selected two facades in the same neighbourhood. One was highly 'active,' with 'a high concentration of small businesses, opportunities for pedestrians and a high level of visual interest.' The other, a 'block-long blank warehouse wall was highly 'inactive.' Volunteers posed as lost tourists at both locations. They stood on the pavement, looking confused and with an open map. The 'lost tourists' did not approach anyone. They waited for random passers-by to offer help.

'The results were remarkable. Pedestrians at the active façade site were nearly five times more likely to offer assistance than at the inactive façade site:10 per cent of passers-by offered assistance at the active site versus 2.2 per cent at the inactive site. Of those who helped, seven times as many at the active site offered to let our 'tourist' use their phone (7 per cent versus 1 per cent). Four times as many offered to actually lead our tourist to their destination (4 per cent vs 1 per cent).⁷⁸



Active (left) and inactive (right) facades led to different behaviour from pedestrian behaviour.

Recent academic research is starting to explain why. A study of 29 shopping areas, in Maastricht, was conducted by Harmen Oppewal and Harry Timmermans, to determine which public areas people preferred to visit. 214 participants were asked to rate 128 images of places, based on a list of 10 attributes of appearance, layout and furnishing of shopping centres. They found that the four most important variables that mostly influenced people's choices were; maintenance levels, shop-front appearance and presence of activities and cafes with the presence of green areas a little way behind. Maintenance levels, attractive large shop windows, the number of street activities and the number of cafes all had what statisticians call p-values of 0.000 or 0.001. This means that there is almost 100 per cent probability that the appearance of the place depends on these factors. The amount of greenery also had a positive relationship, but with a p-value of 0.010 – still important, but suggesting an almost 100 per cent probability that the appearance of the place depends on the amount of greenery.⁷⁹

77 Gehl, J. (2006), Close encounters with buildings. (p.29-47).

78 Edible Urbanism Project, Happy Seattle, www.thehappycity.com/wp-content/uploads/2015/03/Editable-Urbanism-Report.pdf. In addition to these findings, people at the active façade reported a significantly higher level of trust in strangers (5.1 vs. 4.8 out of 10), walked more slowly and lingered more.

79 Oppewal, H., & Timmermans, H. (1999). Modeling consumer perception of public space in shopping centers.

Some façade complexity is good, but not too much

Researchers are starting to find that 'people consistently prefer moderate levels of visual complexity, but also tend to like inherent order.⁷⁸⁰ For example, in 1992, Thomas Herzog conducted an important cognitive analysis on which urban spaces students preferred at Grand Valley State University. 326 undergraduate students were shown 70 colour slides of urban settings (with no people). They showed four categories of urban spaces: eight were open or un-defined; 19 were spacious, but well-structured; 11 were enclosed; and eight had blocked views. Examples are shown below. Participants were asked to rate how much they liked each space, on a scale of 1 to 5, where 1 was 'not at all' and 5 was 'a great deal'.

They found that nine predictor indicators explained 87 per cent of the variances in people's preferences. The key ones were 'coherence,' 'legibility,' 'complexity' and 'mystery.' They also found that well-structured spaces were the most favoured images. They were;

- Preferred with a rating of 3.4 out of 5, (compared to an overall average of 2.2);
- Judged as more 'coherent,' with a rating of 3.7 out of 5 (compared to an overall average of 3.0); and
- Judged as more 'legible,' with a rating of 3.5 out of 5 (compared to an overall average of 3.2).

This seems to confirm an older 1972 study, by Stephen Kaplan, which found that we seem to prefer scenes that have a moderate level of complexity. They seem to hold our interest for longer.⁸¹ Based on the ratings, of 88 participants, of 56 images of urban and rural spaces, Professor Kaplan found that complexity;

- Had a positive relationship with preference of urban spaces, with a standardized coefficient of 0.78, which means that complexity explains 61 per cent of the variance in preference for urban spaces; and
- Had a positive relationship with preference of rural spaces, with a standardised coefficient of 0.69, which means that complexity explains 48 per cent of the variance in preference for rural spaces.

Can too much complexity be a 'bad thing'? There is some analogous research, on modern paintings, that too much confusing information to process can overwhelm the visual system, become harder to process and lead to less popular images.⁸² For example, a 1980 study into art preferences found that very ambiguous paintings were judged by most people as less pleasant because they could not easily 'read' them. 43 undergraduate students from the University of New Brunswick, Canada, were shown 20 slides of Cubist paintings, with a 'fairly broad range of ambiguity' and had to rate each on a scale 1 to 10, where 1 was 'not interesting' and 'not pleasant' and 10 was 'very interesting' and 'very pleasant'.

