

APPENDICES

Appendices

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Appendix 1

The Housing Market Offer

The following searches were undertaken on national property portals, *Rightmove* or *Prime Location* for three-bedroom houses for sale in the specific search area identified.

From a visual review of the primary façades shown on the website I categorised the houses as housebuilder-vernacular or not, based on the style characteristics set out in chapter three. (When this was not the primary image used to identify the property I looked at the image gallery of that property for the main façade).

1 - Bicester, Oxfordshire, 15 May 2015

(ref fig. A1 at the end of this search list for screenshots of the search).

Rightmove

- 22 properties
- 20 housebuilder-vernacular style = 91%

The two more modern looking properties are part of the same development of polite contextual design; red brick, with render/stone bands at floor and parapet levels, flat roofs, featuring large floor-to-ceiling windows and projecting balconies.

2 - Skipton, Yorkshire, 15 May 2015

Rightmove

- 31 properties
- 30 housebuilder-vernacular style = 97%

3- Shrewsbury (+10 miles), 16 February 2017

Rightmove

- 104 properties
- 79 housebuilder-vernacular style = 76%

Of the non housebuilder-vernacular properties: fifteen are stripped vernacular; 10 are more modern design.

4- Hampshire, 16 February 2017

Rightmove

- 344 properties
- 298 housebuilder-vernacular style = 87%

Of the non housebuilder-vernacular properties: fifteen are stripped vernacular; 10 are more modern design.

5- Slough (+5 mile radius), Buckinghamshire, 18 August 2017

Prime Location

- 107 properties
- 83 housebuilder-vernacular style = 80%

Of the non housebuilder-vernacular properties: eight are stripped vernacular; 13 are more modern design.

6- Swindon, 18 August 2017

Prime Location

- 78 properties (one had no photo so 77 for purposes of percentage calculation)
- 74 housebuilder-vernacular style = 96%

The three non housebuilder-vernacular properties are stripped vernacular.

7- Stoke-on-Trent (+5mile radius), 21 December 2018

Rightmove

- 141 properties
- 110 Housebuilder-vernacular = 78%

The non-housebuilder-vernacular properties include: a number of stripped vernacular properties; two townhouses with less decorative features and a large juliet balcony; and six what I would call semi-stripped vernacular with casement rather than smaller sub-divided windows. All of the properties have pitched roofs.

8- Bury St Edmunds (+5mile radius), 21 December 2018

Rightmove

- 25 properties,
- 25 housebuilder-vernacular style = 100%

Totals

A total of 852 properties were assessed across the eight searches. 719 of these properties were in housebuilder-vernacular style, an average of 84%.

NEW HOMES AND DEVELOPMENTS FOR SALE IN BICESTER, OXFORDSHIRE

CHANGE LOCATION AND CRITERIA

LIST VIEW GRID VIEW MAP VIEW Results per page: 48 HIGHEST PRICE

Location: Bicester

Radius: This area only

Price (£): No min No max

Beds: 3 No max

Property: Houses

Added: Anytime

Include Sold STC

1-22 of 22 new homes for sale found

FEATURED AGENT	FEATURED DEVELOPER	FEATURED NEW HOME
 <p>For a no-obligation market valuation to sell or rent your property</p> <p>Click here or Call 01869 251 590</p>	 <p>Attention Investors 1 & 2 bedroom apartments for £170,000 - £215,000</p> <p>Guaranteed rental yield of £1,000 PCM for 1 Year!!</p> <p>Lagan Homes</p>	 <p>Coming Soon</p> <p>3 bed detached house for... Skimmingdish Lane, Bicester, OX27 8JF</p>
 <p>FROM £599,995 10 3</p> <p>6 bedroom detached house The Moreton at Kingsmere, Chesterton, OX26...</p>	 <p>FROM £559,995 10 2</p> <p>4 bedroom detached house The Potton at Saxon Fields, Cartmel, Chesterton Bicester,</p>	 <p>Coming Soon 10 1</p> <p>3 bedroom detached h... Garden Quarter, Skimmingdish Lane,</p>
 <p>FROM £534,995 10 2</p> <p>4 bedroom detached house The Kempston at Saxon Fields, Cartmel, Chesterton Bicester,</p>	 <p>FROM £530,000 8 3</p> <p>5 bedroom detached h... Kingsmere Village, Chesterton, Bicester,</p>	 <p>FROM £529,500 15 1</p> <p>3 bedroom detached h... The Substation, The Garden Quarter,</p>
 <p>FROM £499,995 14 0</p> <p>4 bedroom detached h... Whitelands Way, Bicester...</p>	 <p>FROM £499,995 12 0</p> <p>4 bedroom detached h... Kingsmere, Bicester...</p>	 <p>FROM £499,995 14 0</p> <p>4 bedroom detached h... Kingsmere, Bicester...</p>
 <p>FROM £419,995 7 2</p> <p>3 bedroom semi-detached house The Foxcote at Kingsmere, Chesterton, OX26...</p>	 <p>FROM £419,995 8 3</p> <p>4 bedroom detached house The Thames at Saxon Fields, Cartmel, Chesterton Bicester,</p>	 <p>FROM £405,000 9 1</p> <p>4 bedroom detached h... De Lacy Fields, Kingsmere Village,</p>
 <p>FROM £375,000 8 1</p> <p>3 bedroom terraced ho... Garden Quarter, Skimmingdish Lane,</p>	 <p>FROM £349,995 8 2</p> <p>3 bedroom semi-detached house The Welland at Saxon Fields, Cartmel, Chesterton Bicester,</p>	 <p>FROM £349,995 6 0</p> <p>4 bedroom terraced ho... Kingsmere, Bicester...</p>
 <p>FROM £339,995 6 0</p> <p>3 bedroom semi-detached house Kingsmere, Bicester...</p>	 <p>FROM £334,995 8 2</p> <p>3 bedroom semi-detached house The Calder at Saxon Fields, Cartmel, Chesterton Bicester,</p>	 <p>FROM £319,995 7 2</p> <p>3 bedroom semi-detached house The Crane at Saxon Fields, Cartmel, Chesterton Bicester,</p>
 <p>FROM £499,995 14 0</p> <p>4 bedroom detached h... Whitelands Way, Bicester...</p>	 <p>FROM £499,995 12 0</p> <p>4 bedroom detached h... Kingsmere, Bicester...</p>	 <p>FROM £499,995 14 0</p> <p>4 bedroom detached h... Kingsmere, Bicester...</p>
 <p>FROM £289,995 6 0</p> <p>3 bedroom terraced ho... Kingsmere, Bicester...</p>	 <p>FROM £289,995 6 0</p> <p>3 bedroom terraced ho... Kingsmere, Bicester...</p>	 <p>FROM £289,995 6 0</p> <p>3 bedroom terraced ho... Kingsmere, Bicester...</p>

Figure A1. Example search: Screen shot of new build house search in Bicester 15 May 2015

Appendix 2

Housing Design Awards

– Analysis of 10 years' Completed Winners, 2007-16

In the 10 years 2007-2016, 14 completed project awards (two of which were for specific Large Housebuilder Awards) were given to nine of the top 20 volume housebuilders, out of a total of 52 awards (Housing Design Awards, 2017). That's 27% of awards (or 24% excluding the specific Large Housebuilder Awards) going to the top 20 housebuilders who produce over 60% of new homes (ONS, 2017a). There were no traditional or housebuilder-vernacular style winners. Eight of the awards (15%) were in what I term a 'modern vernacular' style (ref chapter one for characterizing definition). Of these, only one, The Avenue in Saffron Waldon by Hill was by a top 20 housebuilder. The other housebuilder winners were in a more modern style, sometimes with vernacular-like elements, such as pitched tiled roofs on smaller scale house scheme. Seven of the 14 volume housebuilder winners were of large, urban developments of flats, all but one of which are in London.

In terms of how representative the winners are of other national trends, suburban or rural locations were under represented (34% of awards versus 79% of households (DCLG, 2014)), as were developments containing houses (52% of award winners included houses in the scheme – some of which only partially- versus houses comprising 75% of new build homes (DCLG, 2017)).

Analysis shown in tables 1 and 2 below.

References

- DCLG. (2014). *English Housing Survey: Headline Report 2012-13*. London: Department for Communities and Local Government.
- DCLG. (2017). *Housing Statistical Release. Housebuilding; New Build Dwellings, England: June Quarter 2017*. London: Department for Communities and Local Government.
- Housing Design Awards. (2017). Awards Archive - The Housing Design Awards. Retrieved 11 December 2017, from <https://hdawards.org/archive/>
- ONS. (2017). *Construction Statistics* (No. 18; p. 23). Retrieved from Office for National Statistics website:
<https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/articles/constructionstatistics/number182017edition>

Table 1

Analysis of winners for location, type, housebuilders and style

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	Award totals	Award averages	National averages
Number of awards	6	6	7	6	5	4	4	3	5	6	52		
Urban	100%	67%	57%	17%	60%	100%	75%	33%	80%	67%		66% average urban	21% urban households*
Suburban or Rural	-	33%	43%	83%	40%	-	25%	67%	20%	33%		43% average suburban/rural	79% suburban/rural households
London	67%	50%	43%	33%	40%	100%	75%	33%	50%	50%		54% average in London	17% London new builds **
Houses	67%	33%	43%	83%	40%	-	75%	67%	60%	50%		58% average incl houses	75% new build houses ***
Flats	33%	67%	57%	17%	60%	100%	25%	33%	40%	50%		48% average all flats	25% new build flats
Top 20 VHB	2	1	3	1	1	1	2	-	1"	2"	11	21% of total excluding VHB award	
modern vernacular	-	1	-	1	1	-	-	1	2	2	14	27% of total including VHB award	
											8	15% of total	

" includes winner of Large Housebuilder Category
 * ref EHS 2012-13
 ** ref Live table 232 (for 2012-13 year)
 *** ref Housing Statistical Release Sept 2017

Table 2

Housing Design Awards Completed Winners by Top 20 Volume Housebuilders (2016)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Barratt Developments			(Bristol) Hanham Hall, Gloucestershire		(London) St Andrews Phase 3	(London) St Andrews				*(West London) Tachbrook Triangle
Taylor Wimpey									*(George Wimpey) Oxley Woods, Milton Keynes	
Persimmon										
Berkeley										Tabard Square, London
Bellway										
Redrow							Barking Central, London			
Galliford Try				(Linden) Newhall 'Be', Harlow						
Bloor Homes										
Bovis Homes										
Crest Nicholson			Bath Riverside				Icon Street, Somerset			
Cala										
Countryside Properties			Abode, Cambridge	Horsted Park, Kent						
McCarthy and Stone										
Hill	The Scene, London	The Avenue, Saffron Walden								
St Modwen										
Kier										
Mount Anvil										
Telford Homes	Frampton Park, London									
Avant Homes										

* Large Housebuilder Award (category only for 2008 and preceding years)
 Blue shading = large flatted development (total 7)
 Orange shading = in 'modern vernacular' style (total 1)

Summary of Housing Design Award Winners 2007-2016

Note: Top 20 housebuilders annotated in red

2016 Housing Design Award Winners

6 total: all urban; 4 London, 1 Newcastle, 1 Manchester; 2 include houses, 4 all flats.

