

Anthony Sully

# The Estate House Re-designed



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# Foreword

Buildings and the demands placed on them are constantly changing, yet the industry's approaches and skills are stilted; traditional views are holding back new methods of working. The industry remains slow and unresponsive. As the human population continues to expand, with now over 7.5 billion people on the planet, we need more suitable sustainable built environments and homes. Even in the developed world, the demand for housing outstrips supply, largely due to the resource intensive traditional methods that we continue to use. Anthony Sully offers valuable thoughts based on a vast body of experience that provide a new perspective. The insights allow readers to be more considerate of lessons learned, equipping professionals with foresight to improve design and avoid repeating the same historical mistakes. Importantly, the book explores expectations of the home and the operational standards that the industry needs to meet. Through the review of off-site manufacturing, an informed position is gained on engineered building and what might be achieved with future prefabrication and an Eco Home standard.

Sully's lens places people and technology together, so that we are better able to understand housing and what can be done to elevate standards. Practices in the field of construction and design have largely been pedestrian. A reluctance to change has created problems with practice, exemplified by the catastrophic events of Grenfell in the UK. A relaxation in standards and lack of consideration for design has seen buildings incorrectly designed with inappropriate thermal insulation, inadequate acoustic performance and problems of function and accessibility. Fundamentally, buildings should be properly designed, being considerate of the social and physical requirements and properly integrated within the built and natural environment.

Buildings are complex systems that need to be treated as whole systems, with performance standards that need to be met and maintained. Performance should exceed and not just meet the expectations of the building users. The autonomous home may be just around the corner, but without understanding the needs of the occupant and function of the building, within an integrated environment, the potential of comfortable living will be lost. The industry can no longer be content with its current mode of delivery.

Few challenge the conservative approach to building, but those who do can provide new and innovative methods of building. Master plans for energy efficient, energy flexible developments, adopting a holistic approach to living and working are becoming a reality, even if only on a prototype scale. More sustainable villages and cities are emerging; however, different approaches are required. It is good to see that Anthony Sully's work addresses the complexity of the home exposing some of the mistakes that designers have been making, by adopting traditional practice.

Many of the ideas are not new, but few have positioned them together providing an alternative way of approaching building. Not all ideas will be readily adopted or suit the palate of the technologist, developer or designer, but this publication will challenge views. The focus on design and technology will ultimately encourage all who operate in construction to reflect on what they do and the standards they want to achieve.

Leeds, UK

Professor Christopher Gorse  
Sustainability Institute  
Beckett University

# Preface

This book is carrying out certain functions such as reporting, conveying a message, analysing, observing, appraising, informing and proposing. My writing has been stimulated by current events, inspired by various observational sources and engineered by my own desire as a designer to help improve an overwhelming socially disastrous situation and an architectural moribund wilderness when it comes to the mass estate housing sector.

Alain de Botton<sup>1</sup> made some films on the state of housing in the UK in 2014, and he commented that whilst the design of these houses had no design merit or personality (apart from the wretched pastiche of past styles as in Poundbury, Dorset), they seemed to have affected the occupants to the extent of reducing their will to be neighbourly or socialise, which results in them staying indoors watching TV. Rather a sad but relevant observation no less. When he questioned a builder about the pastiche architecture of one of his developments, the builder replied ‘We just give the people what they want’. Now this cannot be true because the public may express opinions but they are derivative and are not the result of professional research. It is part of the builder’s sales pitch but it is delusional. The public cannot be blamed for poor house design. It is up to the professionals connected with the housebuilding industry to provide a better service. Throughout my own research, I have been disappointed that I have not found any serious attempt by anyone to re-examine the process of designing a house rather like designing a product or as a mechanical object that has a shell, entrance and exit points for people, light, services and contents. The whole sector is governed by out-of-date processes and institutions that are stuck in traditional methods and misguided goals. There has been much progress in building technology and services, and the enveloping awareness of the importance of sustainability and energy conservation, but this has not been matched by the actual design of the spaces that define a house.

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<sup>1</sup>Alain de Botton, born in Switzerland in 1969. Writer and philosopher dealing with subjects such as travel, architecture and literature.