80 Zacharias, J. (2001). Pedestrian behavior and perception in urban walking environments. (p.11).

81 Kaplan, S., Kaplan, R., & Wendt, J. S. (1972). Rated preference and complexity for natural and urban visual material.

82 Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience?



Cubist painting with highest subjective ambiguity (Braque, left) and lowest subjective ambiguity (Picasso, right).

A measure of subjective ambiguity was earlier attributed to each painting. This was calculated using a diversity index. It ranged from a minimum of 3.7 (low) to a maximum average of 5.1 (high). It turned out that the more ambiguous paintings were, the less popular they were. For example, Braque's painting The Portuguese, with a high subjective ambiguity value of 4.6, was the painting with the lowest pleasantness rating (5.0). It was hard to understand and the least popular. In contrast, Picasso's Still Life with Gourd was easier to understand. It had a low subjective ambiguity of 3.1. It was also more popular – receiving a rating of 7.1. Picasso's painting was rated as more pleasant, because it had fewer components and clearer shapes. Statistically, 32 per cent of the variance in preferences was determined by each painting's level of ambiguity.⁸ Might the same be true of streets?

Some colour is nice

There is some anecdotal and case study evidence that people prefer streets with some colour in them. On the Venetian island of Burano, no-one lives in a house of the same colour as their neighbour. Originally painted by fishermen so that they could see their homes in the Adriatic fog, residents must make a formal request before they paint their houses. Is this overly onerous? Certainly, it is popular with tourists. The photographer Lumi Toma recalled;

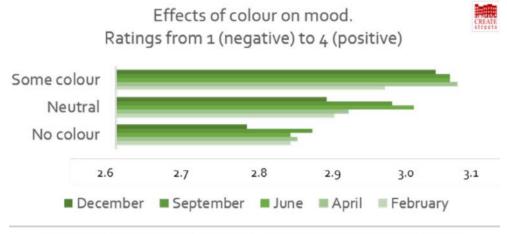
'with the very first steps on the island I immediately felt a burst of positive energy. My brain started reacting to what my eyes were seeing, and a feeling of happiness overpowered me.¹⁸⁴

In 2010, architects Jeroen Koolhaas and Dre Urhahn launched a project called 'Praça Cantão', in Rio de Janeiro, Brazil. Intended to challenge the negative connotation generally attributed to favelas (or slums), the architects trained 300 residents to paint 34 houses in Santa Marta, a hillside slum in the heart of Rio de Janeiro. They argued that the whole neighbourhood had benefited from this rainbow treatment. 'It gives the community life,' said Edimar Marcelinho Franco, a favela resident who helped with the painting and subsequently obtained a professional painting qualification. He added, 'people who come to the favela today say, "Wow, how pretty." It

84 https://www.dailymail.co.uk/travel/travel_news/article-3062423/A-town-technicolour-Venetian-island-Burano-house-painted-different-shade-rainbow-want-make-change-need-government-permission.html.

⁸³ Nicki, R. M., et al. (1981). Ambiguity, cubist works of art, and preference.

doesn't have that image of an ugly favela.' Carlos Piazza, AkzoNobel's communication director for Latin America, agreed; 'colours bring status.' Tigrao, or Big Tiger, was a drug dealer before he took part in the project. He declared, 'it gave me a different outlook on life, showing me that an honest job can be a good thing.'⁸⁵ However, these are just anecdotes. Can we be sure that colour really improves our mood and emotional state? In 2006, a cross-cultural research project was conducted, on the impact of light and colour on psychological mood, in indoor working environments. 899 people in four very different countries (UK, Sweden, Saudi Arabia and Argentina), each with different light and climatic conditions, filled in surveys over a four-month period from September to December. This was compared to local lighting and colour conditions. Those who were in the most colourful settings had a visible mood improvement.⁸⁶ The figure above shows the relationship between colour and participants' mood. Consistently, those living in more colourful environments felt better.



Colour has beneficial effects on mood, on a scale 1 (negative) to 4 (positive).

People seem to prefer some symmetry in their facades

Research is increasingly demonstrating that humans tend to prefer symmetrical design. A 2004 psychology study was conducted on people's design preferences, by comparing symmetric and non- symmetric images. 40 undergraduate students were shown 10 pairs of un-familiar geometric images. They were asked to choose the most attractive from each pair. Each pair contained images that were symmetrical and asymmetrical by colour, or by shape, or had images that were orientated with, or without, vertical symmetry.