SUPREME WINNER

The Malings, Newcastle-upon-Tyne

Architect - Ash Sakula

Developer - Carillion Igloo

Contractor - Gentoo Tolent

Planning Authority - Newcastle City Council



Frampton Park Baptist Church & Apartments , Hackney

Architect - Matthew Lloyd Architects

Developer - Telford Homes plc

Contractor - Telford Homes plc

Planning Authority - London Borough of Hackney



Baylis Old School, Lambeth

Architect - Conran and Partners

Developer - Henley Homes

Contractor - Henley Homes

Planning Authority - London Borough of Lambeth



MAYOR'S HOUSING DESIGN AWARD

Ely Court / Kilburn Park (formerly Cambridge and Wells Court), South Kilburn

Architect - Alison Brooks Architects and Lifschutz Davidson Sandilands Architects

Developer - London Borough of Brent / Catalyst Housing

Contractor - Willmott Dixon Housing Ltd

Planning Authority - London Borough of Brent



LONDON SUSTAINABLE DEVELOPMENT COMMISSION AWARD FOR SUSTAINABLE HIGHER DENSITY

The Scene, Walthamstow

Architect - Pollard Thomas Edwards

Developer - ISHA and Hill Residential

Contractor - Hill Partnerships

Planning Authority - London Borough of Waltham Forest



GRAHAM PYE AWARD FOR PLAN FORMS

hoUSe, New Islington, Manchester

Architect - shedkm

Developer - Urban Splash

Contractor - SIG

Planning Authority - Manchester City Council



2015 Housing Design Award Winners

6 total: 4 urban, 2 suburban; 3 London, 1 Derbyshire, 1 Saffron Walden, 1 Andover; 2 include houses, 4 all flats. 1 'modern vernacular' (The Avenue)

SUPREME WINNER

Parkside, Matlock

Architect - Evans Vettori Architects

Developer - Barncroft Homes

Contractor - Barncroft Homes

Planning Authority - Derbyshire Dales District Council



St Mary of Eton - The Mission, London E9

Architect - Matthew Lloyd Architects

Developer - Thornsett

Contractor - P.J. Hegarty

Planning Authority - London Borough of Hackney



1-6 Copper Lane, London N16

CUSTOM BUILD AWARD

Architect - Henley Halebrown Rorrison

Developer - Springdale Gardens Ltd

Contractor - Sandwood Design & Build

Planning Authority - London Borough of Hackney



MAYOR'S AWARD

Portobello Square, London W10

Architect - PRP Architects LLP

Developer - Catalyst Housing Group

Contractor - Ardmore

Planning Authority - Royal Borough of Kensington & Chelsea



GRAHAM PYE AWARD FOR FAMILY HOUSING

The Avenue, Saffron Walden

Architect - Pollard Thomas Edwards

Developer - Hill

Contractor - Hill

Planning Authority - Uttlesford District Council



RICHARD FEILDEN AWARD

Bradbury Place, Andover

Architect - Design Engine Architects

Developer - Enham Trust

Contractor - Drew Smith

Planning Authority - Test Valley Borough Council



2014 Housing Design Award Winners

7 total: 4 urban, 3 suburban; 3 London, 1 Cambridge, 1 Kent, 1 Gloucestershire, 1 Bath; 3 include houses [check if Bath does too], 4 all flats

SUPREME WINNER and GRAHAM PYE AWARD

Abode, Great Kneighton, Cambridge

Architect - Proctor & Matthews

Developer - **Countryside Properties**

Contractor - Countryside Properties

Planning Authority - Cambridge City Council



Mint Street, London E14

Architect - Pitman Tozer Architects

Developer - Peabody

Contractor - Galliford Try Partnerships

Planning Authority - London Borough of Tower Hamlets



Royal Road, London SE1P

Architect - Panter Hudspith Architects

Developer - Affinity Sutton

Contractor - Higgins Construction

Planning Authority - London Borough of Southwark



MAYOR OF LONDON AWARD

Kings Cross ArtHouse, London WC1H

Architect - dRMM Architects

Developer - Argent Property Development Services LLP

Contractor - Kier Construction

Planning Authority - London Borough of Camden



Horsted Park, Chatham Kent

Architect - Proctor & Matthews

Developer - **Countryside Properties**

Contractor - Countryside Properties

Planning Authority - Medway Council



RICHARD FEILDEN AWARD

Hanham Hall, South Gloucestershire

Architect - HTA Design LLP

Developer - **Barratt Homes, Bristol**

Contractor - Barratt Homes, Bristol

Planning Authority - South Gloucestershire Council



Bath Riverside, Phase 1 & 2, Bath

Architect - Feilden Clegg Bradley Studios, Holder Mathias Architects

Developer - Crest Nicholson Regeneration

Contractor - Crest Nicholson Operations

Planning Authority - Bath and North East Somerset Council



2013 Housing Design Award Winners

6 total: 1 urban, 5 suburban [assuming Chesterfield is]; 2 London, 1 Harlow, 1 York, 1 Essex, 1 Chesterfield; 5 include houses, 1 all flats. 1 'modern vernacular' (Derwenthorpe)

SUPREME WINNER

Newhall "Be", Harlow

Architect - Alison Brooks Architects

Developer - Linden Homes

Contractor - Galliford Try

Planning Authority - Harlow Council



GRAHAM PYE AWARD

Barking Riverside - Buzzards Mouth Court, London IG11

Architect - Sheppard Robson

Developer - Barking Riverside PPS

Contractor - Bellway Homes

Planning Authority - London Borough of Barking and Dagenham



MAYOR'S HOUSING DESIGN GUIDE AWARD

Church Walk, Clissold Park, London, N16

Architect - David Mikhail Architects

Developer - David Mikhail Architects

Contractor - Eurobuild Contractors

Planning Authority - London Borough of Hackney



Derwenthorpe Phase 1, York

Architect - Richards Partington Architects

Developer - Joseph Rowntree Housing Trust, David Wilson Homes

Contractor - Barratt Homes Yorkshire East, David Wilson Homes

Planning Authority - City of York Council



RICHARD FEILDEN AWARD

Hargood Close, Colchester

Architect - Proctor and Matthews

Developer - Family Mosaic

Contractor - ISG Jackson

Planning Authority - Colchester Borough Council



Mastin Moor Residential High Support Unit, Chesterfield

Architect - OMI Architects
 Developer - Turning Point
 Contractor - ESH Construction
 Planning Authority - Chesterfield Borough Council



2012 Housing Design Award Winners

5 total: 3 urban, 2 suburban [assuming Chesterfield is]; 2 London, 1 Dorset, 1 Leeds, 1 Suffolk; 2 include houses, 3 all flats. 1 'modern vernacular' (Officers Field) [Tibbys?...]]

SUPREME WINNER, GRAHAM PYE AWARD, RICHARD FEILDEN AWARD

Officers Field, Osprey Quay, Weymouth, Dorset

Architect - HTA Architects
 Developer - ZeroC
 Contractor - Acheson Construction
 Planning Authority - Weymouth & Portland Borough Council

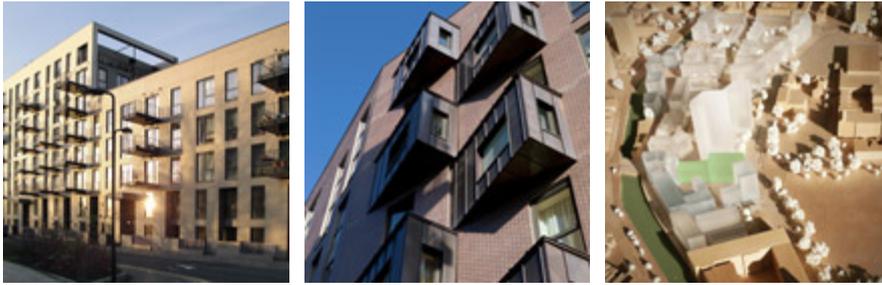


MAYOR'S HOUSING DESIGN GUIDE AWARD, COMMUNITY CONSULTATION AWARD

Bridport House, Hackney, Colville Estate Phase 1

Architect - Karakusevic Carson Architects
 Developer - London Borough of Hackney
 Contractor - Willmott Dixon

Planning Authority - London Borough of Hackney



Saxton, Leeds

Architect - Union North
Developer - Urban Splash
Contractor - Urban Splash Build
Planning Authority - Leeds City Council



St. Andrews Phase 3, Tower Hamlets

Architect - Glenn Howells
Developer - Barratt London
Contractor - Barratt London
Planning Authority - London Borough of Tower Hamlets



Tibby's Triangle, Southwold, Suffolk

Architect - Ash Sakula
Developer - Adnams/Hopkins Homes
Contractor - Hopkins Homes
Planning Authority - Waveney District Council



2011 Housing Design Award Winners

4 total: 4 urban; 3 London, 1 Leeds; 0 include houses, 4 all flats

SUPREME WINNER

Granary Wharf, Leeds

Architect - careyjones, chapmantolcher , CZWG , Allies & Morrison

Developer - ISIS Waterside Regeneration

Contractor - Ardmore Construction

Planning Authority - Leeds City Council



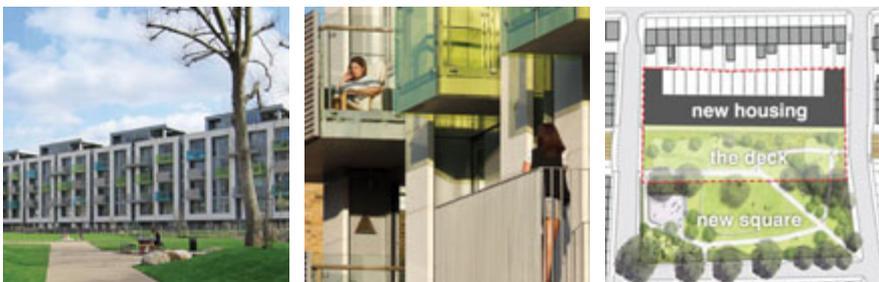
Arundel Square, London N7

Architect - Pollard Thomas Edwards Architects

Developer - United House Developments, Londonewcastle

Contractor - United House

Planning Authority - London Borough of Islington



COMMUNITY CONSULTATION AWARD, GRAHAM PYE AWARD

St. Andrews, London E3

Architect - Allies and Morrison, Maccreeanor Lavington Architects, Townshend Landscape Architects

Developer - Barratt London, Circle Anglia

Contractor - Barratt London

Planning Authority - London Borough of Tower Hamlets



Peabody Avenue, London SW1E

Architect - Haworth Tompkins

Developer - Peabody Trust

Contractor - Mansell

Planning Authority - London Borough of Westminster



2010 Housing Design Award Winners

4 total: 3 urban; 3 London, 1 Somerset; 3 include houses, 1 all flats

OVERALL WINNER

Icon Street, Somerset

Architect - Feilden Clegg Bradley Studios

Developer - Crest Nicholson

Contractor - Crest Nicholson

Planning Authority - Mendip District Council

Public Realm Architect - Grant Associates



Armour Close, London N7

Architect - HFI Architects

Developer - Homes for Islington

Contractor - Mansell

Planning Authority - London Borough of Islington



Barking Central, London IG11

Architect - Allford Hall Monaghan Morris

Developer - Redrow Regeneration

Contractor - Ardmore Construction

Planning Authority - London Borough of Barking and Dagenham

Public Realm Architect - muf



RICHARD FEILDEN AWARD WINNER

Clerdale Street, London E2

Architect - Karakusevic Carson

Developer - Tower Hamlets Community Housing

Contractor - Hill Partnership

Planning Authority - London Borough of Tower Hamlets



2009 Housing Design Award Winners

3 total: 1 urban; 1 London, 1 Devon, 1 Cambridgeshire; 2 include houses, 1 all flats. 1 'modern vernacular'? (South Gate)

OVERALL WINNER

South Gate, Totnes

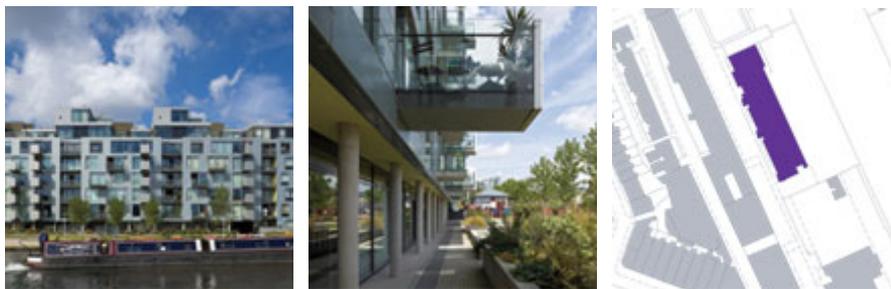
Architect - Harrison Sutton Partnership

Developer - South Hams District Council / Midas Homes / Sovereign Housing

Contractor- Midas Homes
Planning Authority - South Hams District Council



Angel Waterside, London N1
Architect- Pollard Thomas Edwards Architects
Developer - City Wharf Development
Contractor - City Wharf Construction
Planning Authority - London Borough of Islington



Hereward Hall March, Cambridgeshire
Architect - Proctor and Matthews Architects
Developer - Home Group Developments
Contractor - Inspace
Planning Authority - Fenland District Council



2008 Housing Design Award Winners

5 total: 4 urban; 2 London, 1 Stockport, 1 Salford, 1 Milton Keynes; 3 include houses, 2 all flats. 2 'modern vernacular'? (Chimney Pot Park, Rostron Brow)

OVERALL WINNER

Chimney Pot Park, Salford

Architect - Shed KM Architects

Developer - Urban Splash

Contractor - Urban Splash Build

Planning Authority - Salford City Council



Adelaide Wharf, London E2

Architect - Allford Hall Monaghan Morris

Developer - First Base with English Partnerships

Contractor - Bovis Lend Lease

Planning Authority - London Borough of Hackney



Bourbon Lane, London W12

Architect - Cartwright Pickard Architects, B & C Architectes

Developer - Octavia Housing and Care

Contractor - Como Homes

Planning Authority - London Borough of Hammersmith and Fulham



RICHARD FEILDEN AWARD

Rostron Brow, Stockport

Architect - TADW Architects

Developer - Northern Counties Housing Association

Contractor - CSC Construction

Planning Authority - Stockport Metropolitan Borough Council



LARGE HOUSEBUILDER WINNER

Oxley Woods, Milton Keynes

Architect - Rogers Stirk Harbour + Partners

Developer - **George Wimpey, South Midlands**

Contractor - Taylor Wimpey

Planning Authority - Milton Keynes Partnership



2007 Housing Design Award Winners

6 total: 4 urban; 3 London, 1 Cornwall, 1 Sheffield, 1 Plymouth; 3 include houses, 3 all flats. 2 'modern vernacular'? (Gun Wharf, Broadclose)

OVERALL WINNER

Tabard Square, London SE1

Architect - Rolfe Judd

Developer - **Berkeley Homes**, East Thames

Contractor - Laing O'Rourke

Planning Authority - London Borough of Southwark



The Sinclair Building

Architect - Project Orange

Developer - Sinclairs

Contractor - Ackroyd & Abbott

Planning Authority - Sheffield City Council



LARGE HOUSE BUILDER WINNER

Tachbrook Triangle, London SW1

Architect - Assael Architecture

Developer - Barratt West London

Contractor - Barratt West London

Planning Authority - Westminster City Council



MEDIUM HOUSE BUILDER WINNER

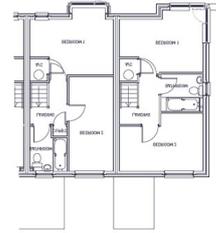
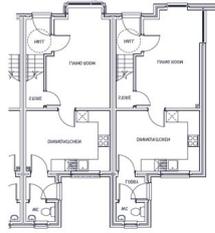
Gun Wharf, Plymouth, Devon

Architect - Lacey Hickie Caley

Developer - Devon & Cornwall Housing Association with Midas Homes

Contractor - Midas Homes

Planning Authority - Plymouth City Council



SMALL HOUSE BUILDER WINNER

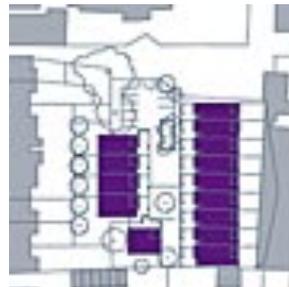
Melody Lane, London N5

Architect - Julian Cowie

Developer - London Wharf

Contractor - London Wharf

Planning Authority - London Borough of Islington



RICHARD FEILDEN AWARD

Broadclose, Bude, Cornwall

Architect - Trewin Design Partnership

Developer - Guinness Trust & Westcountry Housing Association

Contractor - Midas Homes

Planning Authority - North Cornwall District Council



Appendix 3

Online Survey Questionnaire

Copy of online survey conducted through Survey Monkey, December 2015 – February 2016

For ethics approval ref Appendix 8



Visual Attitudes to Housing in England

About This Survey

You are invited to participate in a research study titled **Visual Attitudes to Housing in England**. This study is being conducted by Gillian Horn from the University of Sheffield. You are being invited to participate in this study because you are an adult living in England. Your participation in this study is completely voluntary and you can withdraw at any time.

The purpose of this research study is to understand public preferences on the visual appearance of new build houses in England and whether they ally with what is offered in the market and with building professionals' preferences. It is hoped that this study will contribute to an improved understanding of public preferences in housing appearance for those involved in the design and supply of new housing in England.

If you agree to take part in this study you will be asked to indicate your preferred facade in a series of paired images of houses. You will also be asked some general questions about you, such as your age and level of education. It will take approximately 10 minutes to complete. Your responses will be confidential and identifying information such as your name, email address or IP address will not be collected. You will be asked at the end of the survey if you would like to participate in future related surveys connected to this research study. If you agree your email address will be kept securely and only used by the researcher to contact you about future related surveys on this research study. It will not be disclosed to any other parties. It can be deleted at your request.

To the best of our ability your answers in this study will remain confidential; however, as with any online related activity the risk of a breach of confidentiality is always possible. To minimize any risks all data is stored in a password protected electronic format and the surveys will not contain information that can personally identify you. The results of this study will be published in a PhD thesis, targeted for late 2017. The data collected from this survey may be used for subsequent research and publications, online and in print. Participants will not be identified in any report or publication.

For more information about this research study please visit questionsofdesign.net. If you have questions about this research project please contact Gillian Horn at glhorn1@sheffield.ac.uk.

This project has been ethically approved via the University of Sheffield School of Architecture's ethics review procedure which is monitored by the University's Research Ethics Committee. If you wish to raise any complaint about this study please contact Gillian Horn at glhorn1@sheffield.ac.uk. Should you have a complaint that has not been handled to your satisfaction please contact the Supervisor for this study, Professor Flora Samuel at f.b.samuel@reading.ac.uk or the Director of the Graduate School of Architecture, Dr Stephen Walker at ats.j.walker@sheffield.ac.uk.

Thank you for taking part in this research study, it's your feedback that makes it possible.



Visual Attitudes to Housing in England

Your Consent to Take Part in This Survey

By clicking "I agree" below you are indicating that you are at least 18 years old, have read and understood this information sheet and consent form and voluntarily agree to participate in this research study.

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

Please print a copy of this page for your records.

I agree

I disagree



Visual Attitudes to Housing in England

Qualifying Questions

Have you lived in England for 5 or more years?

Yes

No

Are you age 18 or over?

Yes

No



Visual Attitudes to Housing in England

A Bit About You

What is your age?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 +

What is your gender?

- Female
- Male

What is your occupation?

- Architect or architecture student
- Work or study in a design-related field
- Other

What is the highest level of education you have completed?

- Secondary education, without formal qualifications
- Secondary education, with ordinary level qualifications (eg GCSE)
- Secondary education, with higher level qualifications (eg A levels)
- Further education College or University without qualification
- Further education College or University with graduate qualification
- Postgraduate or professional qualification

Where have you lived in the last 5 years?

- Mostly in a town or city
- Mostly in a suburban area
- Mostly in a rural area

Do you live in...?

- A private rented home
- A Council or Housing Association rented home
- A home you or someone in your household owns
- An institutional home such as halls of residence or care home
- None of the above

Questions Of Design

Visual Attitudes to Housing in England

Your Preferred Style

The 3 bedroom suburban house is the most typical house type in England and for this reason is the subject of this study.

In the following questions you will see images of new 3-bedroom suburban houses.

Everything about the houses is assumed to be the same for all of the images, except for the style and appearance of the front facade.

You will be asked to indicate your personal preference for each pair shown.

1



A



B

Which house do you prefer the look of?

1A

1B

2



A



B

Which house do you prefer the look of?

2A

2B

3



A



B

Which house do you prefer the look of?

3A

3B

4



A



B

Which house do you prefer the look of?

4A

4B

What factors influenced your choices above?



Questions to those who chose house image A in Preferred Style section

Visual Attitudes to Housing in England

Your Preferred Windows

In the following questions you will see images of a new 3-bedroom suburban house.

Everything about the house is assumed to be the same for all of the images, except for the proportion and size of the windows.

You will be asked to indicate your personal preference for each pair shown. Some images will repeat. It does not matter if your preferences change through the survey.

1



A



B

Which house do you prefer the look of?

- 1A
- 1B

2



A



B

Which house do you prefer the look of?

- 2A
- 2B

3



A



B

Which house do you prefer the look of?

- 3A
- 3B

4



A



B

Which house do you prefer the look of?

- 4A
- 4B

5



A



B

Which house do you prefer the look of?

- 5A
- 5B

6



A



B

Which house do you prefer the look of?

6A

6B

What factors influenced your choices above?



Questions to those who chose house image A in Preferred Style section

Visual Attitudes to Housing in England

Your Preferred Roof

In the following questions you will see images of a new 3-bedroom suburban house.

Everything about the house is assumed to be the same for all of the images, except for the roof form. You will be asked to indicate your personal preference for each pair shown.

1



A



B

Which house do you prefer the look of?

- 1A
- 1B

2



A



B

Which house do you prefer the look of?

- 2A
- 2B

3



A



B

Which house do you prefer the look of?

- 3A
- 3B

What factors influenced your choices above?



Questions to those who chose house image B in Preferred Style section

Visual Attitudes to Housing in England

Your Preferred Windows

In the following questions you will see images of a new 3-bedroom suburban house.

Everything about the house is assumed to be the same for all of the images, except for the proportion and size of the windows.

You will be asked to indicate your personal preference for each pair shown. Some images will repeat. It does not matter if your preferences change through the survey.

1



A



B

Which house do you prefer the look of?

1A

1B

2



A



B

Which house do you prefer the look of?

- 2A
- 2B

3



A



B

Which house do you prefer the look of?

- 3A
- 3B

4



A



B

Which house do you prefer the look of?

- 4A
- 4B

5



A



B

Which house do you prefer the look of?

- 5A
- 5B

6



A



B

Which house do you prefer the look of?

6A

6B

What factors influenced your choices above?



Questions to those who chose house image B in Preferred Style section

Visual Attitudes to Housing in England

Your Preferred Roof

In the following questions you will see images of a new 3-bedroom suburban house.

Everything about the house is assumed to be the same for all of the images, except for the roof form. You will be asked to indicate your personal preference for each pair shown.

1



A



B

Which house do you prefer the look of?

1A

1B

2



A



B

Which house do you prefer the look of?

2A

2B

3



A



B

Which house do you prefer the look of?

3A

3B

What factors influenced your choices above?



Visual Attitudes to Housing in England

That's it! Thank you!

Thank you for taking the time to complete this survey. It's your feedback that makes this research possible.

And thanks to Barratt Homes, Taylor Wimpey and Persimmon Homes for their kind permission to use their images in this survey.

Please leave any feedback below and visit questionsofdesign.net for more information and future surveys on visual attitudes to house design. Please also forward a link to friends and family.

If you are happy to be contacted for future related surveys please leave your email address below.

It will not be used for any other purposes and will not be passed onto any third

parties. Your responses to this survey will remain anonymous.

Name

(optional)

City/County

(optional)

Email

Address

Appendix 4

Visual Preference Survey Figures

Figure 1 - Test 1 image pairs as presented in the survey

Original images used and reproduced with the kind permission of Taylor Wimpey (House 1A, 2B); Persimmon Homes (House 3B) and Barratt Homes (House 4A)



House 1



House 2



House 3



House 4

Figure 2 - Test 2, embellished and stripped window proportion images

Original image top left



Figure 3 - Test 2, examples of window size image pairs as presented in the survey



Figure 4, Test 3, examples of the flat and pitched roof options



Appendix 5

Demographic representation in the survey

Below I set out the correspondence of the survey respondents with estimated national statistics for each of the demographic factors tested, to give a picture of the extent of representation of the survey sample. Some of the factors tested I did not go on to analyse due to under representation in certain categories.

Gender

There was a slightly higher proportion of female respondents than the national average (59% compared to 51%) (ONS, 2017).

Age

Respondent ages were generally in proportion with national levels, with the exception that 18-24 year olds were overrepresented in the survey by 18% and over 65 year olds were underrepresented by 8% (ONS, 2017).

Location type

Respondents living in urban locations were overrepresented compared to national estimates by over 40%, whereas respondents living in suburban locations were underrepresented by 40% (DCLG, 2014). This does not affect the statistical significance of the results which are moderated for in the quantitative analysis statistical modelling, but could bias the relative number of comments that may be influenced by respondent location in accordance with the distortion.

Education level

Proportionally, survey respondents were considerably out of alignment with the general population in two bands - those with GCSE equivalent as their highest level of qualification were underrepresented by 19% and those with post graduate or professional qualifications were overrepresented by 29% (adjusting for the post-graduate qualified architects in the respondent group). Other bands were within a 5-8% margin of national profile estimates (HESA, 2018; ONS, 2017). I did not analyse demographic responses according to education due to these anomalies. As above, this does not affect the statistical significance of the results, but could bias the relative number of comments that may be influenced by respondent education level in accordance with the distortion.

Housing tenure

Survey respondents accurately reflected the national proportion of homeowners (63%) but were over represented in the private rented sector by 9% and underrepresented in the social rented sector by 14% (DCLG, 2014). I did not analyse the survey data in accordance with tenure due to the small representation of socially renting tenants.

Appendix 6

Visual Preference Survey - Quantitative Results: Tables and Charts

Key to terms:

N = sample number

SD = Standard Deviation (the measure of the spread of the data).

SE of mean = Standard Error of the Mean (the standard deviation of the mean)

B = Correlation Coefficient (the measure for the extent of correlation between two variables, measured between -1 and +1, with 0 indicating no correlation).

p = probability value (the measure of the probability of the hypothesis being tested being true. p-values range between 0 and 1, with a low value (≤ 0.05 taken as the cut-off for statistical significance) indicating a higher probability that that the hypothesis being tested is true).

R-squared = Coefficient of Determination (a goodness-of-fit measure of a linear regression model. It measures the proportion of variance between dependent and independent variables. Values range between 0 and 1 with a higher value indicating the extent that the variation in the dependent variable is explained by the independent variable).

Adjusted R-squared = Coefficient of Determination adjusted to take account of more independent variables added to the model (it is therefore a truer reflection of variance in multi-variable models).

Table 1 - Frequencies and Means

Independent Variables	Categories	N	% of N	Mean for Embellished Preference	SD	SE of mean
Gender	Male	281	41%	.577	.396	.024
	Female	409	59%	.697	.353	.017
Age	18-24	226	33%	.752	.327	.022
	25-34	136	20%	.619	.369	.032
	35-44	86	12%	.459	.391	.042
	45-54	87	13%	.489	.394	.042
	55-64	69	10%	.609	.389	.047
	65+	86	12%	.799	.309	.033
Occupation	Architect or Architecture Student	104	15%	.353	.368	.036
	Work or Study in Design-Related Field	124	18%	.556	.370	.033
	Other	462	67%	.739	.337	.016
Location Type	urban	448	65%	.571	.393	.019
	suburban	152	22%	.793	.290	.024
	rural	90	13%	.783	.293	.031
	Total	690	100%	.648	.375	.014

Table 2 - Distribution of Preferences

Preference for embellished style		Total
0 houses	Count	113
	%	16%
1 house	Count	67
	%	10%
2 houses	Count	96
	%	14%
3 houses	Count	127
	%	18%
4 houses	Count	287
	%	42%
Total	Count	690
	%	100%

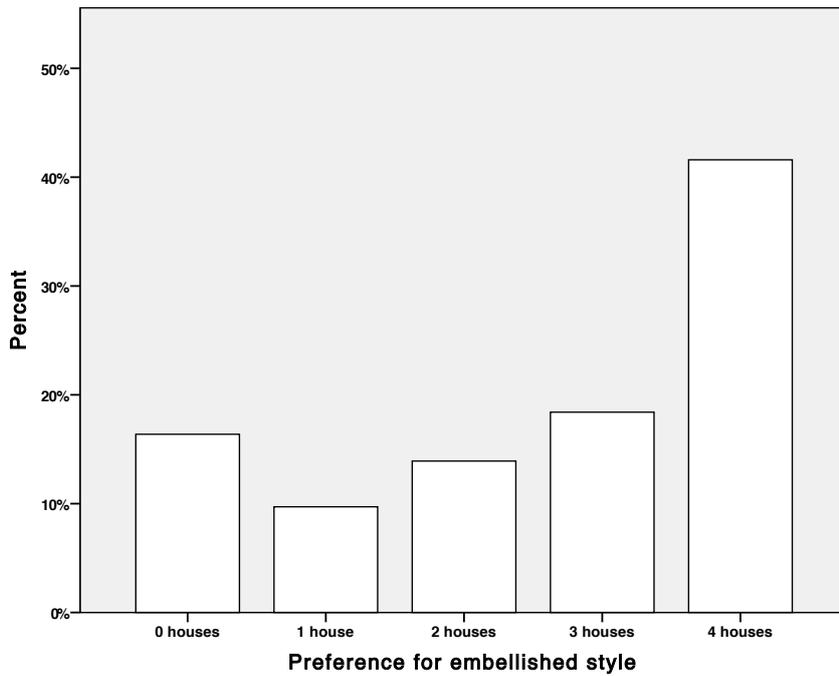


Table 3 – Crosstabulation preference for embellished style by respondents' Gender

Preference for embellished style		Gender		Total
		Male	Female	
0 houses	Count	63	50	113
	%	56%	44%	100%
1 house	Count	33	34	67
	%	49%	51%	100%
2 houses	Count	39	57	96
	%	41%	59%	100%
3 houses	Count	47	80	127
	%	37%	63%	100%
4 houses	Count	99	188	287
	%	34%	66%	100%
Total	Count	281	409	690
	%	41%	59%	100%

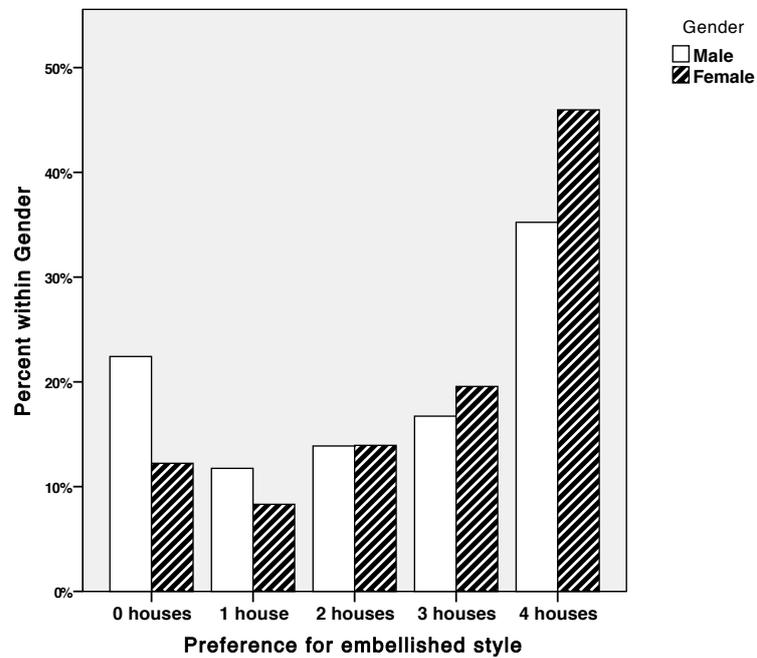


Table 4 – Crosstabulation preference for embellished style by respondents' Age

Preference for embellished style		Age						Total
		18-24	25-34	35-44	45-54	55-64	65+	
0 houses	Count	19	21	29	25	12	7	113
	%	17%	19%	26%	22%	11%	6%	100%
1 house	Count	17	18	7	12	10	3	67
	%	25%	27%	10%	18%	15%	4%	100%
2 houses	Count	26	21	17	14	11	7	96
	%	27%	22%	18%	15%	11%	7%	100%
3 houses	Count	45	27	15	14	8	18	127
	%	35%	21%	12%	11%	6%	14%	100%
4 houses	Count	119	49	18	22	28	51	287
	%	41%	17%	6%	8%	10%	18%	100%
Total	Count	226	136	86	87	69	86	690
	%	33%	20%	12%	13%	10%	12%	100%

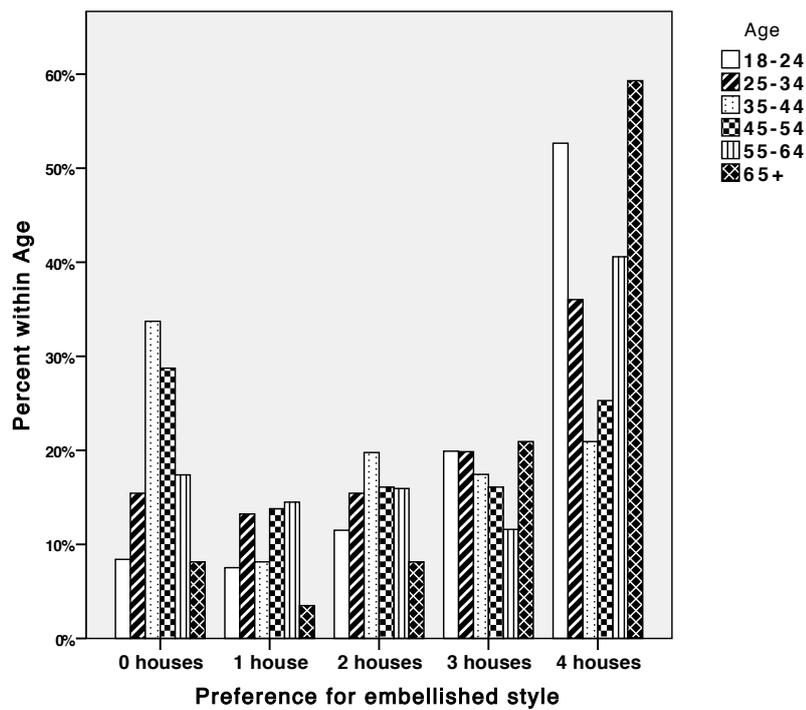


Table 5 – Crosstabulation preference for embellished style by respondents' Occupation

Preference for embellished style		Architect or Architecture Student	Work or Study in Design-Related Field	Other		
0 houses	Count	41	25	47	113	
	%	36%	22%	42%	100%	
1 house	Count	21	14	32	67	
	%	31%	21%	48%	100%	
2 houses	Count	16	28	52	96	
	%	17%	29%	54%	100%	
3 houses	Count	10	22	95	127	
	%	8%	17%	75%	100%	
4 houses	Count	16	35	236	287	
	%	6%	12%	82%	100%	
Total		Count	104	124	462	690
		%	15%	18%	67%	100%

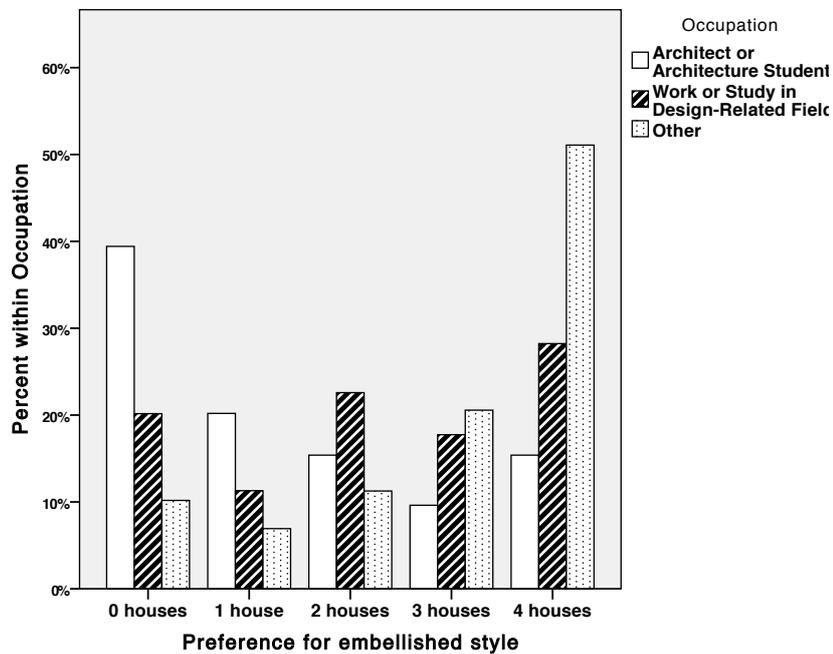


Table 6 – Crosstabulation preference for embellished style by respondents' Location Type

Preference for embellished style		Location Type			Total
		urban	suburban	rural	
0 houses	Count	98	9	6	113
	%	87%	8%	5%	100%
1 house	Count	58	6	3	67
	%	87%	9%	4%	100%
2 houses	Count	66	19	11	96
	%	69%	20%	11%	100%
3 houses	Count	70	34	23	127
	%	55%	27%	18%	100%
4 houses	Count	156	84	47	287
	%	54%	29%	16%	100%
Total	Count	448	152	90	690
	%	65%	22%	13%	100%

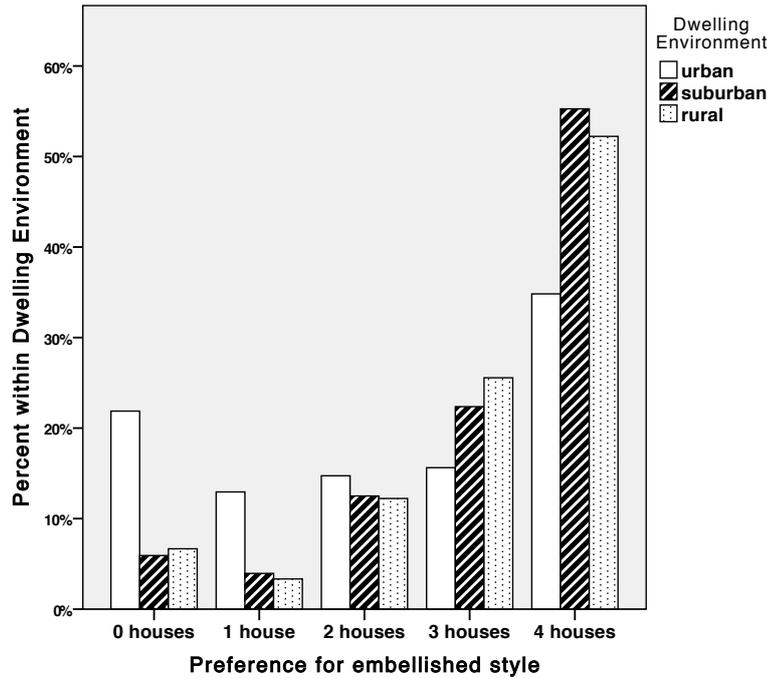


Table 7- Regression Table^a for Façade Style

Model	Unstandardized Coefficients		
	B	SE	p
(Constant) ^b	.732	.031	.000
Age=25-34	-.088	.036	.015
Age=35-44	-.249	.042	.000
Age=45-54	-.231	.041	.000
Age=55-64	-.184	.045	.000
Age=65+	-.059	.043	.169
Occupation=Architect or Architecture Student	-.335	.037	.000
Occupation=Work or Study in Design-Related Field	-.128	.034	.000
Location =suburban	.162	.032	.000
Location =rural	.113	.040	.005
Gender	.071	.026	.005

Dependent Variable: Preference for embellished style

a- Reference categories for model constant: Age=18-24, Occupation=Other, Location =urban, Gender=female

N R-Squared Adjusted R-Squared
 690 .262 .251

Table 8- Window Proportions Frequencies and Means

Preference for embellished style	N	% of total	Square		Vertical		Horizontal		
			N	Mean	SD	Mean	SD	Mean	SD
			0 houses	113	16%	.65	.667	1.29	.809
1 house	67	10%	.84	.665	1.34	.750	.78	.794	
2 houses	96	14%	.85	.680	1.08	.816	.97	.839	
3 houses	127	18%	.90	.677	.93	.828	1.03	.826	
4 houses	287	42%	1.07	.674	.61	.776	1.18	.818	
Total	690	100%	.91	.688	.92	.843	1.04	.831	

Key: Lowest mean Highest mean

Table 9- Regression Table^a for Proportion

Model	Unstandardized		
	Coefficients		
	B	SE	p
(Constant) ^b	.662	.076	.000
Age=25-34	.196	.089	.028
Age=35-44	.068	.104	.514
Age=45-54	.315	.103	.002
Age=55-64	.106	.112	.344
Age=65+	.053	.106	.619
Occupation=Architect or Architecture Student	.555	.091	.000
Occupation=Work or Study in Design-Related Field	.318	.085	.000
Location =suburban	-.167	.079	.036
Location =rural	-.009	.099	.929
Gender	.084	.063	.187

a- Dependent Variable: Preference for vertical proportion

b- Reference categories for model constant: Age=18-24, Occupation=Other, Location =urban, Gender=female

N R-Squared Adjusted R-Squared
690 .095 .082

Table 10 - Window Sizes and Roof Shape Frequencies and Means

	Preference for large windows		Preference for pitched roof	
	Count	%	Count	%
Embellished options, N=422				
Square	282	67	370	90
Horizontal	231	55	359	87
Vertical	202	48	354	86
Total	715	56	1083	88
Stripped options, N=240				
Square	157	65	136	57
Horizontal	145	60	120	50
Vertical	159	66	141	59
Total	461	64	397	55
Total, N=662				
Square	439	66	506	76
Horizontal	376	57	479	72
Vertical	361	55	495	80
Total	1176	59	1480	75

Table 11 – Frequencies and Means for Roof Preference by Occupation

Pitched roof preference	Mean	N	SD
Architect or Architecture Student	1.73	97	1.132
Not Architect or Architecture Student	2.37	554	1.061
Working or Studying in Design-Related Field	2.03	117	1.189
Not Working or Studying in Design-Related Field (outside Architecture)	2.33	534	1.067
Other Occupations	2.46	437	1.007
Architects or Architecture Students or Working or Studying in Design-Related Field	1.90	214	1.170
Total	2.27	651	1.095

Table 12- Regression Table^a for Roof Type

Model	Unstandardized		p
	Coefficients		
	B	SE	
(Constant) ^b	2.576	.100	.000
Age=25-34	-.192	.118	.104
Age=35-44	-.545	.137	.000
Age=45-54	-.661	.134	.000
Age=55-64	-.449	.145	.002
Age=65+	-.227	.139	.103
Occupation=Architect or Architecture Student	-.646	.120	.000
Occupation=Work or Study in Design-Related Field	-.318	.111	.005
Location =suburban	.308	.104	.003
Location =rural	.188	.130	.149
Gender	.042	.083	.614

a- Dependent Variable: Preference for pitched roof

b- Reference categories for model constant: Age=18-24, Occupation=Other, Location =urban, Gender=female

N R-Squared Adjusted R-Squared
651 .130 .116

Appendix 7

Visual Preference Survey Findings Qualitative Results – Descriptive Categories and Results Tables and Charts

The descriptive categories

Test 1- Preferred Style categories

Below, I set out a summary of the 15 descriptive categories identified in my analysis of the 546 respondent answers to the question “What factors influenced your choices?” about the four pairs of images in the Preferred Style section of the survey. All quotes cited below are from these answers.

For evaluation of these findings see chapter nine, Survey Findings. For the category summary including total uses, pejorative uses and positive uses and the words that constitute the category refer to Table 1 in Appendix 8.

1- *Detail* was the biggest category, *Detail*, with a total of 174 occurrences. ‘Detail(ing)’ was the most frequently stated descriptive word, used by 116 respondents. The word ‘features’ was also part of this category. A significant majority of uses of this category (69%) were positive towards the embellished houses. The citing of detail was not always a straightforward like or dislike and was often nuanced, sometimes seen as a necessary part of a traditional style and getting in the way of a modern style: “Where the facades were more detailed I tended to prefer them - they looked homier. Although I chose the less detailed facade in 2 for the opposite reason - it looked more modern”. Detail was commonly referred to for adding interest and softening the aesthetic: “I don't like pastiche Tudor details but think more generic details like lintels and awnings add interest”; “Don't like 'pseudo-old', but prefer some detailing beyond purely box-like”. It was often linked to an idea of coherence and completeness: “The desire for the building to have a 'face' with the right amount of detail and incident. E.g. a human face with no eyelashes looks wrong”.

2- *Plain* was the second largest category with 115 occurrences, mainly used in favour of the stripped façade option or against the embellished option (a total of 63%). The two main words within this category, ‘plain’ and ‘simple’, were used with different emphases: ‘plain’ was used negatively three times more than positively: “the more plain versions look cheap and unfinished and lack a sense of place”; whereas ‘simple’/‘simplicity’ was nearly wholly positive (92%): “simplicity, not too many different/fussy materials, honesty, minimal maintenance!”

3- *Traditional* was the third largest category with 86 occurrences. Overall it was used more negatively towards the embellished façade than positively (40% vs 38%) with 22% neutral uses. The words 'older' (17 occurrences) and 'vernacular' (4 occurrences) were evenly split between positive and negative use; a mix of finding it 'pseudo' / 'erstaz' and 'comforting' / 'visually interesting'. The words 'old-fashioned' (8 occurrences), 'historic' (5 occurrences) and 'period' (9 occurrences) were used pejoratively in all but one case for each: "the traditional decoration. I have nothing against traditional decoration, but it looks inauthentic on a new build house". There was a strong association of this category with detail (42% of uses).

4- *Decoration* was the fourth largest category, with 84 occurrences, used in majority (58%) in favour of the embellished façade: "The clear embellishments on the houses I chose. The ones I didn't looked like Sims stock houses before they gave the user the opportunity to personalise them." As with detail some of the responses were conditioned: "Because the shapes of the structures are mimicking older styles which have additional embellishments and details, the version of these structures which do not have these elements appear 'naked' or unfinished." There was some overlap of occurrence of this category with detail (24% of uses) and with traditional (18% of uses).

5- *Pastiche* was joint fifth with 65 occurrences. All uses were pejorative, against the embellished facade option: "I hate modern houses with period windows and ornate porches - looks fussy and pastiche".

6- *Modern* was joint fifth with 65 occurrences, mainly used positively towards the stripped façade option (65%): "My choice was always with the simpler cleaner design, with less frills. The houses become more modern and minimal looking when they are less decorated". 34% of uses overlapped with the plain category.

7- *Character* was the seventh most cited category with a total of 59 occurrences. The two main words in this category, 'character' and 'interest', were never used positively towards the stripped façade: "Historic character. General appearance, eg having wooden beams, and triangular roof over attic extension and doorway. Prefer houses which look older in style and less modern. Makes them look more homely." 'Honesty' was the only word in the character category used in favour of the stripped façades, in all occurrences (4). There was a strong association of character and detail (46% of uses coinciding). This was particularly the case for the word 'interest', with a 60% correspondence. There were less associations of character and decoration with 15% overlap. 15% of uses also referred to homely and 20% to bland: "Don't especially like the additional features in 1a and 2b, but houses look bare without them. 3a and 4b have enough other interest to be able to carry the more minimal doors, windows etc".

8- *Attractive* was the eighth most cited category with a total of 57 occurrences. Only 7% of these were used in favour of the stripped façade, with the large majority referencing the embellished façade: "The fenestration and the extra detailing makes them look more attractive".

9- *Bland* was ninth was most cited category with a total of 41 occurrences. Words in this category included: 'bland', 'boring', 'blank' 'dull' and other similar words. They were almost exclusively used against the stripped façade (92%). 44% of uses referred to detail, or lack thereof: "They look bland and sort of corporate if they don't have nice details like porches

and window pane lines". 29% of uses linked to lack of character: "I like the contrast of the surface embellishments on the facades. The large clear windows/surfaces make the houses look new, bland, without character; the lintels/wooden decorations/contrast bricks look older and more interesting."

10- *Fussy* was the tenth most cited category with a total of 39 occurrences. This category was used wholly pejoratively towards the embellished façade. The words 'needless', 'unnecessary' and 'gratuitous' were always used in relation to decoration, ornament and embellishment: "Simplicity of design, absence of tacky fussy details and some degree of elegance". 44% of uses referred to *Detail* and 31% to *Traditional*. There was minimal overlap with the *Pastiche* category (8%).

11- *Coherence* had 36 occurrences. A number of respondents noted their choices were based on fitting into the neighbourhood or the form of the house, preferring a coherent whole rather than necessarily liking particular features. This tended to be towards a more traditional form and keeping the decorative features of the original option: "I think the older styled buildings looked better generally, but only because the style works as a whole. The more modern doors and window sills didn't work with the traditional red roof and white walls, but a house designed around modern, minimalist aspects would look better as a whole", though one use was to say that new housing shouldn't fit in with old design, that "it holds back new and bolder designs".

12- *Homely* was cited 34 times. All of the uses were positive towards the embellished façade: "Details like cornices and wood work make the houses look more lived in and homely". There was a strong association with *Detail* (32% of uses), some link with *Decoration* (18% of uses) and *Attractive* (18% of uses). There was only one overlap of use with *Unwelcoming*.

13- *Unwelcoming* was cited 34 times. All of the uses of were against the stripped façade: "Aesthetically I don't like either of them but the ones with more decoration seem friendlier and more inviting. The stripped back ones seem stark and 'unloved'". There was a strong association with (lack of) *Detail* (32% of uses) and *Decoration* (24% of uses).

14- *Light* was the second smallest category with 18 occurrences, made from uses of the words 'light' and 'view'. The significant majority (78%) of uses were positive towards the stripped façade: "I like lots of light and the mullions in the windows reduce this on the more 'decorated' houses".

15- *Familiarity* was the smallest category, with 15 occurrences. A large majority of uses were positive towards the embellished façade (87%); some through direct positive associations with traditional style houses of childhood and some through negative associations of the stripped façade with council housing and looking institutionalised: "Associations with low cost council housing style are off putting."

Looking cheap (9 occurrences in total) was not categorized but merits note. All referred to the stripped versions looking cheap and a further 4 referred to the embellished façade looking more expensive.

Many respondents (24) expressed a dislike for both, and many had qualified responses to their choices: "They are all horrid, but the lack of detail on the more 'modern' looking ones makes them seem austere."; "I prefer plain, modern looks. Do not like any of the styles

shown - although because they are available I live in something like them. Would ban old fashioned rural lookalike.”

Test 3- Roof form categories

Below, I set out a summary of the 15 descriptive categories identified in my analysis of the 546 respondent answers to the question “What factors influenced your choices?” about the three pairs of images in the Preferred Roof section of the survey. All quotes cited below are from these answers.

1- *Dislike flat/prefer pitch* was the most cited category across the two groups, with a total of 106 occurrences and the most common category in the embellished image test group. There was a marked difference in the frequency of use of this category across the two test groups, used five times less in the stripped image group (31% vs 6%). This category expressed either a dislike for the flat roof or a liking of the pitched. Words used against the flat roof were: hate, detest, dislike and not keen. Words used in favour of the pitch were: prefer, like, pitched roofs, sloping roofs, pointy roofs, having a roof, roof shape. For example: “Pitched roof every time.” In the embellished image test group the majority of uses (58%) were negative, against the flat roof. In the stripped image test group the majority of uses (55%) was instead expressing a positive preference for the pitched roof.

2- *Fittingness* was the second most cited category across the two groups, with a total of 78 occurrences, and the most common category in the stripped test group where it was used more than twice as much as in the embellished test group (26% vs 11% respectively). This category captures comments that raised either a fitting into the surrounding context - be it immediate neighbours, the assumed suburban setting or national context, or fitting into the overall design of the façade: “flat roof doesn't work in a suburban context” and “the flat roof shown doesn't suit the style of property”. Expressions used about context included look out of place, appropriate in the context, fits in, suit/do not suit. For example, “Flat roofs do not suit homes in this country, would stick out.” Words used about the house itself included: balanced, proportions, fit, jar, works well with, for the style, harmony, relationship between, suit. For example: “for that style of house, I prefer a traditional sloped roof” and “I actually like a lot of modern buildings with flat roofs, but this just didn't seem to work in these particular examples.” Context fittingness was more common in the embellished image test group than in the stripped group (35% vs 18% respectively).

3- *Unattractive* was the third most cited category across the two groups, with a total of 73 occurrences. This was the second biggest category in the embellished image test group, and the sixth biggest in the stripped group, used by 19% and 9% of each respondent group respectively. Many different words were used to express the sense of unattractiveness: ‘ugly’, ‘not/less/un-appealing’, ‘unattractive’, ‘horrible’, ‘boxy/box-like’, ‘institutional’, ‘boring’, ‘ghastly’, ‘unsightly’, ‘tatty’, ‘utilitarian’, ‘unfriendly’, ‘harsh’, ‘brutal’, ‘clinical’, ‘stark’, ‘aggressive’, ‘monotonous’, ‘bald’, ‘bizarre’, ‘weird’, ‘odd’, ‘Frankenstein's monster’, ‘scruffy’, ‘tacky’. For example, “Is there anything more ugly than a flat roof?”

4- *Practical maintenance* was the fourth most cited category across the two groups, with a total of 68 occurrences. Proportionately it was used with almost equal frequency by both groups (14% in the embellished and 15% in the stripped). This category captured a range of practical and maintenance concerns, all directed towards the flat roof option. These ranged

from fear of leaks, drainage and damp and views that pitched roofs are more suited to the British climate, to beliefs that a flat roof would be higher or harder maintenance and generally problematic. Sometimes these worries outweighed aesthetic appeal: "I actually preferred look of flat roofs but had one once that leaked with disastrous results - rot, mushrooms, smell - could not bear to tick my preference."

5- *House-like* was the fifth most cited category across the two groups, with a total of 66 occurrences. All but one of the uses was used in favour of the pitched roof. It was the third most cited category in the embellished image test group, where it was more than twice as common as in the stripped image test group (17% and 9% respectively). This category captured the feeling that the houses looked more homely and/or house-like with a pitched roof. For example, "Has to have a roof to look like a house!" and "The flat roof just doesn't give off a homely vibe. It looks institutional". This was often linked with other building that the flat roof image reminded respondents of, captured in the next category, *associations*. For example "Flat roof looks harsh and like a block of flats or prison. Less homely and looks colder".

6- *Associations* was the sixth most cited category across the two groups, with a total of 60 occurrences and was more common in the embellished image test group than in stripped test group (14% vs 9%). Most of this category made direct associations between the image of the houses and other building types, using the phrases 'reminds me of...', 'looks like a ...', or 'gives the impression of...'. Building types referred to include: offices, commercial, administrative and industrial buildings, small factory, a facility, a prison, a school, a community centre, council estates, block of flats, 1930s, 1950s, 1960s and 1970s buildings, a correctional institute, a mental institution, temporary porter cabins (sic), a hospital, shops and shopping centre, a school gym, a warehouse, a car park and a home. For example: "Don't like houses that look like factories". Only the last, the association with a home, was used for the pitched roof options, all of the others associations were for the flat roof option, and all were pejorative. Also in this category are expressions of expectations for something, such as a suburban house in England.

7- *Loft space* was the seventh most cited category across the two groups, with a total of 44 occurrences and was equally common in the two groups (9%). Words used included 'attic', 'loft' and 'roof space'. The assumption given in all but one instance, was that the pitched roof would offer additional useful space for storage or conversion. Adaptability and value were often cited. For example: "Pitch roof offers potential for loft conversion and chance to add value"

8- *Modern* was the eighth most cited category across the two groups, with a total of 38 occurrences, but was the second most cited in the striped image test group. This category had the largest discrepancy of use in the two groups, of more than a factor of five (17% for the stripped image group and 3% for the embellished image group). The majority of uses of this category was positive and in favour of the flat roof, for example: "I like the modern, simple lines". Some uses were negative, and a number related to the fittingness category, for example: "flat roofs look too modern, would not fit in and do not last". In addition to 'modern', words used in this category were 'modernism/ist', 'contemporary', 'clean lines/looking', 'simple/simplicity', 'Bauhaus style', 'Moderne'.

9- *Prefer flat/dislike pitch* was joint ninth most cited category across the two groups, with a total of 30 occurrences. This category was proportionately nearly four times as common in

the stripped image test group as the embellished group. It was also more frequently used than the *Prefer pitch* category by the stripped group (11% vs 6%), in contrast to the embellished image test group who cited the *Prefer pitch category* ten times more frequently than the *Prefer flat* category (31% vs 3%). There was a large majority (85% and 90%) within both groups who expressed their preference as a positive liking of flat roofs rather than a negative dislike of pitched roofs. For example, "I like flat roofs!". This contrasts with the responses in the *Prefer pitch* category.

10- *Traditional* was joint ninth most cited category across the two groups, with a total of 30 occurrences. The use of this category was similar for both test groups (5% of stripped image group respondents and 7% of embellished image group respondents). Words used in this category were: 'traditional', 'vernacular', 'period', 'conventional', 'English' and 'Georgian'. The latter was used with reference to the flat roof, but all others were to the pitched roof form. The majority of uses were in favour of the pitched roof, such as: "For that style of house, I prefer a traditional sloped roof". But some were not, for example: "Some window configurations just don't work with the traditional pitched design".

11- *Attractive* was cited across the two groups a total of 25 times. It was used more frequently by the embellished image test group (6% vs 3%) and was used differently in each of the text group. All but one use was in favour of the pitched roof in the embellished group, in contrast to all but one use in the stripped image group being in favour of the flat roof. Words used in this category were: 'appealing', 'the aesthetics', 'looks nicer', 'prefer the look', 'pleasant', 'visually pleasing', 'smarter', 'classier', 'sharper', 'elegant', 'kerb appeal'.

12- *Character* was cited across the two groups a total of 20 times. It was used slightly more by the stripped image test group (6% vs 4%). The majority of uses were positive towards the pitched roof, for example: "Houses with shaped roofs have more character". But a quarter of uses were positive of the flat roof, such as: "Flat roof looks modern, sleek and different". Words used in this category were: 'interesting', 'more unusual', 'different', 'individual', 'the feel', 'comforting', 'characterless'.

13- *Unfinished* was cited across the two groups a total of 11 times. All uses were in regard to the flat roof, such as: "I don't like flat roofs. It makes the house look unfinished or naked!". Words used in this category were: 'unfinished', 'incomplete', 'bare', 'more complete', 'something's missing'.

14- *Cheap* was the second to last cited category across the two groups, with a total of 10 occurrences. All references in this category in the embellished image test group were towards the flat roof, for example: "Flat roofed houses are unattractive and look cheap". In the stripped group the responses were mixed, with one reference to the problem of cheap trusses in the pitched roof and another about the possibility of the flat roof looking cheap.

15- *Terrace space* was the least cited category across the two groups, with a total of 9 occurrences, most of which were in the stripped image test group. This category encompassed the usability of the flat roof space for a terrace, solar panels or extension, for example: "More potential to incorporate green roof on flat roof (and possibly more flexible for solar panels). Flat roofs look more modern, bit more continental". Phrases used in this category were: 'terrace', 'put on useable volume', 'possibility for extension upwards', 'garden', 'surface you can make use of', 'green space'.

Results Tables and Charts

Table 1, Category Summary

(The main use of each category for the two options is highlighted in grey)

Category	Number of uses	% used in favour of embellished or against stripped	% used in favour of stripped or against embellished	% neutral	Respondent words in category (in decreasing order of frequency)
Detail	174	69	17	14	'detail(ing)', 'features'
Plain	120	28	63	9	'plain', 'simplicity', 'clean lines/look', 'simple', 'cleaner', 'minimal(ist)', 'not cover up', 'sleek'
Traditional	86	38	40	22	'traditional', 'old(er)', 'period', 'old-fashioned', 'classic'. 'historic' and 'vernacular'
Decoration	84	58	32	10	'decoration', 'ornament(ation)', 'embellishment', 'ornate'
Modern	65	18	65	17	'modern', 'contemporary'
Pastiche	65	0	100	0	'pastiche', 'mock Tudor', 'fake', 'pseudo', 'bolt/stick/add-on', 'pretending', 'faux', 'false', 'artificial', 'replicate', 'imitate', 'bling', 'copy', 'mimic', 'outdated', 'inauthentic', 'Tudorbethan', 'lookalike'
Character	59	85	8	7	'interest(ing)', 'character', 'honest(y)', 'fresh',
Attractive	57	82	7	11	'attractive', 'appealing', 'look nicer/nicest', 'aesthetically pleasing', 'prettier/ness', 'beautiful', 'aesthetically pleasant', 'cute'
Bland	41	93	2	5	'bland', 'flat', 'boring', 'blank', 'bare', 'dull', 'naked', 'monotony'
Fussy	39	0	100	0	'fussy', 'unnecessary', 'needless', 'tacky', 'frilly', 'twee', 'busy', 'kitsch',

					'gratuitous', 'twiddly', 'fiddly', 'cheesy', 'prissy'
Coherent	36	53	17	31	'fit', 'balance', 'whole', 'match(ing)', '(in)coherent', 'tie/pull together', 'complete', 'out of place', 'consistent', 'incongruous', 'integrity', 'integral', 'right amount of', 'holistic', 'compliment'
Homely	34	100	0	0	'homely', 'welcoming', 'inviting', 'bright', 'friendly'
Unwelcoming	34	100	0	0	'stark', 'austere', 'unwelcoming', 'clinical', 'unfriendly', 'uninviting', 'sterile', 'soulless', 'harsh', 'threatening', 'impersonal', 'unhomely', 'mean', 'forbidding'
Light	18	22	78	0	'light', 'view'
Familiar	15	87	13	0	'familiar(ity)', 'memories', 'similar', 'what I'm used to', 'remind'

Table 2, Category word use compared for architects and non-architects

category	respondent number		Colour key:							
	non-architects	architects	used more my non-architects	+ 100+% difference	+ 75-99% difference	+ 50-74% difference	+ 25-49% difference			
	546	477	used more my architects	- 100+% difference	- 75-99% difference	- 50-74% difference	- 25-49% difference			
	all	69								
number of occurrences	number of occurrences		% of total category use		difference non-architects to architects	% of respondent group use		difference non-architects to architects	difference non-architects to architects as a % of non-architect use	
	non-architects	architects	all	non-architects		architects	all			non-architects
Light	18	13	2%	2%	4%	-2%	3%	7%	-5%	-166%
Coherent	36	27	4%	4%	7%	-4%	6%	13%	-7%	-130%
Pastiche	65	53	7%	7%	10%	-3%	11%	17%	-6%	-57%
Fussy	39	33	4%	4%	5%	-1%	7%	9%	-2%	-26%
Character	59	50	6%	6%	7%	-1%	10%	13%	-3%	-24%
Plain	115	98	12%	12%	14%	-2%	21%	25%	-4%	-20%
Traditional	86	74	9%	9%	10%	-1%	16%	17%	-2%	-12%
Decoration	84	73	9%	9%	9%	0%	15%	16%	-1%	-4%
Homely	34	30	4%	4%	3%	0%	6%	6%	0%	0%
Familiar	15	13	2%	2%	2%	0%	3%	3%	0%	0%
Detail	174	153	19%	19%	17%	2%	32%	30%	2%	5%
Modern	65	59	7%	7%	5%	2%	12%	9%	4%	30%
Unwelcoming	34	31	4%	4%	2%	1%	6%	4%	2%	33%
Attractive	57	53	6%	6%	7%	3%	10%	6%	5%	48%
Bland	41	40	4%	4%	1%	4%	8%	1%	7%	83%
Total	922	800	100%	100%	100%	100%	100%	100%		

Table 3, Category type summary

Category Type	Category	Used in favour of the Embellished preference		Used in favour of the Stripped preference	
		Total frequencies	%	Total frequencies	%
Style	Traditional				
	Modern	total 52	41%	76	59%
Attribute	Detail				
	Decoration				
	Plain				
	Light	total 206	58%	147	42%
Judgement	Character				
	Attractive				
	Bland				
	Coherent				
	Fussy				
	Pastiche	total 154	65%	84	35%
Emotion	Homely				
	Unwelcoming				
	Familiar	total 81	98%	2	2%
Total		1788	65%	972	35%

Chart 1, Number of occurrences of category types

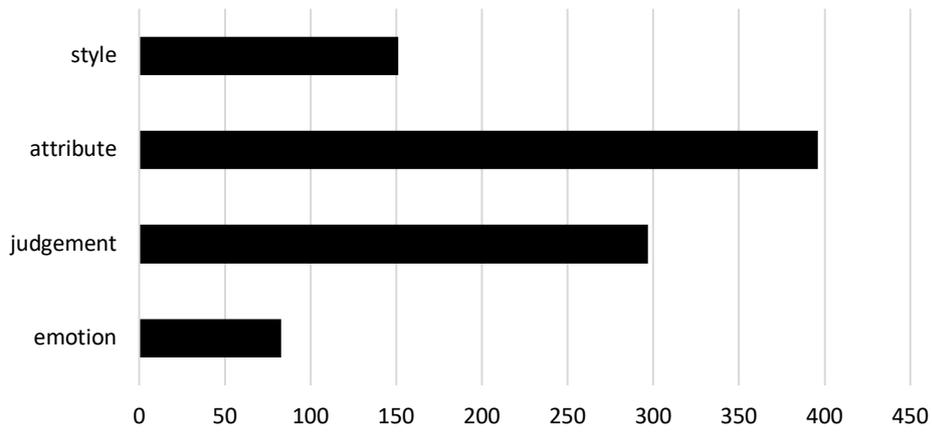


Chart 2, Frequency of category types used in the favour of the two façade styles

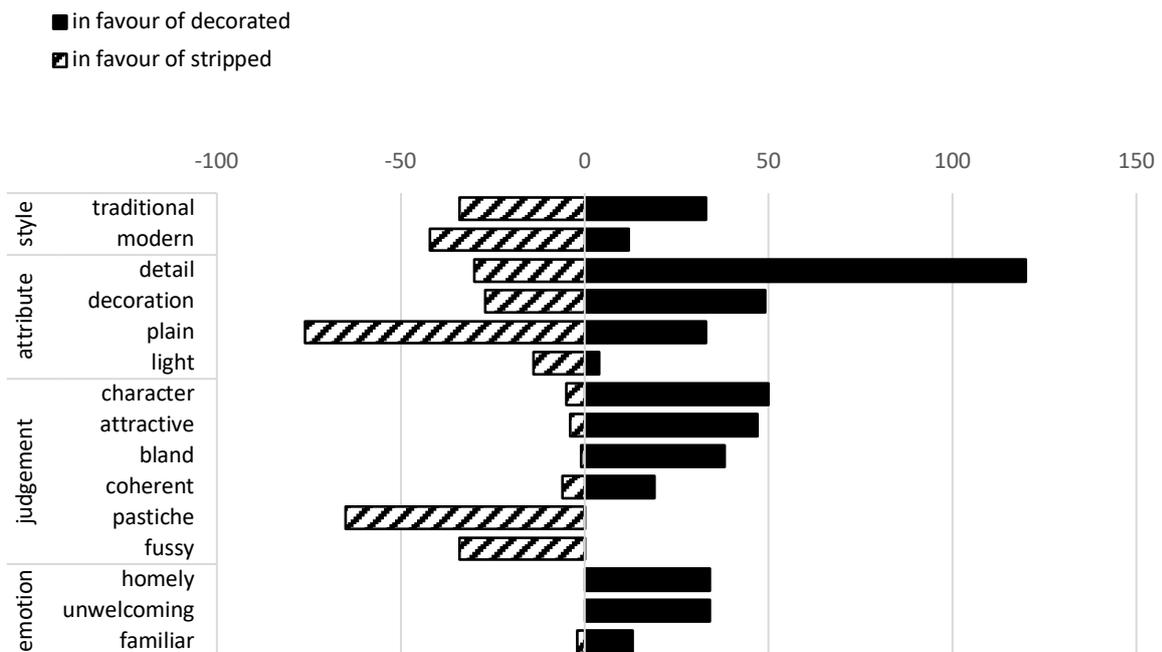
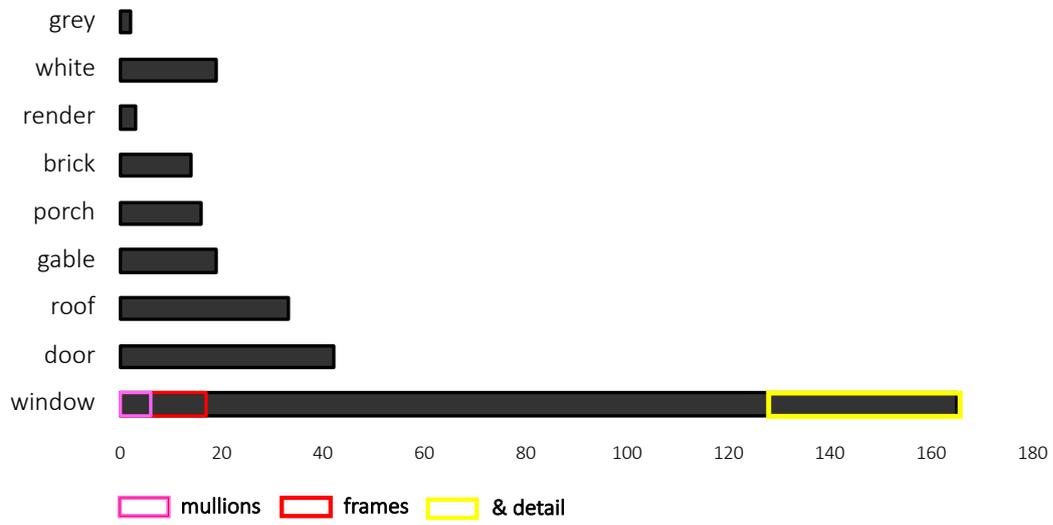


Chart 3, Number of occurrences of architectural element words



Appendix 8

Ethics Approval

On-line Survey Ethics Application and Letter of Approval

Interviews with Volume House Builders