Dr. Peg Rawes<sup>2</sup> also made a film recently with Beth Lord<sup>3</sup> entitled ‘Equal by Design’ but it tended to focus more on affordable housing. She and her colleagues summarised how the housing crisis was impacting upon the environment and the well-being of people but it did not get to grips with the fundamental inactivity of investigative house design research. In the promotion of well-being, it came out with platitudes for people that they should not aim to be happy, nor should they be pre-occupied with money, but rather they should look after themselves. This guidance is designed to help them reduce tensions by not setting impossible goals for living. I found this rather belittling and patronising although it is meant to be well-meaning.

The Design Commission’s recent report<sup>4</sup> ‘People and Places’ states what should be done but it is yet another example of avoiding the ‘how’:

*Government should establish a formal cost-benefit analysis of how design elements impact on behaviour in the built environment.*

*Housebuilders should be compelled to employ appropriately qualified urban designers, architects and landscape architects to ensure that schemes meet the highest standards of housing and neighbourhood design.*

*The authors highlighted ‘the need to intervene on both design and social features of residential areas to promote mental well-being’.*

What are these ‘design elements’? I just wish someone would pay more attention to how families live in modern life and accept that the growing phases of children need more serious attention. Sometimes throughout the writing of this book, I have felt like a detective trying to solve a crime and crime it surely is. To witness the building of thousands of estate houses in the past and the present day, knowing that the vast majority of them will have to be demolished for not being fit for purpose is a tragic situation. Buying a car is the next big purchase in a person’s life and, like many products, if fails to satisfy then it can be sold or exchanged quite easily. Not so a house. People can be more easily locked in financially or geographically and can end up spending years of misery. It has also been disappointing, but not surprising, that many companies whom I have approached have refused to participate in my research for this book. Their unwillingness could suggest that they have something to hide. Here are some of their replies published anonymously:

---

<sup>2</sup>Professor Peg Rawes, Programme Director M.A. Architectural History, Professor in Architecture and Philosophy, The Bartlett School of Architecture/UCL.

<sup>3</sup>Dr. Beth Lord, Reader in Philosophy, Head of Philosophy and School Director of Postgraduate Studies, School of Divinity, History, and Philosophy, University of Aberdeen.

<sup>4</sup>March 2017. This report was written by Jack Tindale (Manager, Design, Policy Connect) and Naomi Turner (former Head of Manufacturing, Design & Innovation, Policy Connect).



*Thanks for your email. Unfortunately this is not something we would be interested in taking forward. We wish you success with your venture.*

*While we have been thrilled by the level of interest in our facility, we are wholly focused on completion and operation of our facility so regrettably, we will be unable to engage with you regarding your book.*

*Further to your recent enquiry, I have now had the chance to speak to our Directors and unfortunately in this instance we are not prepared to give our permission for the use of our photographs/plans in your new book.*

*I have spoken to the relevant people at the factory and I'm afraid they are extremely busy establishing our products and are not in a position at the moment to engage with this kind of research.*

My obvious thanks go out to all those individuals, companies and organisations who have responded positively to my quest by making contributions of advice, suggestions and allowing their work to be published. I am well aware that this whole field is highly complex and has evolved through centuries paying witness to transitional phases of community development and political upheavals. I enter this arena as an experienced house owner and family man, and therefore, through my own career of designing and teaching, I have become aware of how much this housing sector has not provided the homes that people expect or need. Something has to be done.

Cambridgeshire, UK

Anthony Sully

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Whilst every effort has been made to seek approval for the use of information and images from contributors, I apologise in advance for any inaccuracies that exist.

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# Introduction

*Housing is Britain's top policy issue. It is the "crisis" of our day.* The Guardian, 1 October 2015

*And they all get put in boxes, little boxes all the same*

*There's a green one, and a pink one*

*And a blue one and a yellow one*

*And they're all made out of ticky tacky*

*And they all look just the same.*

'Little Boxes' is a song written and composed by Malvina Reynolds in 1962, which became a hit for her friend Pete Seeger in 1963, mocking suburban housing in the USA.