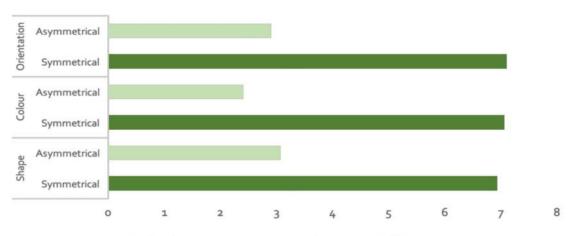
The findings were startling. Symmetry won three times out of three. On a scale of 1 to 10, 'designs with symmetrical shape were judged to be more attractive than designs with asymmetrical shape (6.9 versus 3.1). Symmetrically-coloured designs were judged to be more attractive than asymmetrical coloured designs (7.1 versus 2.4). Designs with a vertical axis of symmetry were chosen as more attractive than designs with a non-vertical axis of symmetry (7.1 versus 2.9). Without ambiguity or cavil, people like their symmetry.⁸⁷ The chart below shows the average ratings, on a scale 1 to 5, where 1 is 'least attractive' and 5 is 'most attractive'. Symmetry, or near symmetry, is everywhere: not only in popular 'traditional' architecture, from the colonnade of St. Peter's Square in Rome, to the Schönbrunn Palace in Vienna, but in many of the most popular streets and towns around the world. Symmetry is certainly a way of creating a façade which 'lives' and which is both coherent and complex. Our appreciation for some streets over others might be due to this. Create Streets' 2015 Ipsos MORI poll arguably found that the most nearly-symmetrical streets, with the most rhythm, were the most popular.

⁸⁵ http://edition.cnn.com/2010/WORLD/americas/11/17/brazil.beautiful.favela/index.html.

⁸⁶ Küller, R., Ballal, S., Laike, T., Mikellides, B., & Tonello, G. (2006), The impact of light and colour on psychological mood: a cross-cultural study of indoor work environments.

⁸⁷ Cárdenas, R. A., & Harris, L. J. (2006). Symmetrical decorations enhance the attractiveness of faces and abstract designs.

Average ratings (on a scale 1 to 10, where 1 is 'least attractive' and 10 is 'most attractive')



Results from survey on symmetrical/asymmetrical images.

A QUICK GUIDE TO VISUAL PREFERENCE SURVEYS

Appendix vii: visual preference surveys methodology

a developmi preferences

What is a visual preference survey? Visual preference surveys are a simple and effective participatory design and research technique to gauge quickly and relatively cheaply the preferences of the public or a specific target group. They should focus on one design aspect with everything else held as constant as possible. Usually two to seven pairs of images are presented to gauge preferences for specific issues.

How to make a visual preference survey? Visual preference surveys should aim to use images which are as similar as possible. Ideally, only the element which are compared should be different. Often images will need to be edited to align extraneous aspects such as sky colour or level of greenery which might influence the result. What questions can you ask? Visual preferences surveys should be used to test public preferences for one specific issue or a linked subset of issues. These can include a building's height, façade pattern, or overall style; very specific details such as windows, doors, materials, colours, roof types or level of ornament ; street's sense of enclosure, carriageway design, or the design of or components within a public space. How do you ask your questions? Wherever possible, ask as tangible, specific and 'real' a question as possible. Sometimes it is right to ask 'which of these do you prefer?" But normally you should relate questions to real life or to actual changes to a place: • "Which of these buildings would you rather live next to?" to:// "Where would you rather sit?" "Where would you rather walk?" "Which of these would you rather see built near your home?"

Why use a visual preference survey? Visual preference surveys can empower communities and bypass unnecessary distractions. They can help public officials, developers, and architects understand what is popular during the planning and design stage of

A visual preference survey for buildings



- The example above compares buildings with two very
- The example above compares buildings with two very different façade patterns. The camera angle should be as similar as possible. Sometimes two different versions of the same comparison from different angles may be appropriate. The buildings being compared should ideally be of a similar size. .
- imilar size





Or whatever is deemed appropriate and relevant.

ent. They can also be used to research public

of the sky. This is one of the simplest elements to align

of the sky. This is one of the simplest elements to align using photo editing software. The surroundings should be comparable. For example, don't compare a building in a busy urban setting with a building in a green, leafy setting. The foreground elements should be similar, including the number of people, cars, trees or other obstacles and the amount and quality of street furniture.



A visual preference survey for public spaces

Some examples

(deg(EFA HQ) Right: Robert C. Weaver Federal Building (HUD HC) Surveyor, D1 1 141

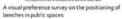
A visual preference survey comparing architectural styles for public buildings





The example above compares two public squares of a different size.
Be very clear about the primary focus of your comparison. Is it the size of the public squares of the number of the public squares of the squares of enclosure (the ratio of height to width)? Is it the number of trees? Or the amount, positioning or quality of street furniture? Ideally, test only for one element in yourcomparisons.
Depending on your focus, try to control for as many variables as possible. This will minimize the risk of

and lasts to to by Anag Ba 1974 Lotte Caled with the 2 for the and and face to the same and the second is shown in the second





Appendix viii: Deltapoll visual preference survey results

DELTAPOLL

Prepared by Deltapoll for Create Streets

Sample size: 2,024 adults in the United Kingdom

Fieldwork: 21st to 24th March 2025

CS1. Here are two alternative designs for the same street in a city centre location. If you had to choose, and all other things being equal, which one of the streets do you prefer?



Image A = 429 responses (21%)

Image B = 1538 responses (76%)

Don't Know = 57 responses (3%)

CS2. Here are two alternative designs for the same street in a city centre location. If you had to choose, and all other things being equal, which one of the streets do you prefer?



Image A = 435 responses (22%)

Image B = 1541 responses (76%)

Don't Know = 48 responses (2%)

CS₃. Here are two alternative designs for the same street in a city centre location. If you had to choose, and all other things being equal, which one of the streets do you prefer?



Image A = 423 responses (21%)

Image B = 1571 responses (78%)

Don't Know = 30 responses (1%)

I		Gender				Age		Generation					
	Total	Male	Female	18 to 24	25 to 34	35 to 54	55 to 64	65+	Generati on Z	Millenni als	Generati on X	Baby Boomer s	
		Α	В	С	D	E	F	G	н	I	J	K	
	2024	971	1047	232	312	682	339	459	289	537	570	587	
	2024	925	1093	249	327	632	324	492	333	523	508	625	
CS1-A	429	222	205	39	70	151	50	119	55	113	115	126	
001-4	21%	23%	20%	17%	22%	22%	15%	26%	19%	21%	20%	22%	
						F		C.F					
CS1-B	1538	726	808	188	240	509	280	320	229	410	443	435	
001-0	76%	75%	77%	81%	77%	75%	83%	70%	79%	76%	78%	74%	
				G			E.G						
Don't Know	57	23	35	5	2	22	8	20	5	14	12	26	
Don titliow	3%	2%	3%	2%	1%	3%	2%	4%	2%	3%	2%	4%	
								D					
	435	203	232	52	58	144	59	123	63	104	117	134	
CS2-A	22%	21%	22%	22%	18%	21%	17%	27%	22%	19%	21%	23%	
	/0	21/0		2270	1070	2170	17 /0	-, /,0 F		1370	2170	2370	
	1541	745	791	178	251	525	269	318	225	424	442	428	
CS2-B	76%	77%	75%	77%	81%	77%	79%	69%	78%	79%	78%	73%	
					G	G	G	••••					
	48	23	24	2	3	13	11	19	2	9	11	26	
Don't Know	2%	2%	2%	1%	1%	2%	3%	4%	1%	2%	2%	4%	
	-//	_//	-//			-/-	•			-/-	-//	Н	
CS3-A	423	196	224	33	30	143	66	151	40	79	122	167	
	21%	20%	21%	14%	10%	21%	20%	33%	14%	15%	21%	28%	
						D	D	C.D.E.F			H.I	H.I.J	
CS3-B	1571	762	805	196	280	529	270	296	247	453	440	406	
	78%	79%	77%	85%	90%	77%	80%	65%	85%	84%	77%	69%	
				G	E.F.G	G	G		J.K	J.K	ĸ		
Don't Know	30	12	18	3	2	10	3	12	3	6	7	14	
	1%	1%	2%	1%	1%	2%	1%	3%	1%	1%	1%	2%	

	Region						Socia	l Grade		Annual Household Income						
London	Rest of South	Midland s	North	Wales	Scotland	Northe n Ireland	ABC1	C2DE	Under £14k	£14k to £21k	£21k to £34	£34k to £48k	More than £48k			
L	М	N	0	Р	Q	R	S	Т	U	V	W	X	Y			
265	638	324	473	97	168	59	1139	865	243	213	541	330	616			
253	613	342	497	109	164	46	1164	840	247	199	516	357	635			
								•								
62	116	59	120	24	36	12	230	194	73	52	104	67	116			
23%	18%	18%	25%	24%	22%	20%	20%	22%	30%	24%	19%	20%	19%			
			М	*	*	**			W.X.Y							
198	504	248	344	71	126	46	876	648	158	159	422	259	493			
75%	79%	76%	73%	73%	75%	78%	77%	75%	65%	74%	78%	78%	80%			
				*	*	**					U	U	U			
5	18	17	8	2	5	1	32	23	12	2	14	4	7			
2%	3%	5%	2%	2%	3%	1%	3%	3%	5%	1%	3%	1%	1%			
		0		*	*	**			Y							
73	132	69	110	16	32	4	249	183	67	59	116	65	107			
28%	21%	21%	23%	16%	19%	6%	22%	21%	27%	28%	21%	20%	17%			
				*	*	**			Y	Y						
188	494	245	352	80	130	53	863	663	166	152	415	263	500			
71%	77%	76%	74%	82%	78%	90%	76%	77%	68%	71%	77%	80%	81%			
				*	*	**						U	U.V			
4	13	10	11	2	6	2	26	20	11	2	10	2	10			
2%	2%	3%	2%	2%	3%	4%	2%	2%	4%	1%	2%	1%	2%			
				*	*	**			x							
59	134	66	114	22	25	3	238	182	71	62	86	72	106			
22%	21%	20%	24%	23%	15%	5%	238	21%	29%	29%	16%	22%	17%			
2270	2170	2070	2470	*	*	**	21/0	2170	W.Y	W.Y	1070	2270	1770			
205	494	251	354	72	139	56	882	673	168	146	445	258	504			
77%	78%	78%	75%	74%	83%	95%	77%	78%	69%	69%	82%	78%	82%			
	10,0]		*	*	**		, 0, 0	00,0	00,0	U.V	,0,0	U.V			
1	9	7	5	3	4	0	19	10	4	4	10	0	7			
0%	1%	2%	1%	3%	2%	0%	2%	1%	2%	2%	2%	0%	, 1%			
• /•			. / •	*	*	**				-/-		•	. / .			
Children	Children 18 or Working Status Housing Tenure						Current Voti	ng Intention		GE 2024 Vote						
N	Wo	rking Not	Owned	Mortgag		-	Lab Lib P									

		in to of working status nousing reliure			current voting intention						de 2024 Vole						
	Yes	No	Working (All)	Not Working (All)	Owned Outright	Mortgag e	Renting	Con	Lab	Lib Dem	Reform	Other	Con	Lab	Lib Dem	Reform	Other
	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP
(651	1347	1206	813	637	460	882	370	484	171	375	242	375	595	193	225	241
(633	1363	1220	799	657	430	891	343	513	157	401	214	341	616	123	248	183
-														1	1		
-	132	287	245	182	141	88	197	92	110	36	68	44	89	137	38	46	40
2	20%	21%	20%	22%	22%	19%	22%	25%	23%	21%	18%	18%	24%	23%	20%	20%	16%
										*					*		
5	512	1012	930	604	469	367	659	268	370	128	299	189	278	451	143	173	192
7	79%	75%	77%	74%	74%	80%	75%	73%	76%	75%	80%	78%	74%	76%	74%	77%	80%
										*					*		
	7	48	30	27	26	4	26	10	4	7	8	10	8	7	12	6	10
	1%	4%	2%	3%	4%	1%	3%	3%	1%	4%	2%	4%	2%	1%	6%	2%	4%
		z			AE					AH*		AH			AM*		
	141	291	242	194	153	78	194	82	120	34	69	37	85	139	30	37	50
2	22%	22%	20%	24%	24%	17%	22%	22%	25%	20%	18%	15%	23%	23%	15%	16%	21%
					AE				AK	*					*		
5	501	1021	946	590	466	380	660	280	354	136	303	200	282	442	159	182	186
7	7%	76%	78%	73%	73%	83%	75%	76%	73%	79%	81%	82%	75%	74%	82%	81%	77%
			AC			AD.AF				*					*		
	9	35	18	30	17	1	29	8	10	1	3	6	8	14	4	5	6
1	1%	3%	1%	4%	3%	0%	3%	2%	2%	1%	1%	3%	2%	2%	2%	2%	3%
				AB	AE		AE			*					*		
	101	317	216	205	158	72	186	101	84	28	78	39	99	115	35	50	37
•	16%	24%	18%	25%	25%	16%	21%	27%	17%	16%	21%	16%	26%	19%	18%	22%	15%
		Z		AB	AE			AH.AI.AK		*			AP		*		
	545	1006	976	592	463	384	685	266	394	142	290	199	270	473	156	171	202
1	84%	75%	81%	73%	73%	84%	78%	72%	81%	83%	77%	82%	72%	80%	81%	76%	84%
	AA		AC			AD			AG	*		AG		AL	*		AL
	4	24	14	16	15	3	11	3	6	2	7	4	6	7	2	4	2
	1%	2%	1%	2%	2%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	2%	1%
										*					*		





contact@createstreets.com

© Create Streets