There is a housing crisis in the UK, which amounts to a shortage of well-designed dwellings in the mass estate<sup>5</sup> homes market. Government agencies and local authorities are planning to address this problem by encouraging building developers to build thousands of homes all over the country from single dwellings to multi-occupied dwellings serving a broad section of the community. I am not dealing with 'affordable or social housing' or housing for the homeless as this is beyond the scope of this book. This shortage of housing stock is as a result of population growth due to people living longer, the birth rate and immigration. According to the Office for National Statistics (GB), the population in the 1960s for the UK was 52,372,500 and by the 2010s it increased by 10 million. This places a tremendous burden on such a tiny island. These dwellings are built usually as a mixed development estate of up to a few hundred with an identifiable style. Amongst these is the 'estate house', which is the focus of this book. Despite these good intentions, the whole situation is plagued by the dominance of about ten major housebuilders, which the government acknowledges in the following:

---

<sup>5</sup>Estate: traditionally described a large country house and land of a wealthy owner. This meaning refers to the masses of housing estates built for the majority of the population.



**Fig. 1** Typical modern estate grouping in UK. *Photo* Author

*In a separate report by the Communities and Local Government Committee, MPs urged the break-up of the dominance of big housebuilders in order to create more competition to “fix the broken market”. It said: “If we remain overly reliant on a part of the industry that has little incentive to change the way it works, then the country will not be able to deliver the new homes it needs.” The Telegraph. 29.4.17*

Also:

*And while demanding the demolition of hundreds of council estates to free up land for redevelopment, the nine largest building companies currently sit on land with planning permission to build 404,040 new homes in the UK – further driving up the price of land and the housing they build on it. Woodberry Down, Architects for Social Housing,<sup>6</sup> May 2017*

These housebuilders have been accused of sitting on ‘Landbanks’ which is land bought at a time when prices were much lower than they are now. Years later, they build on this land at high densities and sell the houses plus land that has escalated in value making them a huge profit.

The top ten housebuilders, which together have a market value of £37.5 billion, control almost half the market—up from 9% in 1960. Another trend that is contributing to this shortage is foreign investors developing and buying land and property, which is sometimes left empty whilst they sit on a growth product. As the Guardian published:

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<sup>6</sup> *Class War on Woodberry Down: A National Strategy*. Published by Architects Social Housing May 2017.

*It found “93% of flats in one of Manchester’s biggest housing developments have been bought by foreign residents or companies registered overseas. Only 17 of the 282 flats were bought by British residents and only two are being lived in by UK owners.” Guardian 8.4.17*

Housebuilders vary in type and are selected according to their building capabilities and skills, their contractual and management skills, and their ability to compete on price on delivery of these mass products. There is also the process whereby a buyer can organise the design and build of their own home through Self Build or Custom Build working with a developer. Chapter 6 defines the range of structures and materials that different builders will specialise in, such as brick and block, concrete, steel frame, timber frame. These builders are also categorised in terms of their scale of production, their preferred methods of prefabrication, and how far they can reach the standards of Eco Home status. It is interesting to note that architects are mentioned in most of my case studies, but when it comes to the large developers such as Barratts and Wimpeys, architects do not seem to get a mention. This is because they are in-house and have less status than the independent practices. Clive Aslet, former editor of Country Life magazine, wrote:

*Volume housebuilders regard architects with contempt, don’t employ them and we all have to live with the horrible results. The Times, 30th November 2017*

Another observation:

*I cannot disagree that housing design needs a radical overhaul, however, the major problem currently is that the main players are not really interested in either building more houses or improving designs either to make them more affordable or more eco-friendly, despite what all the politicians say a shortage always keeps the market high. Also the major housebuilders have no incentive to build out sites rather to build as sold, this again keeps the prices high and denies any real benefit in using modern methods of construction. They also claim that their Clients want choice in fixtures and fittings so they cannot build ahead or pre-empt the finishes. Mike Duhig, Modulogic Ltd.*

It is absolutely no use building thousands of new homes if they do not provide sufficient space and storage so that people can lead proper decent lives, and that they continue to ignore the existence of children and their needs. The fact that current house design displays a paucity of imagination as well, by repeating well-worn, conservative and established plans and room descriptions, confirms the need for a total shake-up with the whole sector. Since 2004, the average house floor area has shrunk by 4 m<sup>2</sup> according to the RIBA. I am encouraged by a debate that was led by Jo Churchill MP in the House of Commons on the 13/12/17 when she said: