LEGACY AND LAND

The role of legacy motive in improving the quality of housing developments in the UK.

A thesis submitted in partial fulfilment
of the requirements of the award of
Doctor of Philosophy
at Oxford Brookes University

Margo Socha

May 2022

supervised by:
Dr Marcel Vellinga | Hugh Petter

Acknowledgments

I am extremely grateful for the opportunity to undertake this PhD. My greatest thanks go to my supervisors, Professor Marcel Vellinga at Oxford Brookes University and Hugh Petter and Robert Adam at ADAM Architecture. I am hugely grateful for their support and understanding, as well as guidance through this process.

I would also like to thank Dr Christian Ehrlich at Oxford Brookes Business School for his guidance and advice in regard to the motivation theories. I am also grateful to my fellow PhD students and staff members at the Faculty of Technology, Design and Environment for their support and encouragement.

Crucially, I would like to express my gratitude to all the participants without whom this research would not have been possible. I am indebted to all landowners, developers, architects, planning officers and residents who took the time to share their experiences and provided me with hugely insightful data.

Finally, I would like to thank my loving family – Katie, Robert and Anna – for their continuing support and encouragement over the years, without which none of this would have been possible.

Abstract

This research correlates with the growing popularity of legacy schemes in the UK. There has been a number of studies pertaining to this model of housing delivery, whereby landowners take on a strong stewardship role over the development process. However, there is little evidence concerning the relation between legacy and housing quality. In order to address this gap, the role of legacy motive is investigated through a literature review and a case study approach, which included interviews with key stakeholders, a household survey and an analysis of planning documentation.

The existing literature illustrates the prevalence of the concept of legacy in many academic fields. Based on various motivation theories it is argued that leaving a legacy is a universal human motive and a fundamental aspect of human existence. The analysis of three contemporary housing estates provides further evidence for that and the fact that the salience of legacy motive is strongly related to the long-term landownership and the amount of control over the development process. It is demonstrated that legacy motive affects landowners' decision-making on instrumental, social, expressive and intrinsic level, and leads to a more long-term and socially conscious view of housing schemes.

The notion of "higher quality" is also called into question. Components of housing quality are identified and the differences between stakeholders' understanding are analysed, illustrating the conflicting agendas in the development process. It is argued that in the face of complexities of the planning system and the concept of housing quality itself, effective collaboration between stakeholders is paramount and partnership models of delivery produce the best results.

Finally, by drawing together evidence on landowners' decision-making, their role in the development process and stakeholders' perceptions on housing quality, it is demonstrated that legacy motive can translate itself into additional investments in various aspects of housing developments. And while this research is careful about using the word "better" to describe the development outcomes of legacy schemes (due to the subjective nature of the concept of housing quality), it has been demonstrated that they have the potential to deliver "more". Therefore, it is argued that legacy motive can, and indeed has, led to higher quality of housing development.

Preface

This research was funded by Oxford Brookes University and ADAM Architecture – an architectural practice that has worked closely with the Duchy of Cornwall on several of their housing schemes; and it constitutes a collaborative effort between both institutions. Prof. Marcel Vellinga from Oxford Brookes University and Hugh Petter and Robert Adam from ADAM Architecture were on the supervisory team. A joint proposal was initially drafted by Prof. Marcel Vellinga and Robert Adam and then further developed by the principal researcher – Margo Socha.

The data gathered during fieldwork was independently analysed by the principal researcher to ensure the impartiality of the research. The dissertation has also been subject to the rigorous process that characterizes a PhD degree – it has been examined and scrutinised by independent and impartial committees during such milestones as registration, transfer and the final examination.

List of Contents

ACKNOWLEDGMENTS **3**

ABSTRACT **3**

PREFACE **4**

LIST OF CONTENTS **5**

LIST OF ABBREVIATIONS **11**

INTRODUCTION **13**

1.1 Background 14
1.2 Aims and objectives 16
1.3 Structure of the thesis 18

THE CONCEPT OF LEGACY **21**

2.1. What is legacy? 22
2.1.1. Inheritance and wealth accumulation 25
2.1.2. Legacy in architecture and built environment 28
2.1.3. Legacy in contemporary housing schemes 30
2.2. Leaving a legacy as a human motive 34
2.2.1. The pyramid model of landowners' motives 38
2.2.2. Identity and cognition 39
2.3. Summary 43

HOUSING QUALITY **47**

3.1. Development process 48
3.1.1. Obstacles to higher housing quality 48
3.1.2. Development and quality control 52
3.2. What is housing quality? 58
3.2.1. Homebuyers 58
3.2.2. Other stakeholders 73
3.3. Summary 83

METHODOLOGY 87

4.1. The philosophy of research 88
4.2. Literature review 90
4.3. Conceptual framework 91
4.4. Selecting the case studies 93
4.5. Data collection 94
4.5.1. Desk-based research 94
4.5.2. Interviews 94
4.5.3. Questionnaire 96
4.6. Data Analysis 102
4.7. Limitations 103

CASE STUDIES 105

5.1. Legacy motive 106
5.1.1. Overview of landowners and their land holdings 107
5.1.2. Burwell 108
5.1.3. Newhall 109
5.1.4. Tadley Acres 112
5.1.5. Comparison between landowners' motives 115
5.2. Development process 120
5.2.1. Burwell 120
5.2.2. Newhall 126
5.2.3. Tadley Acres 134
5.2.4. Comparison between case studies 145
5.3. Housing quality 149
5.3.1. Development outcomes 149
5.3.2. Stakeholders' perspectives on housing quality 194
5.4. Summary 219

DISCUSSION 223

6.1. Leaving a legacy as a universal human motive 226
6.2. Conceptualization of housing schemes as legacy 227
6.3. The role of legacy motive in housing developments 229
6.4. Aspirations vs. development outcomes 236
6.5. The quality of legacy schemes 249
6.6. Summary 253

CONCLUSIONS 259

BIBLIOGRAPHY 265

Appendix A: Housing standards, guidance and indicators 285

Appendix B: List of issues investigated through interviews with stakeholders and residents 289

Appendix C: Tadley Acres design vs. Shepton Mallet architecture 293

Appendix D: Newhall design vs. Harlow architecture 297

Appendix E: House price analysis 301

Appendix F: Average prices at Tadley Acres and in Shepton Mallet 329

Appendix G: Average prices at Newhall and in Harlow 333

Appendix H: Average prices per square foot at Tadley Acres and in Shepton Mallet 339

Appendix I: Average prices per square foot at Newhall and in Harlow 342

List of Abbreviations

4B Commission – Building Better, Building Beautiful Commission

BfL – Building for Life

CABE – Commission for Architecture and the Built Environment

CLA – Country Land & Business Association

CABE – Commission for Architecture and the Built Environment

CPRE – Campaign to Protect Rural England

CSH – The Code for Sustainable Homes

HQIs – Housing Quality Indicators

LDO – Local Development Order

NIMBY – Not In My Backyard

NPPF – National Planning Policy Framework

ONS – Office for National Statistics

PPG – planning policy guidance

PPS – planning policy statements

PRS – Private Rented Sector

RES – Rural Exception Site

RICS – Royal Institution of Chartered Surveyors

RTPI – Royal Town Planning Institute

SBD – Secured by Design

TMT – Terror Management Theory

TND – Traditional Neighbourhood Design

RP – Registered Provider

WODC – West Oxfordshire District Council

1

INTRODUCTION

This research constitutes a cross-disciplinary study of the concept of legacy in a specific context of housing developments in the UK. The main aim is to establish a link between legacy motive and housing quality, i.e. demonstrate that the drive to leave behind a lasting legacy can lead to higher housing quality.

In order to do so, three different legacy schemes were investigated. “Legacy schemes” are here understood as housing projects, in which a private landowner, rather than selling the land to a developer, plays an active part in the development process, presumably due to the concerns about their own legacy. The selected case studies – Tadley Acres, Newhall and Burwell – were chosen to illustrate the variations in contemporary legacy schemes in terms of architectural style, delivery model, salience of legacy motive and the size of a landowner (from large institutional landowner such as the Duchy of Cornwall at Tadley Acres, through medium-size non-aristocratic landowner at Newhall, to smaller farmer-landowner in Burwell).

1.1 BACKGROUND

In recent years, the concept of legacy became a prominent narrative within the discourse on housing in the UK. The Prince's Foundation has been leading the way and advocating for landowners' involvement in legacy schemes – a model of housing delivery originated by the Prince of Wales and the Poundbury development (Grant, 2005, pp. 45-78). The key characteristic of legacy schemes is that they are developed with a strong involvement from the landowner who, rather than optioning his land to a developer, takes an active part in the development process and is a driving force behind the vision for the scheme.

The rationale behind legacy schemes is that long-term private landowners often conceptualize housing developments as their legacy, and therefore, are more concerned with the quality of what is being built on their land than other stakeholders (volume housebuilders in particular). They are also more likely to take a long-term and socially conscious view of housing developments as they are motivated by factors other than financial gain, e.g. the welfare of a local community or the preservation of an area's local character (Prince's Foundation for Building Community, 2016). This argument seems particularly relevant due to the large amount of British land that is in private hands and poor quality of housing delivered by volume housebuilders.

It is impossible to say exactly how much land is in private hands as there is no comprehensive record of land ownership in the UK. Land Registry lists every sale of land since when it was set up in 1925, but if land has not been sold since, there would be no record of who owns it. Therefore, the only way to trace back the ownership of large parts of the UK are historical records such as *The Return of Owners of Land*, also known as Second Domesday, which was commissioned by Parliament and published in four volumes between 1874 and 1876 (Cahill, 2001, p. 4).

According to Cahill's estimates (2001, pp. 3-5) as much as one third of land in England and Wales is unregistered, including around 13 million acres occupied by over two million private estates, most of which are owned by long-term private landowners. Out of that, 677,000 acres are controlled and owned by the Royal family through the Crown Estate, the Duchy of Cornwall, the Duchy of Lancaster as well as other private land holdings such as Sandringham and Balmoral.

The Duchy of Cornwall, which was created in 1337 by Edward III as a personal endowment for his son, has played a particularly important role in advancing the idea of legacy schemes. The Duchy is one of the largest private landowners in England and its land – around 130,000 acres across the UK (Shrubsole and Powell-Smith, 2017) – historically belongs to the male heir to the throne – the Prince of Wales. Since Prince Charles took an unprecedented interest in architecture and the quality of the built environment, the Duchy's significant land holdings became the perfect canvas to illustrate his *vision for Britain* (Prince of Wales, 1989). He joined forces with Léon Krier – one of the earliest proponents of new urbanism agenda – and their efforts brought about one of the first legacy schemes – the famous Poundbury development, which started construction in 1993.

The potential to apply this model of housing delivery on a much larger scale was evident. Six years after Poundbury development started construction, the *Sunday Times* reported that large landowners had optioned about 25,000 acres of land to developers for new housing estates (Cahill, 2001, pp. 15-16).[1] To put this number in perspective, almost 400 new developments the size of Tadley Acres could have been built on that land, which illustrates the impact that legacy projects could have had on the housing stock, had the landowners chosen to get involved in the delivery of these schemes.

This narrative regarding the value of legacy schemes was fuelled by notoriously poor quality of housing delivered by volume housebuilders, which is considered by the homebuyers to be bland, generic and monotonous (Homes and Communities Agency, 2009; Angle and Malam, 1998). Consequently, new-build estates became increasingly unpopular, both among the homebuyers and local communities. According to the RIBA (2009), at least two thirds of prospective homebuyers would only consider buying from the older stock; and there are many studies that attribute NIMBY attitudes to the low quality of housing developments (Smith, 2016; Prince's Foundation for the Built Environment, 2014; Bressi, 1993).

Furthermore, poor quality is not only unpopular, it also costs money. Research suggests that costs to the society resulting from poor quality of housing (e.g. increased costs of such services as NHS, the police or fire department) may amount to more than £1.5 billion per year (Nicol *et al.*, 2010; Barrow, Bachan and Royal Institution of Chartered, 1997). On the other hand, studies show that good design pays off socially and financially. It can reduce crime, improve people's health and social well-being as well as increase property values (CABE, 2010; Savills, 2016; RICS, 2016; Prince's Foundation, 2020). An analysis conducted by Savills (2016) and Knight Frank (2020) demonstrated that in areas of high demand additional early investment in the development can significantly raise house prices, sales rates and land values. A recent study by Space Syntax and Knight Frank (Prince's Foundation, 2020) also linked the walkability of a settlement to its value – investigated case studies illustrated a strong correlation between higher rental value of the commercial uses and higher "walkability score" (achieved by introducing non-residential uses, vehicular accessibility and permeability). Similarly, research suggests that properties with no distinctive design are more difficult to re-sell and owners face more negative equity (Forrest *et al.*, 1997).

Finally, the long lifespan of buildings (typically assumed as at least 50 years (Khasreen, Banfill and Menzies, 2009)) means that the homes we are building today will influence our environment for decades to come. In that context, the concerns related to the legacy of new housing developments seem not only warranted but crucial.

[1] The actual number could have been significantly higher as this figure was based on only about half of the industry's output.

1.2 AIMS AND OBJECTIVES

Having looked at the background and rationale behind legacy schemes, some crucial questions emerged. Significant knowledge gaps were identified in the following areas: the question of what constitutes "better" quality, the concept of legacy itself and how it pertains to landowners' motives, and the role of other stakeholders in legacy schemes.

The main argument behind legacy schemes is that they are able to produce better quality housing compared to the standard product delivered by volume housebuilders. However, the question of whether these schemes can be considered of "better quality" is rarely properly addressed by the industry. The concept of housing quality is extremely subjective and various stakeholders might have very different perspectives and understandings of quality. Despite introducing various quality control measures such as review practices, standards and indicators, there is still no definitive method to objectively evaluate building and design quality (Gann and Whyte, 2003; Gann, Salter and Whyte, 2003).

Furthermore, due to the involvement of Prince of Wales and his commitment to specific design principles, the new urbanism agenda is inherently imbedded in many contemporary legacy schemes. And while the principles of mixed use and a compact development have been widely accepted by the industry, new urbanist developments are often criticised for overemphasis on visual qualities, overly deterministic belief that good design creates good communities, high design costs which make housing less affordable, and insufficient attention to cultural and regional differences. These issues are rarely reflected in the non-academic literature on legacy schemes.

The concept of legacy itself is given even less scrutiny and its impact on housing developments is significantly under-researched. There is little evidence regarding landowners' motives and the claims about landowners being concerned with their legacy, and the legacy of their housing schemes, are often left unsubstantiated. There is also no consideration given to the broader questions surrounding the concept of legacy, e.g. what legacy is, how does it manifest itself in the built environment, how does it affect people's decision-making. This is despite the fact that there is a significant amount of literature on the concept of legacy within many academic fields, i.e. law, economy, genetics, psychology and philosophy.

Finally, legacy schemes are presumed to be driven by the landowner's vision and aspirations. However, the development process is extremely complex and there is a breadth of other stakeholders involved. Also, legacy schemes were initially associated with landed estates and large private landowners, but smaller landowners, who are expected to have much less control over the development process, have since started taking interest. Therefore, it seems crucial to further investigate the role of other stakeholders in legacy schemes and ask whether legacy motive is really unique to landowners.

Due to the above gaps in the discourse surrounding legacy schemes, the link between legacy

and housing quality has never been properly established. Therefore, the main aim of this research was to investigate the role of legacy in improving housing quality and answer the following question – does legacy motive lead to higher housing quality? This research question was address in the following steps:

1. *Is leaving a legacy a relevant motivation for stakeholders involved in legacy schemes?*
   Even if it is, that does not necessarily mean that stakeholders conceptualize housing schemes as their legacy.
2. *Do stakeholders consider housing developments their legacy?*
   Even if they do, that does not necessarily mean that they will decide to pursue it.
3. *To what extent does legacy motive affect decision-making and how does it translate itself into specific aspirations?*
   Even if legacy motive translates itself into aspirations related to housing quality, that does not necessarily mean that these aspirations will be realised.
4. *What are the obstacles to achieving these aspirations and are legacy schemes able to overcome them?*
   Even if legacy schemes manage to achieve what they set out to, that does not necessarily mean that they can be universally considered as "better".
5. *Can legacy schemes be universally considered as "better"?*

These questions were addressed through the following aims and objectives:

1. To analyse how legacy has been conceptualized, now and historically, and how it has manifested itself in the built environment.
2. To investigate the role of legacy motive in human motivation and its impact on legacy schemes.
3. To explore and critically evaluate how various stakeholders conceptualize housing quality and which aspects of housing quality they prioritize.
4. To analyse the relationships between various stakeholders involved in legacy schemes and evaluate their role in the development process.

The above objectives were achieved through a literature review and a case study approach, which included interviews with key stakeholders, a household survey and an analysis of planning documentation. The gathered data provided a better understanding of the concepts of legacy and housing quality, as well as a better understanding of the development process behind landowners' legacy schemes, i.e. who are the main stakeholders, what is their understanding of "good" housing quality, how much control do they have over the development process, how are they affected by the legacy motive, and finally what is the actual legacy of the investigated schemes and whose legacy is it?

1.3 STRUCTURE OF THE THESIS

This thesis is divided into the following chapters:

Chapter 2: The Concept of Legacy

Chapter 2 provides the necessary background to address questions 1, 2, 3 and 5 in the argument presented on the previous page.

The first part of the chapter discusses the conceptualizations of legacy in various academic fields, most notably psychology, philosophy, economy and architecture. It is considered whose legacy manifests itself through housing developments and in what form, e.g. physical urban fabric, name recognition, dissemination of design principles. The legitimacy of that process is called into question, particularly in the context of wealth accumulation and social inequalities.

In the second part of the chapter, various motivational theories are used to illustrate that leaving a lasting legacy is a powerful and a universal human motive. It is also considered what are other factors and motives that affect people's decision-making. A framework based on Maslow's pyramid of needs (Maslow and Frager, 1987) is developed, which was used in the case study analysis to illustrate how legacy motive can translate itself into specific aspirations related to housing quality.

Chapter 3: Housing Quality

Chapter 3 provides the necessary background to address questions 4 and 5 in the main argument of this thesis.

The first part of the chapter discusses the complexities and challenges of the development process, identifies the most common obstacles to higher housing quality and evaluates different methods of quality control.

The second part of the chapter provides an overview of different aspects of housing quality (e.g., affordability, safety, aesthetics, size, local facilities, etc.) and illustrates differences in stakeholders' perspectives. This provided a basis for further analysis of the considered schemes and informed many aspects of the methodology, e.g. interviews, questionnaires, conceptual framework.

Chapter 4: Methodology

Chapter 4 describes the research methodology, including the philosophical stance of this research, the conceptual framework, selection of case studies and methods for data collection and data analysis. In particular, the logic behind selecting these particular housing schemes, and these particular research methods, is explained. The design of the semi-structured interviews and the household survey is discussed in relation to its impact on the gather data (e.g. reliability, response rates).

Chapters 5: Case Studies

Chapters 5 describes the selected case studies and presents the data gathered during fieldwork and the corresponding analysis. The chapter is divided into three sections each focusing on different aspect of the investigated housing developments: legacy motive (5.1), development process (5.2) and housing quality (5.3).

Section 5.1 investigates to what extent the legacy motive impacted stakeholders' decision-making and demonstrates how it translated itself into specific aspirations. In doing so, it provides evidence for questions 2 and 3 in the proposed argument.

Section 5.2 analyses the development process behind the investigated schemes. It demonstrates what were the obstacles to achieving the schemes' aspirations and provides evidence for the role of different stakeholders. In doing so, it addresses question number 4.

Section 5.3 focuses on the development outcomes of the considered schemes and evaluates what actually have been achieved. Stakeholders' understanding of housing quality is also analysed, including residents' preferences and opinions. This section provides evidence for questions 4 and 5.

Chapter 6: Discussion

Chapter 6 discusses the evidence presented in Chapter 5 and links it to the literature review. It follows the structure of the main argument of this thesis and provides answers to the five questions put forward above. In doing so, it demonstrates that legacy motive can lead to higher housing quality and discusses the role of various stakeholders in legacy schemes.

Chapter 7: Conclusions

Chapter 7 provides final remarks and summarises the main findings of this research.

2

THE CONCEPT OF LEGACY

This chapter focuses on the concept of legacy, its definition, its manifestation in the built environment and its role in human motivation. The first section aspires to answer the question of what is legacy and explores its various interpretations, understandings and classification. It also examines some of the ethical concerns related to the issue of inheritance and wealth accumulation and provides examples of how legacy manifests itself in the built environment and housing. It goes on to discuss landowners' legacy schemes specifically – how they came to be and what are their characteristics. The final section focuses on the role of legacy motive – how it affects human behaviour and what are the factors and circumstances affecting its salience. Based on various motivational theories the model for further analysis of legacy motive is developed.

2.1. WHAT IS LEGACY?

The word legacy has its origins in the Medieval Latin verb *legare*, which meant to give someone the duty to do something (in other words to delegate) or to give the right to inherit (Partridge, 1966). Originally, it specifically referred to an office of papal legate who was a representative of a pope outside Rome that took jurisdiction over a particular province and often held an important position within Church and state (*Oxford dictionary of English*, 2010). Therefore, the concept of legacy used to be inherently related to the notions of power, influence and land (or more specifically a particular territory).

It is often difficult to differentiate between the similar concepts of legacy, inheritance, heritage, patrimony or even property, particularly that they all originated during feudalism (none was known in English language before 13th century) and had connotations to the inheritance of land (*Oxford dictionary of English*, 2010; Shrimali, 1998). However, the notion of legacy seems to be the broadest of them all, as nowadays it can be defined as virtually anything handed down by our predecessors (*Oxford dictionary of English*, 2010). That can mean anything from money and material possessions, through genetic material we pass on to our kids, knowledge and values we pass on to future generations, to any work or action that we will be remembered by. In this respect, legacy is probably also the most powerful yet abstract and elusive of these concepts and it is intrinsically related to the meaning of life, sense of belonging, fear of dying and a symbolic immortality – a mark we make on this planet, an impression we leave behind.

It is generally recognized that the main purpose of leaving a legacy is to pass on something to the future generations. Research suggests that intergenerational decision-making can be characterized by self-interested behaviour as decision-makers tend to undermine the importance of benefits they will not be able to profit from or even witness themselves. However, Fox et al. (2010) argue that legacy, understood as a fundamental human desire to *"extend one's identity and one's life's work and meaning into the future to outlive the physical self"*, provides a mechanism for translating one's self-centred motives (to leave a legacy) into long-term benefits for a collective (future other).

Such a definition of legacy, rooted in the process of identity development, is not an unpopular one as legacy is often associated with self-image, personal values and beliefs and how one is going to be remembered by others (Hunter and Rowles, 2005; Marcoux, 2001). This is well reflected in the concept of generativity introduced by Erikson (1980) as one of the life stages in human development and part of the aging process that occurs in early adulthood. Generativity is characterized by natural drive to establish and guide the next generation and can be expressed either more literally through parental instincts and the drive to produce offspring or more generally through concerns about one's impact on future generations often resulting in prosocial behaviour (Fox, Tost and Wade-Benzoni,

2010).[2] Therefore, the concept of generativity also presents a more altruistic understanding of legacy that goes beyond one's self-interest and aspirations to be remembered (Hunter and Rowles, 2005; Kotre, 1995).

Other academics believe that legacy is best understood in the context of life story model of identity. According to this approach, people develop their identities and personalities through a psychological construction of one's life story as a narrative; and leaving a legacy provides a meaning and an ending to that story, primarily by passing along one's values, beliefs and sense of self (Hunter, 2007; McAdams, 1996).

Interestingly, all those interpretations recognize the social imperative behind the process of legacy building. This means that in addition to biological and parental interpretations related to bearing and raising a child, and materialistic interpretations related to the inheritance and bequest, the concept of legacy can also be understood as a cultural transmission of values, beliefs and knowledge. Similarly, Hunter and Rowles (2005) distinguish between three types of legacy – biological, material and legacy of values, though at the same time they recognise the flexible and overlapping nature of these categories. Biological legacy refers to childbearing and all that it entails (e.g., DNA inheritance, transmission of health conditions), but also includes organ and body donation for medical or research purposes. Material legacy refers to one's material possessions, irrespectively of their actual financial worth as items such as heirlooms might carry strong sentimental value without necessarily being financially valuable. This category also includes symbolic legacy – a public manifestation of one's work or impact on the world, e.g. a hospital wing named after its donor, a scholarship or institution set up in someone's name, a building named after its founder or architect, a book, a memoir or an artwork. The last category – legacy of values – relates to education and teaching, particularly in terms of one's religious beliefs and such concepts as morality, honesty and right or wrong. This type of legacy is also evident in the so-called dual inheritance theory (DIT), which proposes that human beings are subject not only to genetic inheritance but cultural inheritance as well that allows us to formulate collective memory, social norms, traditions and group identity (Linquist, 2010; Hunter, 2007).

Personal memoirs and other autobiographical writings are the type of material legacy that is particularly valued, which Hunter and Rowles (2005) interpret as a nostalgic response to a contemporary lifestyle. They argue that feelings of nostalgia often arise as a psychologically-rooted response to change – a defence mechanism that increases sense of belonging and social identity; and therefore, it is understandable that at times of rapid change and uncertainty caused by globalisation, migration, displacement or terrorism, people tend to look back to the past, towards what seems familiar and comforting. Such an attitude was evident in the post-modernist preoccupation with the

[2] There is evidence suggesting that in the absence of children, people tend to direct their aspirations to leave a legacy towards a greater community (Hunter and Rowles, 2005).

past and it still manifests itself today, for instance through an increasing interest in genealogical research that fuels the so-called legacy tourism (McCain and Ray, 2003; Prentice, Guerin and McGugan, 1998).[3]

In the context of cultural inheritance, it is interesting to look at Heidegger's and Derrida's conceptualizations of intellectual legacy, who both consider legacy a fundamental aspect of human existence. For Heidegger *"the human being is the heir and the one who learns in all things"* (Heidegger and Hoeller, 2000); while Derrida states that *"To be […] means […] to inherit"* and continues to write that *"What we are, we inherit"* (Derrida, 1994, p. 54; Derrida and Rottenberg, 2002, p. 111). In other words, *"[a]ll the questions on the subject of being or of what is to be (or not to be) are questions of inheritance"* (Derrida, 1994, p. 54). However, that is not to say that our past, history and traditions determine or define our identity and who we are – they rather create possibilities for the future.

Heidegger and Derrida also recognize the dual nature of legacy, which constitutes not just the inheritance that benefits future generations but also a certain burden, a debt towards the past, which for Heidegger is particularly evident in the process of the transmission of tradition (Heidegger, Robinson and Macquarrie, 1962; Richter, 2015; Earlie, 2015). Tradition is passed on as a self-evident construct that we take at face value, which makes it impossible to trace its roots and to *appropriate* the past. The appropriation or the reaffirmation of the past is the main difference between debt – uncritical borrowing from the past; and inheritance – a critical and discriminating interpretation of the past. The intellectual legacy, unlike genetic or material legacy, is never *given*; it has to be rediscovered, negotiated and transformed. Therefore, intellectual legacy is not simply accumulation of knowledge, but rather a conscious and continuous process of deciding between different meanings and interpretations that entails certain responsibility towards the next generations – responsibility to choose what to accept and what to refuse before the inheritance is lost and forgotten (Derrida, 1994; Richter, 2015). Especially that intellectual legacy is passed on through language – whether written or spoken – which can be easily misread or misunderstood.

Flexibility and adaptability of intellectual legacy represent the richness of inheritance and make it possible to keep it alive (Derrida, 1994). Theories, ideas and traditions that do not adapt and evolve become obsolete and eventually die out. The combination of flexibility and human agency also brings up the question of validity of cultural and intellectual legacy, which is forever changing and reinterpreted. As some narratives get forgotten and others preserved and memorialised in museums or history books, it seems essential to ask whose legacy is being preserved and whose lost. There are countless examples of past events being (re)invented or the heritage of minority groups being ignored in favour of 'mainstream' or dominant culture, e.g., problematic history of Native Americans in

[3] Legacy tourism involves traveling to places related to one's ancestors either in search of information or in order to connect with one's past. This is another example of a powerful relation between the concepts of legacy and identity.

United States, pluralistic heritage of India or the crimes of Stalin regime in Soviet Union and the Eastern Bloc. In this respect, collective memory and cultural legacy can be compared to a museum or an archive, which are constructed and open to interpretation and destruction (Earlie, 2015; Huyssen, 1995).

Heidegger's and Derrida's approach to the concept of legacy as a debt also points to the negative aspects of legacy. It is easy enough to imagine situations when we do not appreciate what we inherit, e.g. genetic diseases, alcoholism, personality traits, financial debts. As much as we do not get to decide what we inherit, we do get to decide what to pass on to future generations (similarly as we do in case of intellectual legacy), which is well illustrated by the stories of people who overcome their negative legacies (Hunter, 2007). Such examples further emphasize the issues of agency and responsibility involved in leaving and receiving a legacy.

There are some etymological negative connotations of the word "legacy" as well, especially in relation to outdated computer software that cannot be replaced or unfair advantage and preferable treatment offered to children of esteemed members of certain institutions (*Oxford dictionary of English*, 2010). The latter brings forward the ethical concerns related to the concept of legacy and its impact on the equality of opportunities and wealth accumulation.

* * *

2.1.1. Inheritance and wealth accumulation

Leaving a legacy is the main mechanism for the redistribution of wealth from older to younger generation and potentially from those with more economic resources to those with less. However, in reality it usually has the opposite effect, which is particularly evident in the case of landowning classes in the UK as well as in economic theory pertaining to different types of bequests.

As a result of land being passed on from generation to generation, a significant amount of land in the UK is now concentrated in the hands of very few aristocratic families. The most evident example of that is the Royal family, who owns roughly the same amount of land that is needed to house 11 million people in the private sector (Cahill, 2001, p. 19). Furthermore, as much as 40 million acres of undeveloped green land in the UK is owned by just 189,000 long-term landowning families (Cahill, 2001, p. 6). This has obvious negative effects on social equality – as pointed out by the 15th Earl of Derby back in the 1881, land ownership provides political influence, social status, power over tenants, pleasure and entertainment (sport), and money (Cahill, 2001, p. 8).

The issue of concentration of wealth is also visible in the economists' definition of altruistic bequests. The economic thought distinguishes between different types of inheritance based on underlying motives ranging from altruism (Becker and Tomes, 1986; Becker, 1976) to exchange (Cox, 1987; Bernheim, Shleifer and Summers, 1985). The main aim of altruistic bequests is to redistribute resources between older and younger generation, while exchange-based bequests operate

on *quid pro quo* basis. In the altruistic model it is assumed that parents leave an inheritance in order to help their children through increasing their human (education) and non-human (money) capital. Examples of exchange model include grown-up children taking care of their parents in return for the help they have received in their childhood and young adulthood, but also more manipulative cases when parents take advantage of their kids under the threat of disinheriting them – so-called strategic exchange (Masson and Pestieau, 1997).[4] This definition of altruism is restricted to the economic interest of a family, which, might be argued, is not that altruistic at all and encourages the accumulation of wealth. In this respect, Masson and Pestieau (1997) draw similarities between altruistic and capitalist bequests,[5] both of which are characterized by extremely low mobility of wealth that tends to remain within a family line.

Consequently, the main mechanism for the redistribution of wealth from those with more economic resources to those with less has been an inheritance tax. However, taxation imposed on bequests is often extremely unpopular as many people see it as a violation of their property rights or more fundamentally as an impediment to *the quest for immortality* – since the things we bequeath are what is left of us after we die, governmental interventions into these matters can raise an emotional and defensive reaction (Erreygers and Vandevelde, 1997).

The legitimacy of inheritance and inheritance taxation is a controversial issue among the academia as well, and even representatives of the same political, economic or philosophical school of thought seem to be unable to reach an agreement.[6] The discussion is usually dominated by such questions as whether inheritance taxation is an effective method of achieving a more even distribution of wealth within society and, more importantly, of securing the equality of opportunities.

Some academics argue that progressive income tax or adequate provision of public services and goods are more suitable solutions for this purpose. For instance, Becker, Kotlikoff and Bracewell-Milnes all suggest that inheritance tax encourages wealthy people to spend their money during their lifetime rather than save up and as a result leads to the inequality of spending, which only increases the gap between the poor and the rich (Bracewell-Milnes, 1997; Kotlikoff, 1992; Becker, 1981; Smith and Sutherland, 1993). Bracewell-Milnes (1997) and Smith (1993) further argue that the inheritance taxation is *unthrifty* as it transfers the capital from people who earned it (productive labourers) to unproductive labourers (the state). Bracewell-Milnes also draws attention to the additional

[4] Even though, altruistic bequests were believed to be dominant, particularly in the United States, nowadays economists admit that its importance has been overstated (Arrondel, Masson and Pestieau, 1997).

[5] Capitalist bequests are characterized by *"investing everything [one] earns and extending his scope of decision-making beyond his own existence"* (Masson and Pastieau, 1997) and apply only to the wealthiest families. In this type of inheritance, wealth cannot be spent during a single lifetime, and therefore, leaving an inheritance is unavoidable.

[6] Erreygers and Vandevelde (1997) provide interesting examples of how libertarians, communitarians and liberals are all divided on the issue of inheritance.

immaterial value of an inheritance that can be easily destroyed by the inheritance taxation. He suggests that the donor derives value from the act of giving itself – at least as much as the market value of the gift or otherwise the donor would not decide to donate the gift (Bracewell-Milnes, 1997). However, this argument is slightly problematic as it precludes the possibility of true altruistic behaviour (as opposed to simulated altruism (Becker, 1976)), and suggests that all donations and bequests are made for the benefit of the donor.

On the other hand, many academics argue in favour of inheritance taxation, claiming that hereditary rights stand against both economic democracy and capitalist principles, although there is very little consensus on how the inheritance rights should be regulated. Saint-Simonians postulated the abolition of the inheritance rights altogether based on Marxist argument that means of production should be redistributed based on people's productivity rather than hereditary succession and should be allocated to those who can benefit the most from them. Jeremy Bentham suggested a less radical solution whereby only close relatives would keep the right to inherit, while John Stuart Mill proposed to impose limits on the maximum value of an inheritance (Erreygers and Vandevelde, 1997). Similarly, Haslett suggested an introduction of a *lifetime inheritance quota,* which seems to be a more adequate measure to achieve the equality of opportunities as it restricts how much one can inherit, rather than how much one can bequeath (Haslett, 1997). Such a limit would force to divide large inheritances among numerous beneficiaries this way preventing the excessive accumulation of wealth.

Another approach was advocated by Eugenio Rignano and Ernest Solvay who proposed that inheritance taxes should be progressive in time (Erreygers and Vandevelde, 1997). This means that any wealth one has earned themselves would be free of taxation, but any inherited wealth would be taxed with the tax rate increasing after each transfer of the inheritance until it is appropriated by the state.[7] However, such a tax would strongly discourage perpetual saving, which is particularly beneficial in case of land ownership and real estate as it entices the land or property owner to take the role of a steward rather than a consumer. In fact, Bracewell-Milnes argues that all kind of assets are *"best and most efficiently looked after by long-term family owners"* (Bracewell-Milnes, 1997, p. 173) and a progressive inheritance tax would certainly prevent that.

Finally, it is important to point out that even though the inheritance taxation might be helpful in eliminating the most extreme examples of inequality, its role in achieving the equality of opportunities might be somewhat limited due to multiple other factors that contribute to social and economic imbalance (such as education or access to employment). In addition to being ineffective at wealth redistribution, inheritance tax is also ineffective at raising tax revenue due to various tax exemptions and loopholes – the effective inheritance tax rate in the UK can be less than 10%,

[7] Nozick proposed a simplified approach, according to which people can only bequeath what they have earned themselves (Erreygers and Vandevelde, 1997).

compared to 40% nominal rate, contributing less than 0.2% to the national income (Gonçalves, 2019). While this does not necessarily dismiss the legitimacy of inheritance taxation, it does illustrate that current tax law does not serve its purpose.

* * *

2.1.2. Legacy in architecture and built environment

Architecture engages with almost every aspect of human life, and therefore, almost anything of relevance finds its reflection in our built environment. The consequences of past events, people and beliefs that managed to leave a profound and lasting impact on how our cities and towns look today can be conceptualized as legacy. Events such as French Revolution, Spring of Nations, Industrial Revolution, world expositions and Olympic Games; people such as Baron Haussmann, Margaret Thatcher and Prince Charles; architectural and social theories such as modernism, socialism and garden cities – they all manifested itself in the built environment, either through monumental architecture or the urban fabric in general.

Paris is one of the many European cities that perfectly illustrate how our environment is shaped by the past. One of the most famous landmarks in Paris – Eiffel Tower – constitutes a legacy of 1889 Exposition Universelle (it was originally built as a temporary structure marking the entrance to the world's fair). The characteristic street pattern of Paris with its wide boulevards, parks and squares constitutes the legacy of Baron Haussmann's vision, which itself was influenced by the French Revolution – widening the narrow and irregular medieval streets was officially intended as a solution to overcrowding and related health issues, but had a hidden agenda of preventing the possibility of building barricades. Similarly, the famous Ringstrasse in Vienna can be considered the legacy of Spring of Nations (also known as Revolutions of 1848) as it was constructed in place of medieval city walls, which were demolished after they prevented the Army from getting an easy access to the inner city occupied by the revolutionists during the uprising. The rebuilding of Paris and Vienna are also a testament to the certain moment in time when national pride played increasingly significant role and capital cities were intended to exhibit the beauty and grandeur of contemporary ruling empires.

In London, there are plenty other examples of architecture constituting legacy of the past. For instance, the characteristic high-rise architecture of Canary Wharf is the result of Thatcher's relaxed planning policies at London Docklands and the 2012 Olympic Games left a lasting impact on economy, sport, tourism and the urban fabric of East London.

The concept of legacy is particularly evident in monumental architecture, e.g. presidential libraries built in honour of the Presidents of United States, Arc de Triomphe commemorating those who died in the French Revolutionary and Napoleonic Wars, Palace of Culture and Science in Warsaw commonly regarded as an unpleasant reminder of Soviet regime, or contemporary projects

designed by the so-called "star-architects". That last example demonstrates the most straight-forward understanding of architectural legacy – as a credit to people who designed and built it, also expressed in the tradition of putting foundation stones on buildings' exteriors in order to document the names of an architect and/or a builder.

Legacy can also manifest itself through housing developments, which is probably more common in the UK than any other country due to historical development of land ownership and strong paternalistic attitudes of landowning classes (Robinson, 1988). From almshouses and country houses built on landed estates, through industrial villages and garden city movement, to development of new towns; architectural and planning traditions related to housing have always been strong in the UK and left a lasting impact on the built environment. We can see the legacy of these traditions in the principles behind such projects as village of Saltaire built by the 19th century industrialist Sir Titus Salt to house his textile mill workers, or Letchworth Garden City laid out by Raymond Unwin based on the ideas of Sir Ebenezer Howard. The concept of Garden City constitutes a legacy that we are still building on today – for instance through governments' garden villages programme (Taylor, 2015; Ministry of Housing Communities & Local Government, 2017).

More recently, institutions such as RICS (Royal Institution of Chartered Surveyors), CLA (Country Land & Business Association), CPRE (Campaign to Protect Rural England) and the Prince's Foundation have been urging for private landowners to take a more proactive approach to housing developments (as historically landed classes did), which resulted in a new development model exemplified by housing schemes built by the Duchy of Cornwall. Due to heavy involvement of Prince of Wales, these projects reflect Prince Charles' views on architecture and can certainly be considered his legacy (see the next section).

The above examples illustrate that architectural legacy should be considered not just as a material manifestation but also as a symbolic legacy that constitutes a testament to the historical events and contemporary architectural and social thought. In this respect, one could argue that architectural legacy is open to interpretations and could be constructed in a similar manner that an intellectual legacy could (as discussed above). In fact, heritage industry is notorious for favouring the interests of certain sections of the society, just as museums often serve a certain group and present a particular narrative (Shrimali, 1998; Huyssen, 1995). Institutions such as National Trust and English Heritage, which incidentally benefit from legacy gifts, tend to focus on preservation of country houses and castles, which represent the past of a very narrow fragment of the society – the aristocracy.[8] This brings the danger of vernacular architecture being ignored and eventually lost, but also raises the questions about the role of the institutions that are set to protect our heritage. Sociologists Pierre Bourdieu and Alain Darbel claimed that museums *"reinforce for some the feeling*

[8] According to Kevin Walsh, 60% of English Heritage's budget was spent on 0.05% of England's past (Huyssen, 1995).

of belonging and for others the feeling of exclusion" (Bourdieu, Schnapper and Darbel, 1991, p. 112), and it is vital to make sure that our built environment does not do the same.

* * *

2.1.3. Legacy in contemporary housing schemes

Contemporary legacy schemes in the UK can be traced back to late 1980's when the Prince of Wales took an unprecedented interest in the quality of our built environment and urban form (Prince of Wales, 1989). His views on architecture were heavily influenced by new urbanist principles and such developments as Seaside in Florida designed by Andrés Duany and Elizabeth Plater-Zyberk (Katz, 1993, p. 3). Prince of Wales joined forces with an architect Léon Krier and in 1989 they created the Urban Villages Forum in efforts to develop a new housing delivery model based on traditional urban principles (Grant, 2005, p. 112). These efforts brought about the famous Poundbury development, which was followed by many schemes built by the Duchy of Cornwall and other private landowners in the UK. Due to the involvement of Prince of Wales and Léon Krier and their shared commitment to specific design principles, the new urbanism agenda is inherently imbedded in many legacy schemes today.

Prince Charles and the New Urbanism agenda

New urbanism arose as a response to the failings of modernist architecture (particularly when it came to housing), and its roots can be found in the writings of Jane Jacobs (1961) and Kevin Lynch (1960) among others. One of its earliest proponents was Léon Krier, whose critique of modernism and urban sprawl resonated with both academics and industry professionals. Drawing on historic development of towns and cities, he argued for compact, mixed-use, walkable, and self-contained communities with an attractive public realm, well-defined streets and traditional building patterns that facilitate walking and create strong urban identities (Krier, 1998). Krier also strongly advocated in favour of traditional architecture, which he believed to *"transcend both place and period and lend [itself] to continental or even universal implementation"* (Krier, 1998, p. 55).

Krier found a powerful patron in the Prince of Wales, who was instrumental in promoting new urbanism in the UK through the Urban Villages Forum, the Prince's Foundation and numerous housing developments built on land owned by the Duchy of Cornwall (Grant, 2005, pp. 45-78). The dissemination of new urbanism principles was also facilitated by regular conferences, events and publications targeted at industry professionals and, increasingly frequently, at other landowners in the UK (Prince's Foundation for the Built Environment, 2007; Prince's Foundation for Building Community, 2016). Other organisations, such as CLA, further contributed to promoting this model of housing delivery (Country Land and Business Association, 2017) and encouraging more landowners to get involved in housing developments, which have since been referred to as legacy

projects. These were new housing schemes usually built on green land owned by long-term private landowners (often a landed estate), who instead of selling the land outright to a housebuilder, played an active part in the development process. The land ownership pattern in the UK (see section 1.1) made this delivery model applicable on a relatively large scale across the country and the powerful position of the Prince of Wales made it relatively easy to promote this agenda. Consequently, many of the new urbanist principles were soon adopted by the government and included in planning policy and guidance (Grant, 2005, pp. 112-113).

Legacy schemes tended to reflect the landowner's idea of what constitutes good architecture and good housing quality, which became increasingly informed by best practices disseminated by the Prince's Foundation. As a result, legacy schemes that followed were often characterized by adherence to the new urbanist principles and the traditional vernacular advocated by the Prince of Wales and Léon Krier. And while the principles of mixed use and a compact development have been widely accepted, the architectural profession in the UK frequently challenged many claims of new urbanism (Grant, 2005, pp. 124-129).

One common aspect of new urbanism, and thus legacy schemes, that many took issue with was its relation to *"a romantic neoclassical style that often tumbles into tawdry pastiche"* (Rogers, 2004). This is more evident in housing schemes and ideas promoted by the Prince of Wales and Léon Krier than it is in the new urbanist ethos itself. Even though most new urban developments are characterized by neoclassical design, many proponents of the movement argue that their approach has *"little or nothing to do with the issue of architectural style"* and they emphasize harmony of style over design of particular buildings (Grant, 2005, p. 72). There are indeed many examples of non-traditional new urbanist developments such as Greenwich Millennium Village in London or Karow Nord in Berlin; however, housing estates built by the Duchy clearly reflect the Prince's and Krier's preference for traditional architecture.

Looking at different approaches that fall under the new urbanism umbrella (e.g. traditional neighbourhood design, transit-oriented design, urban villages, and smart growth), Krier's and Prince's model resembles most closely the traditional neighbourhood design (TND), which Leung described as shallow urbanism *"merely facilitating prettier sprawl"* (Grant, 2005, p. 58). Admittedly, new urban developments sometimes fail to deliver on their aspirations and instead are characterized by inadequate local services, over-reliance on cars, limited socio-economic diversity and high design costs which make housing less affordable (Bressi, 1993). In fact, Poundbury has been referred to as aesthetical ideal more than anything else, which adds a slightly disparaging undertone to Grant's remark that *"TND developments photograph beautifully"* (Grant, 2005, p. 58).

Another common source of criticism is the new urbanist deterministic and universal approach to urban design. New urbanism focuses on creating attractive neighbourhoods (with spaces to socialize, shop, play, and work) and building thriving communities, which in many ways *"constitutes the ultimate goal of design interventions"* (Grant, 2005, p. 19). This is well illustrated by such

statements as:

- *"By providing streets and squares of comfortable scale with defined spatial quality, neighbors, by walking, can come to know each other and to watch over their collective security"*
- *"By providing a full range of housing types and work places, people of various ages and economic classes are integrated and the bonds of an authentic community are formed"*
- *"By providing suitable civil buildings and spaces, democratic initiatives are encouraged and the balanced evolution of society is facilitated"* (Duany and Plater-Zyberk, 2008).

This overly deterministic belief that good design creates good communities is often called into question. Furthermore, it is often argued that new urbanism's aspiration to identify universal principles does not leave enough room to accommodate for cultural and regional differences and can lead to community efforts being dismissed as NIMBYism (even though public participation is considered an important aspect of the new urbanist design process (Grant, 2005, pp. 1-78; Katz, 1993, pp. 1-17)).

Legacy schemes today

The principles of housing delivery introduced by the Prince of Wales and Léon Krier gave birth to the legacy movement in the UK. Initially, legacy schemes were mostly associated with landed estates and large private landowners but has since been applied more widely and smaller private landowners started taking interest as well.

As the idea of leaving a lasting legacy in a form of a housing development was gaining traction among landowners, housing associations and organisations such as CPRE or RICS recognized the role that landowners can play in the delivery of affordable housing and Rural Exception Site (RES) schemes in particular (small affordable housing schemes built on land where development would not normally be allowed (*National Planning Policy Framework*, 2019)). This delivery model was very much echoing historic housing initiatives on landed estates (such as almshouses), but soon enough it was marketed to smaller farmer landowners as well, who joined the legacy movement (Walker, 2016).

There has also been an increasingly higher variation in style, approach and delivery model among legacy schemes. One of the most recent examples is the Blenheim Estates' partnership with WODC (West Oxfordshire District Council, 2019), which allowed to set affordable rents at as low as 60% of market levels (as opposed to the usual 80% requirement). The key feature of this approach, which has been applied to Park View development in Woodstock and Hanborough Gate in Long Hanborough, is land retention; i.e. Blenheim Estates keeps the freehold to affordable housing, as well as PRS properties, in order to benefit from 8% net rental yield (Sallabank and Daura, 2020).

Legacy schemes and landownership

There are many historical examples illustrating that housing schemes are not necessarily landowners' legacy as the involvement of other stakeholders in the development process has allowed architects, planners and local communities to put their own stamp on the built environment. For example, the Camden Council produced notable housing schemes during the 1960s and 1970s such as Alexandra Road estate or the Brunswick Centre, which constitute a legacy of the borough's Architects Department under Sydney Cook (Swenarton, 2011). Similarly, Coin Street and Odhams Walk estates are a testament to community movements against large-scale redevelopments on the South Bank and in Covent Garden. And while Coin Street community actually purchased the site, the Covent Garden community had no stake in land (Tuckett, 1988; Anson, 1981), which illustrates that the concept of legacy in housing developments is not necessarily related to landownership. The Odhams Walk stands today as a legacy, not of a landowner, but of a local community's fight against the landowner (the Greater London Council) and people's relentless efforts to save their neighbourhood and build desperately needed affordable housing.

That being said, long-term landownership is not only an integral part of the delivery model for most legacy schemes (as in case of Blenheim Estates), but also an integral part of the rhetoric surrounding them – the idea that landowners are more invested in the quality of what is being built on their land because they have owned it for generations. Nevertheless, it is important to ask whether other stakeholders involved in the development process conceptualize these projects as their legacy and whether legacy motive (discussed in the next section) affects their decision-making as well.

2.2. LEAVING A LEGACY AS A HUMAN MOTIVE

One of the main arguments behind legacy schemes is that leaving a lasting legacy is a powerful human motive, and thus a relevant factor in landowners' decision-making. Even though there is little evidence to support these claims as landowners' motivations are significantly under-researched, various theories in the field of psychology suggest that leaving a legacy indeed can be an extremely powerful drive, particularly in the case of intergenerational decisions-making that characterizes land ownership and land management.

Particularly relevant here is the terror management theory (TMT), based on Pulitzer-winning work by Ernest Becker (1997), which provides strong evidence for the relevance of the concept of legacy in human motivation due to its relation to life's meaning and fear of dying. The main premise of the theory is that the inevitability of death combined with our own survival instincts causes a substantial anxiety and in order to manage that "death anxiety" people seek for a symbolic immortality. This self-defence mechanism makes people look for comfort by identifying themselves with more enduring entities such as culture, religion, family or particular organizations (Pyszczynski, Greenberg and Solomon, 1999; Pyszczynski, Solomon and Greenberg, 2015). And arguably, leaving a lasting legacy constitutes another means of achieving symbolic immortality, which makes it a universal human motive resulting from our own mortality (Fox, Tost and Wade-Benzoni, 2010).

Grant and Wade-Benzoni (2009) further differentiate between death anxiety and death reflection, which is related to the Erikson's (1980) concept of generative life stage in human development. Death anxiety is understood as an experiential reaction to the awareness of one's mortality that usually results in a self-protective behaviour; while death reflection is a cognitive reaction that results mostly from the aging process and encourages prosocial behaviour. Hunter and Rowles (2005) also recognize the proximity of death as a factor reinforcing the legacy motive. This suggests that immediate reminders of death such as funerals and military conflicts could lead to a greater concern about one's wealth and well-being; while death reflection caused by the aging process could raise concerns about one's values and beliefs and how they are going to be remembered. Whether the reminders of death are immediate or distant, the evidence suggests that their constant occurrences in our lives increase the significance of the legacy motive in people's decision-making (Fox, Tost and Wade-Benzoni, 2010; Jonas *et al.*, 2002; Wade-Benzoni *et al.*, 2012; Hunter, 2007).

TMT (Becker, 1997) provides strong evidence for the salience of legacy motive, however, it provides no structure for further analysis of the role of legacy motive in housing developments. Also, some academics argue that the defensive character of TMT significantly limits its scope and provides little explanation for some more positive psychological processes such as intrinsic motivation (Deci and Ryan, 2000). Intrinsic motives are valued for the enjoyment and satisfaction resulting from the task itself and, unlike the extrinsic motives, offer no external reward (such as money, social status or personal fulfilment). Ryan & Deci also differentiate between different types of extrinsic motivation

– from externally imposed to fully integrated self-determined motives, e.g. students doing their homework because they were told to do so versus students doing their homework because they find it necessary for their career path – both external motives, but the latter is relatively autonomous and self-determined, and therefore, characterized by higher performance and more positive outcomes.

In order to make up for the shortcomings of the TMT, Maslow's pyramid of needs was considered as a framework for further analysis. Similarly to TMT, Maslow's theory (see Figure 1) proposes that behaviour is driven by needs that are universal and innate to human nature (Becker, 1997; Maslow and Frager, 1987). These human needs can be classified into five groups (physiological, safety, belongingness and love, esteem and self-actualization) that act in a hierarchical manner, meaning that an individual would be motivated by higher-level needs only when the lower-level needs are satisfied (Maslow and Frager, 1987). Towards the end of his life Maslow also recognised the role of intrinsic needs and added a sixth level containing the need to pursue values that go beyond one's self-interest such as truth, beauty or justice (Maslow, 1973).

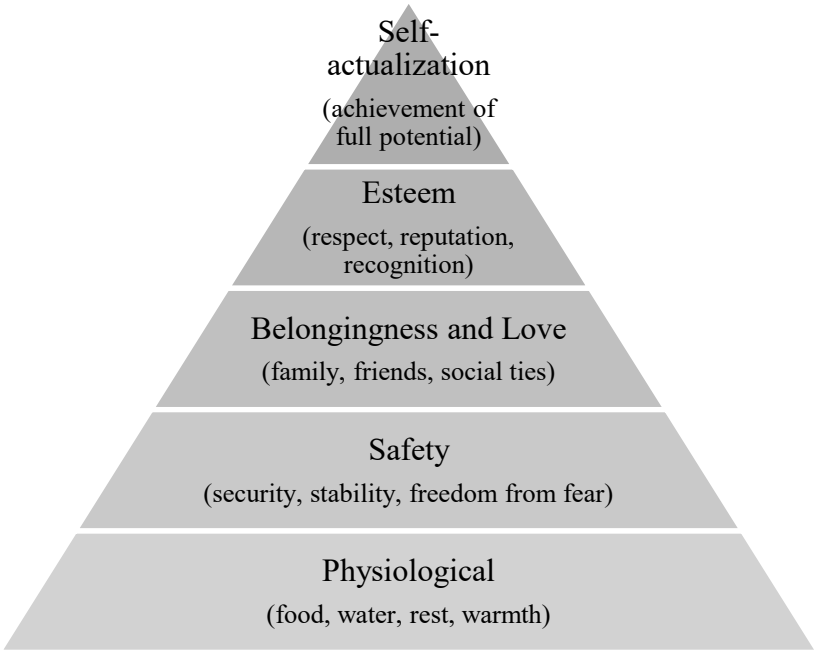


Figure 1: Maslow's pyramid of needs (1987).

Over the years, academics from various fields disagreed over the validity of Maslow's theory and empirical evidence is equally inconsistent and contradictory (Taormina and Gao, 2013; Graham and Balloun, 1973; Lawler and Suttle, 1972). One aspect that is particularly controversial is the hierarchical order of needs. There are many studies and theories that argue against it, as for instance Simon's (1957) *satisficing* concept, according to which people tend to choose a sufficient solution that satisfies most needs simultaneously, rather than an optimal one. Similarly, Hunter and Rowles (2005) found that legacy of values was more important for the participants in their study than material legacy. It is also easy enough to come up with real life examples of people being motivated by higher order needs (such as social relations or personal fulfilment) without satisfying lower-level needs

(such as financial security) first. Maslow himself admitted the possibility of more complex relations between higher- and lower-level needs by saying that "*[t]here are other apparently innately creative people in whom the drive to creativeness seems to be more important than any other counter determinant. Their creativeness might appear not as self-actualization released by basic satisfaction, but in spite of lack of basic satisfaction*" (Maslow and Frager, 1987).

Another criticism concerns the fact that, unlike TMT (Becker, 1997), Maslow's theory (1987) only addresses the content of human motivation and not the process – according to Maslow, needs are innately human, and therefore universal, rather than attained from the social world.[9] Such disregard for the role of one's environment in explaining human behaviour is particularly problematic when considering human motives in the context of different cultures (Neher, 1991). For instance, as far as the theory might test positively in the Western world, there is compelling evidence suggesting that some cultures, particularly in the less developed countries, might value social needs for belonging and esteem more than other lower-level needs. By comparison, the TMT accounts for cultural differences by arguing that the universal motivation to achieve symbolic immortality can manifest itself differently in different cultures (Becker, 1997). In this respect, TMT deals with both the *what* and the *how* of human behaviour – it combines content and process theories of motivation by linking human behaviour to universal human needs as well as values acquired from one's cultural and social environment.[10]

Nevertheless, Maslow's theory (1987) was deemed appropriate due to the specific context of this research. The validity of the hierarchical order of needs has often been called into question due to the fact that it does not accurately describe human behaviour outside the Western culture, and since this research was limited to the housing developments in the UK, such a model was considered a relatively close approximation of reality. Also, the aforementioned Hunter and Rowles study (2005), which concluded that leaving legacy of values was more important to people than their material legacy, included only one participant with a considerable wealth and that participant was first and foremost concerned with her material legacy. This could suggest that people with more substantial material possessions (as for example landowners) are more preoccupied with how their wealth is going to be distributed, which is also supported by the amount of published material that deals with the laws of inheritance and estate planning, e.g. (Cousal and King, 2013; Whitehouse and King, 2013; Sawyer and Spero, 2015)).

Furthermore, many academics agree that, despite being outdated and in need of some modifications, Maslow's theory is still relevant today. In fact, it is frequently applied in workplace

[9] Motivation theories can generally be divided into content theories and process theories. Content theories (e.g., Maslow's pyramid of needs) focus on what motivates people i.e. specific needs that drive human behaviour; while process theories focus on how behaviour is motivated i.e. the processes that drive certain behaviour.

10 According to Deci & Ryan (2000) the content of human motivation, i.e., the underlying needs and motives, which process theories ignore, is equally important in providing a full understanding of human behaviour.

settings, psychology, management and social science (Hanley and Abell, 2002; Koltko-Rivera, 2006; Neher, 1991; White, 2000; Cullen, 1997) as well as in the context of land ownership. For instance, Ilbery (1983) and Gasson (1973) used a model loosely based on Maslow's theory to analyse English farmers' motives. Also, while Maslow's approach is commonly considered too rigid, there seems to be little doubt among academics that some sort of hierarchy in human motivation does exist, with basic needs such as hunger and sleep being more urgent than personal fulfilment (Neher, 1991).

Therefore, it was conceded that a modified version of Maslow's pyramid of needs provides the necessary framework to analyse the legacy motive. A model analogical to the one suggested by Ilbery (1983) and Gasson (1973) was developed (see section 2.2.1) and the role of identity and cognitive processes was taken into consideration to further compensate for the limitations of Maslow's theory (see section 2.2.2). It was believed that this model would accurately reflect people's decision-making process and describe the statistically predominant behaviour, at least in the context of land development. In other words, it is argued here that it was statistically safer to assume that some sort of hierarchical order exists and that most people would be first and foremost preoccupied with their financial status.

This is despite the fact that leaving a legacy is often considered one of those powerful motives (such as duty, justice, love) that go beyond the general notion of self-interest and can lead to an altruistic behaviour (Sober and Wilson, 2000; Montada, 1998; Holmes, Miller and Lerner, 2002; Rocha and Ghoshal, 2006; Fox, Tost and Wade-Benzoni, 2010). However, many academics argue that even seemingly selfless and altruistic actions are actually a result of people's self-centred desires, e.g. to feel good about themselves or to gain other people's respect (Cropanzano *et al.*, 2001; Rocha and Ghoshal, 2006; Jensen, 1994; Jensen and Meckling, 1994). Following this logic, it could be argued that the idea of self-interest is actually embedded in the concept of legacy building as it is by definition driven by the concerns about how one will be remembered after death.

Similarly, economists do not recognize truly altruistic behaviour in the context of leaving an inheritance and the so-called altruistic bequests actually serve a family's interests (as discussed in section 2.1.1). Moreover, Masson and Pestieau (1997) point out a logical flaw in the economic model of altruism – if parents were solely motivated to help their children, they would transfer their wealth sooner in their life, rather than after their death when children do not need their parents' help as much as they did when they were younger. Therefore, the assumption that people operate with their self-interest in mind has a widespread application in the field of economy and it generally offers more predictive accuracy (Holmes, Miller and Lerner, 2002). And as land economy plays a crucial role in housing projects it has been decided to accept the assumption that human beings act primarily based on their own needs and desires.

* * *

2.2.1. The pyramid model of human motives

In order to analyse the role of legacy motive in housing developments, this research used a model based on Maslow's theory with a slightly modified classification of needs suggested by Ilbery (1983) and Gasson (1973), which was deemed more relevant and practical in the context of land ownership.[11] Based on that classification, leaving a legacy can be identified as a motivating factor on an instrumental, social, expressive and intrinsic level (see Figure 2). The first three levels constitute extrinsic motivations and are considered to work in a roughly hierarchical manner following Maslow's order of needs (Maslow and Frager, 1987). However, it was recognized that the division between higher- and lower-level motives is not as rigid as Maslow believed it to be and that some overlap between levels inevitably exists.

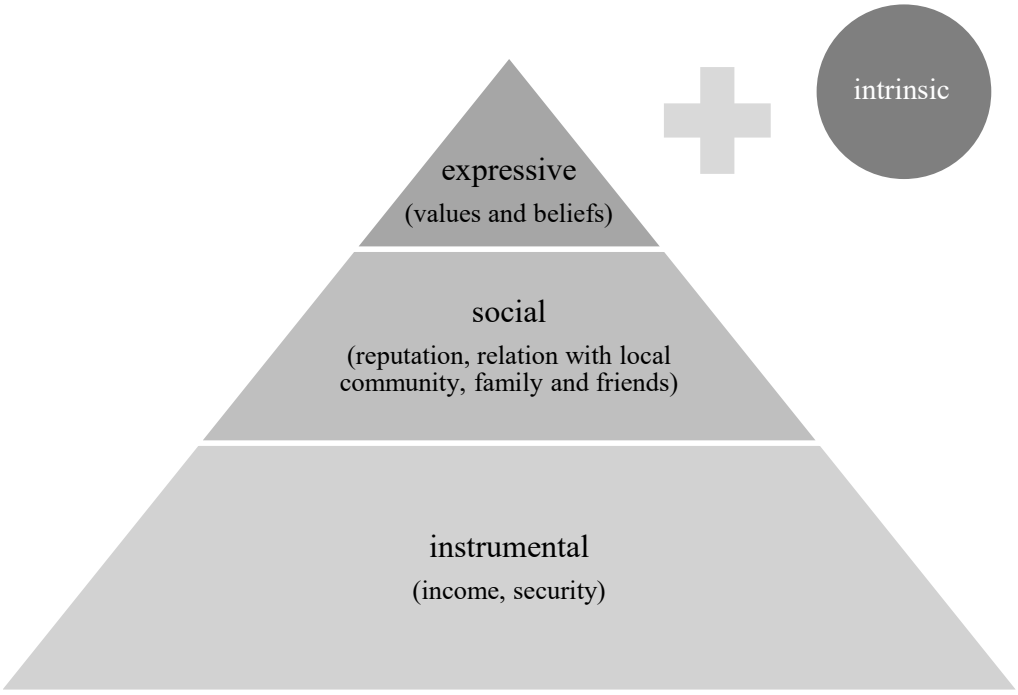


Figure 2: The hierarchy of extrinsic and intrinsic motivation.

On the instrumental level, people aspire to leave a legacy in order to ensure their financial security, and therefore, their decision-making is affected by financial incentives, laws of inheritance and death anxiety (as opposed to death reflection). Thus, it is a material form of legacy, understood as money, land and property bequeathed to the next generation, that people strive for on this level. Leaving a legacy that serves public interest, particularly in the form of adequate housing provisions, is the result of social and expressive needs. On the social level, people might strive to maintain a good relationship with local community and might be motivated by the concerns about their image

[11] For instance, including biological needs such as hunger and sleep would provide little insight into the specifics of legacy schemes.

and reputation. People's personal beliefs and attitudes translate themselves into expressive ambitions for self-fulfilment and personal satisfaction. On this level, housing developments can constitute a testament to the principles and values advocated by people who built them (as in case of Poundbury development and the Prince of Wales). Death reflection further reinforces social and expressive motives as it encourages people to focus on how they will be remembered.

Intrinsic motives such as love for countryside, way of life and sense of duty may also have an impact on legacy schemes. The emotional aspect of landownership could potentially encourage protectionist views on countryside, which sometimes lead to anti-development attitudes that prevent new housing estates from ever being built. However, the evidence on the impact of intrinsic motives is inconsistent – Ilbery (1983) and Gasson (1973) argued that intrinsic motives play crucial role in farmers' decision-making (which could possibly be extended to landowners as well); while Deci & Ryan (2000) suggest that external rewards undermine intrinsic motives and consequently most behaviour in our adult life is extrinsically motivated.

The above model provided the necessary framework to organize the evidence concerning legacy motive and to analyse different factors that influence decision-making process – e.g., funding (or lack thereof), relation with local community, architectural theories prevailing at the time, sense of duty – and how these factors relate to each other. It was used in the analysis of the case studies in order to provide a more integrated view of how to encourage contributions to better housing quality. For instance, following the Maslow's theory (1987), this model would suggest that wealthier landowners whose financial situation is secured are not strongly motivated by financial incentives, and therefore, tax exemptions, grants and subsidies might not be enough to encourage their contributions. A more appropriate approach would be to appeal to landowners' expressive and social motives by ensuring they have enough influence on the design and development process, or by strengthening ties with local communities and emphasizing the negative implications of low quality housing. Especially that research suggests that avoiding a negative legacy can be a considerably stronger motive than pursuing a positive one (Wade-Benzoni, Sondak and Galinsky, 2010).

Lastly, it is important to emphasize that the model suggested here was treated as a hypothesis to be tested during fieldwork.

* * *

2.2.2. Identity and cognition

Another issue that had to be addressed was that Maslow's theory (1987), being one of the content theories of motivation, does not account for the role of social environment in human behaviour. In the context of housing developments, an analysis based purely on the content of motivation would be somewhat reductive due to its disregard for social and cognitive processes captured within process theories, such as one's social interactions and experiences (Bandura, 1986), reinforcement and

punishment (Skinner, 1953), difficulty of the task and attainability of the desirable outcome (Vroom, 1982; Locke and Latham, 2002), as well as one's attitudes, beliefs and intentions (Fishbein and Ajzen, 1975).

In order to provide a more socio-cultural and conscious-led view of human behaviour, this research looked into both the content and the processes behind human motivation. This means that the legacy motive was understood as a universal human motive, but at the same time it was recognized that how that motive translates itself into action would depend on one's cognitive processes and a sense of identity. Therefore, motives, identity and cognition were identified as the main three components that influence human behaviour (see Figure 3).

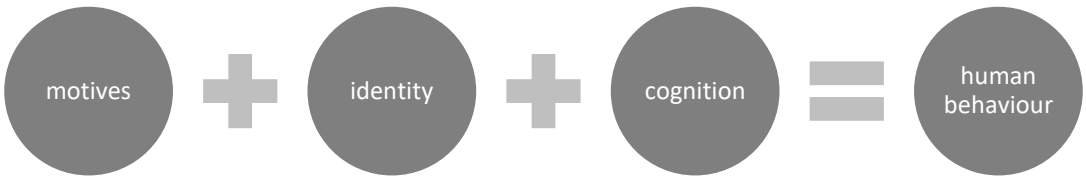


Figure 3: Elements that influence human behaviour.

It was also recognized that the relation between motives, identity and cognition is inevitably extremely complex and interdependent.[12] For instance, a landowner's decision whether to get involved in a housing development could be influenced by their motivation to leave behind a lasting legacy, their belonging to a specific social group or institution, and their knowledge and expertise pertaining to the development process. The relevance of these factors was going to be tested in the field, though it should be pointed out that the exact relation between motivation, cognition and identity lies outside the scope of this project.

Identity

There are many theories in the fields of psychology and social studies related to the notion of identity. For instance, Erikson defined it as a result of challenges faced at various stages of human development, while McAdams developed the life story model, according to which identity takes the form of a narrative (Erikson, 1980; McAdams, 1996). Other academics stressed the importance of one's environment, social group, collective memory and intellectual legacy of our past (Turner, 1987; Huyssen, 1995; Richter, 2015; Derrida, 1994; Stryker and Burke, 2000). While the deliberations on the complex subject of identity are not the focus of this research, it is impossible to ignore the fact that identity often plays an important role in human behaviour.

[12] This complex relation is also recognised by Turner et al. (1979) who identified "*the interplay between structural-cognitive and dynamic-motivational factors"* as a crucial aspect concerning social identity.

There is a significant amount of research that emphasizes the role of identity in human behaviour (Halloran and Kashima, 2004; Fox, Tost and Wade-Benzoni, 2010; Polletta and Jasper, 2001; Turner, Brown and Tajfel, 1979; Ajzen, 1991; Burton, 2004), which is also well illustrated by such motivation theories as Vroom's (1982) expectancy theory, Fishbein's & Ajzen's (1975) theory of reasoned action, self-determination theory (Ryan and Deci, 2000b; Deci and Ryan, 2000) and the TMT (Becker, 1997) – they all recognize the role of personal and collective values and various group dynamics. Moreover, identity is inherently related to the definition of legacy itself (as discussed in section 2.1), and therefore, it is essential to consider its role in legacy building.

The concept of legacy is a personal issue depending on one's values, beliefs, morality and sense of social responsibility (Fox, Tost and Wade-Benzoni, 2010; Aquino and Reed, 2002), all of which are closely related to one's identity. For instance, the religious revival during the Victorian era inspired many landowners to invest in building churches and charitable work, even when landowners themselves were not particularly religious (Robinson, 1988, p. 171), which illustrates the important role of group identity. Also, landowners who are generally regarded as politically conservative usually understood a positive legacy as one that reinforces tradition and existing social order, often with a particular emphasis on the social status of their own family (e.g. ceremonial festivities, pageantry, opposition to wealth and land taxation (Robinson, 1988; Spring, 1984)).

Also, parents' values and beliefs often have a strong influence on offspring's behaviour, as evidenced by the fact that bequeathing patterns among families often stay the same for generations (so-called retrospective bequests, particularly common in France (Arrondel, Masson and Pestieau, 1997, p. 114)). Moreover, according to Fox et al. (2010), individuals that identify themselves with groups that emphasize responsibility to future generations are more likely to be motivated to leave a legacy; and landowners, unlike volume housebuilders, are believed to fit into this category due to their long-term intergenerational stake in land. Research also indicates that certain groups (i.e. economics and business students, experienced accountants, managers) are more prone to favour self-interest over the interest of others (Frank and Schulze, 2000; Marwell and Ames, 1981; Ponemon, 1992; Abdolmohammadi, Read and Scarbrough, 2003; Elm and Nichols, 1993). This might suggest that on the estates managed by professional land agents, where landowners take a more passive approach, a legacy motive is likely to play a less significant role. Landowners can also be considered a group with a relatively high moral identity compared to other stakeholders. However, it has been demonstrated that a high sense of morality may lead to a self-centred and anti-social behaviour due to so-called *moral licensing* (Monin and Miller, 2001; Sachdeva, Iliev and Medin, 2009). According to this theory, individuals might believe that because of their ethical and moral conduct in the past they have earned a *license* to act immorally, and as a result, might favour their own in-group (e.g. a family, landowning class in general, or a local community) at the expense of other people (Fox, Tost and Wade-Benzoni, 2010).

Furthermore, extreme power imbalance between groups can lead to a higher concern for those

that are powerless and vulnerable as individuals that are fully in control of the outcomes take more social responsibility for their actions (Chen, Lee-Chai and Bargh, 2001; Greenberg, 1978; Handgraaf *et al.*, 2008). This is well illustrated by landowners' philanthropic response to the extreme poverty of working classes.

Cognition

Cognitive processes constitute another factor that influences human behaviour; however, its role has been largely overplayed by the academics arguing in favour of rational models of behaviour (e.g., rational choice theory). Despite what scientists used to believe, the idea that people operate in a rational and logical manner (usually assumed by economists (Arrondel, Masson and Pestieau, 1997)) has now been largely dismissed and there is a multitude of studies illustrating that people's behaviour can sometimes be totally irrational (Anderson, Lepper and Ross, 1980; Lord, Ross and Lepper, 1979; Knobloch-Westerwick and Meng, 2009; Rozenblit and Keil, 2002). For example, people tend to stick to one's pre-existing beliefs even in the face of the actual evidence against it. This is described as a "confirmation bias" (or "myside bias") and according to Mercier and Sperber (2017), it proves that reason developed to allow us to advance socially by winning arguments rather than to objectively and logically evaluate problems at hand.

In fact, many cognitive scientists share the opinion that reason is a product of human evolution and developed as a response to human sociability and collaborative living. Sloman and Fernbach (2017) draw attention to another consequence of that collaborative lifestyle, commonly referred to as an "illusion of explanatory depth," which describes people's tendency to think that they understand a lot more than they actually do (particularly in case of explanatory knowledge). According to Sloman and Fernbach, the reason for that is that we are used to relying on other people's knowledge, often without realising it. For example, we do not have to fully understand how everyday devices work in order to be able to operate them as other people designed them the way so we do not need to.

In the context of housing developments, these arguments suggest that lack of architectural skills or knowledge about planning system and development process might not be as obstructive to one's involvement in housing schemes as it might initially seem. Nevertheless, people can only make their decisions (rational or not) based on what they know or rather what they think they know. And according to Simon's (1957) concept of bounded rationality, our knowledge and understanding of reality is always limited. This means that even if stakeholders are strongly motivated to provide high quality schemes, their decisions will inevitably depend on their personal perceptions of what constitutes good housing and how to achieve it. Especially that, as suggested above, it might be extremely difficult to change their pre-existing opinions.

2.3. SUMMARY

This chapter provided a brief overview of the concept of legacy and its relevance in various academic fields, i.e., philosophy, psychology, economy and architecture. Three different types of legacy were identified (biological legacy, material legacy and legacy of values) and considered in relation to culture and collective memory; housing and built environment; power, influence and land; human motivation and intergenerational decision-making; identity development; and altruism and self-interest. In doing so it was illustrated that:

1. *The concept of legacy is a fundamental aspect of human existence and a universal human motive.*

The concept of legacy is inherently related to such notions as meaning of life, sense of belonging and symbolic immortality and as Derrida puts it: *"[a]ll the questions on the subject of being or of what is to be (or not to be) are questions of inheritance"* (Derrida, 1994, p. 54). TMT (Becker, 1997) provided further evidence for the fact that the drive to leave behind a lasting legacy is a universal human motive, and a particularly powerful one in case of intergenerational decisions-making that characterizes land development.

2. *Legacy has always manifested itself through our built environment (and housing projects specifically).*

All types of legacy, except for biological which refers to childbearing and all that it entails, find their reflection in our built environment. Legacy of past events, people and beliefs is clearly visible in monumental architecture, urban fabric of our cities as well as many housing developments (for example almshouses and country houses built on landed estates, industrial villages and garden city movement, development of new towns and contemporary legacy housing).

3. *Contemporary legacy housing schemes are characterized by landowners' involvement in the development process and often reflect new urbanism principles.*

Contemporary legacy housing schemes were inspired by the principles introduced by the Prince of Wales and Léon Krier (Grant, 2005, pp. 45-78). Since then, there has been an increasingly higher variation in style, approach and delivery model among legacy schemes, but what they all do have in common is that, rather than selling land to the highest bidder, landowners are actively involved in the development process. Landowners explicitly conceptualize these housing projects as their legacy, which affects their motivation and decision-making, and therefore, has an impact on the development outcomes.

Contemporary legacy schemes tend to reflect landowner's idea of what constitutes good architecture and good housing quality, which is often informed by best practices disseminated by the

Prince's Foundation. Consequently, legacy schemes often face similar criticism as new urbanism – overemphasis on aesthetics and visual qualities, architectural design bordering on pastiche, overly deterministic belief that good design creates good communities and insufficient attention to cultural and regional differences (Grant, 2005, pp. 124-129).

4. Land ownership is an integral part of the contemporary legacy schemes.

Landowners are more likely to pursue a legacy in a form of housing schemes due to historical development of land ownership in the UK and strong paternalistic attitudes of landowning classes (Robinson, 1988). They are also in a particularly privileged position to engage in legacy schemes as they control the main resource – land. Long-term landownership also plays an important role in the rhetoric surrounding legacy schemes, which follows Bracewell-Milnes' argument that all kind of assets are *"best and most efficiently looked after by long-term family owners"* (Bracewell-Milnes, 1997, p. 173). That being said, since leaving a legacy is a universal human motive, housing schemes can be considered other stakeholders' legacy as well and there many examples to support that (e.g., Odhams Walk, Coin Street or Alexandra Road estate).

5. Legacy building can have positive effects on real estate and property, but negative effects on equality of opportunities.

Perpetual saving is beneficial in case of land ownership and real estate as it entices the land or property owner to take the role of a steward rather than a consumer (Bracewell-Milnes, 1997); however, legacy building encourages the accumulation of wealth, and therefore deepens social inequalities.

6. Legacy can be constructed and is open to interpretation and destruction.

As much as we do not get to decide what we inherit, we do get to decide what to pass on to future generations. This combination of flexibility and human agency involved in leaving and receiving an inheritance makes it essential to ask whose legacy is being preserved and whose lost. This is also true in case of architectural legacy, which can be constructed in a similar manner as cultural legacy, and therefore *"reinforce for some the feeling of belonging and for others the feeling of exclusion"* (Bourdieu, Schnapper and Darbel, 1991, p. 112).

7. Legacy motive can lead to prosocial behaviour.

The idea of self-interest is embedded in the concept of legacy building as it is by definition driven by the concerns about one's life meaning and how one will be remembered after death. In fact, economic theories related to bequests do not recognize the existence of altruistic behaviour that

would go beyond the economic interest of a family. Also, some psychologists and social scientists believe that even seemingly selfless actions are actually a result of people's self-centred desires to feel good about themselves or to gain other people's respect. However, there is a significant body of literature suggesting that legacy motive may lead to prosocial behaviour, which illustrates that legacy, at the very least, provides a mechanism for translating one's self-centred motives (to leave a legacy) into long-term benefits for a collective (Fox, Tost and Wade-Benzoni, 2010).

8. *Maslow's pyramid of needs provides a useful framework to analyse landowners' motivations.*

Despite its limitations and criticism, Maslow's theory was considered suitable for the purpose of this research because: it provides a relatively close approximation of reality in the Western world; it has been previously applied in studies investigating farmers' motives; there seems to be little doubt among academics that some sort of hierarchy in human motivation exists; models based on the assumption that people operate with their self-interest in mind (such as this one) have more predictive accuracy. Based on Maslow's theory (Maslow and Frager, 1987), leaving a legacy was identified as a universal human motive that can be activated on an instrumental, social, expressive and intrinsic level (first three extrinsic levels being roughly hierarchical).

9. *Looking only at the content of human motivation does not provide enough insight to analyse the role of legacy motive in people's decision-making.*

Legacy is often associated with self-image, personal values and beliefs and how one is going to be remembered by others. It is also inherently rooted in the process of identity development as illustrated by the concept of generativity and the life story model. This points to the role of social environment, which is not accounted for in Maslow's pyramid of needs and other content theories. In order to make up for these short fallings, this research also looked into the role of identity and cognitive processes in human behaviour, e.g. the impact of group dynamics, the role of personal and collective values, the importance of skills and knowledge, the extent to which decisions depend on personal perceptions of what constitutes good housing and how to achieve it.

3

HOUSING QUALITY

The following chapter illustrates the complexities behind the concept of housing quality and demonstrates some of the issues related to housing development process, particularly the effectiveness of policy and regulation. First section focuses on identifying the main obstacles to higher housing quality and the commonly used tools for ensuring certain quality standards. This is followed by a deeper look into various aspects of housing quality and stakeholders' perspectives.

3.1. DEVELOPMENT PROCESS

As argued in Chapter 1, legacy motive – i.e., the drive to leave behind a lasting legacy – is only the first step to achieving higher housing quality. There are many factors, related to the characteristics of the development process and stakeholders' agenda, that could prevent legacy motive from translating itself into specific development outcomes. Therefore, it is crucial to consider what are the obstacles to higher housing quality and how they could be overcome.

* * *

3.1.1. Obstacles to higher housing quality

Land allocation and housing supply

Land for new housing is usually allocated through "call for sites", whereby landowners put forward their land and planning authorities choose the most appropriate sites, which often results in new housing developments being isolated and far apart (Stakeholders, 2018; Building Better Building Beautiful Commission, 2020). Consequently, it is difficult and costly to build the necessary infrastructure and facilities such as roads, schools, community buildings or commercial uses, which often require certain footfall in order to be viable (Savills, 2016). Also, identifying a 5-year land supply creates too short of a timeframe to build enough houses for a self-sufficient settlement. As a result, what is being built is a series of isolated housing estates, which become a burden on the existing infrastructure and facilities. The current NPPF (*National Planning Policy Framework*, 2019) addresses this issue by recommending that planning authorities identify developable sites or broad locations for growth for the next 6-10, or even 11-15, years (in addition to the 5-year land supply). The 4B (Building Better, Building Beautiful) Commission suggested that an even longer-term, i.e. 30-year, approach should be encouraged (Building Better Building Beautiful Commission, 2020, p. 60).

Furthermore, according to RIBA (2009) low land supply makes the land acquisition process very competitive and developers try to lower the design and construction costs in order to provide the highest bid and secure the site. This drives up the land values leading to higher house prices and lower housing quality, as developers compete over the site rather than the product.

Land value also has an impact on identifying sites for RES schemes as landowners are reluctant to put forward their site for affordable housing due to the "hope value" of land, i.e. they hold on to the land hoping that their site might get allocation for open market housing in 5 years' time, and therefore, be worth significantly more money (Walker, 2016).

Finally, the overall shortage of housing, caused by low land supply, high home-owning

aspirations[13] and a reduction in occupancy, inflates house prices and limits homebuyers' choice (Bernheimer, 2014; Sallabank and Daura, 2020). This leads to a seller's market where anything will sell, and consequently, developers have little incentive to deliver a better product.

Planning

Another barrier for higher quality housing is an extremely complex and slow planning system. The overbearing amount of policy and regulations is extremely time- and cost-exhaustive, places additional burdens on housing schemes and often constitutes a threat to their viability. Consequently, bureaucracy and the lack of certainty in the planning system is often cited as one of the obstacles to higher quality of housing. Timescale and lack of resources are also a problem for planning authorities. Due to the government's delivery targets dictated by the housing shortage, planning authorities are pressured to build at a certain rate, which can be difficult to achieve without reverting to standardised volume housebuilders' approach (Building Better Building Beautiful Commission, 2020, pp. 118-122).

However, probably the most significant criticism of the planning system is that it is ineffective (Watson *et al.*, 2016). Even with all the standards, regulation and guidance, poor-quality developments not only get built, they are actually the norm (Angle and Malam, 1998; RIBA, 2009; CABE, 2010), which is particularly problematic due to the number of houses that are being built and the government's emphasis on delivery targets. In fact, there is evidence suggesting that more regulation does not result in higher quality housing. For instance, in an affordable housing survey from 2009 (Homes and Communities Agency, 2009), only 8% of projects were considered as "good" or "very good", compared to 18% in the private sector (see Figure 4). This is despite the fact that affordable schemes funded by Homes and Communities Agency (now Homes England) are subject to stricter regulations and standards such as Housing Quality Indicators, which set requirements for visual impact, size and layout, open space, adaptability and accessibility.

[13] A recent study by Santander (2019) showed that 51% of people considered homeownership their top life goal.

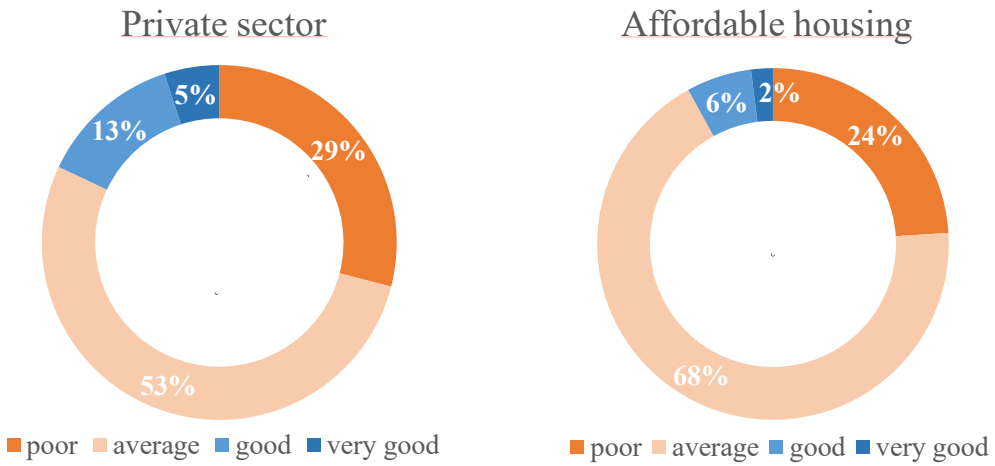


Figure 4: Quality of private-sector vs. affordable homes. Adapted from Affordable Housing Survey (Homes and Communities Agency, 2009).

However, the proportion of "poor" or "very poor" schemes was slightly lower for affordable housing (24% compared to 29%), which might suggest that housing standards and regulations, while not necessarily encouraging higher quality, can be effective in eliminating the worst examples of poor-quality housing.

NIMBYism

Another issue that can further impede the planning process are NIMBY attitudes. These are usually attributed to the low quality of housing developments that are being built, which makes them extremely unpopular with local residents (Smith, 2016; Prince's Foundation for the Built Environment, 2014; Bressi, 1993). Public opinion is also crucial for RES schemes, where Parish Council's support is necessary, as well as for larger sites, where applications are decided by planning committees composed of democratically elected members, who are not required to follow the advice of planning officers and whose decisions might be influenced by their ambition to get re-elected (Stakeholders, 2018).

Funding

Funding is a major issue in any housing scheme and delivering the necessary infrastructure and local facilities is often particularly challenging due to the upfront costs and cashflow issues. Consequently, these elements are often pushed back until later phases, which can negatively affect the house prices, and thus the long-term value of a scheme (CABE, 2005b; RIBA, 2009; Building Better Building Beautiful Commission, 2020; Knight Frank, 2020; Savills, 2016). Some studies also suggest that larger developments are sometimes forced to carry an unfair amount of infrastructure costs; while smaller developments are allowed *"to 'free ride' on the value they create"* (Knight Frank, 2020).

Current tax code constitutes yet another deterrent for the long-term approach to land

development as it is more tax efficient to sell the land in bigger blocks (Building Better Building Beautiful Commission, 2020, pp. 83-86).

Lack of government funding is also an issue for RES schemes (Walker, 2016). Following the guidelines set out in the NPPF (*National Planning Policy Framework*, 2019), affordable housing is now being cross-subsidized by open market properties delivered to ensure the viability of a scheme.

Commercial value and build costs

Evidence suggests that additional investment in "high-quality" design results in around 18% cost premium on legacy schemes (Knight Frank, 2020). These additional costs are one of the main concerns for legacy schemes, largely due to the fact that viability appraisals and mortgage valuations are based almost exclusively on the number of bedrooms.

For the viability studies, developers have to make certain assumptions about the projected values of the properties in order to verify the viability of a scheme. These figures are produced by estate agents, who base their calculations on comparable properties in the area and estimate the average prices that properties would sell for (usually based on number of bedrooms, i.e. a 2-bed. property in this area sells for this much, a 3-bed. for that much, etc.). Following the RICS standards, the estate agents do not factor in the added value of such aspects of housing quality as high ceilings, energy efficiency, storage space, dedicated study, adaptability or architectural detailing. Similar issues arise with mortgage valuations. And since estate agents and mortgage surveyors do not recognise the added value of good design, developers will not either as it is considered to be purely speculative (Stakeholders, 2018).

Consequently, in order to increase their projected profits developers lower the build costs, rather than invest in housing quality, and the whole system works to the lowest common denominator – the only thing that is valued is number of bedrooms and the rest becomes *"costly add-ons to what can be provided by a box"* (Stakeholders, 2018). The idea of building something better and selling it for more is simply not part of that equation. This is particularly true in low-value areas, where low house prices can drive the quality down; and particularly problematic for high-density schemes, where a bespoke and creative approach might be necessary in order to achieve high densities without compromising other aspect of housing quality (e.g., privacy, outdoor space or functionality of properties).

Despite this broken system, some legacy schemes have been able to achieve significant premiums and the argument that investing in good housing quality pays off is often used as a selling point (Prince's Foundation for Building Community, 2016, p. 39). An analysis conducted by Savills (2016) demonstrated that Poundbury development achieved values up to 29% higher than other nearby new build schemes and argued that in areas of high demand additional early investment in the development can raise house prices by 20%, sales rates by 50% and land values by 25%. A more recent study by Knight Frank (2020) presented more conservative numbers (the weighted average

premium for a property at Poundbury was estimated to be 7.3%), but still argued that a premium of 15% is achievable, which was estimated to be sufficient to offset additional costs (Knight Frank, 2020).[14]

* * *

3.1.2. Development and quality control

One of the main concerns for legacy projects is the issue of control over the development process, which affects landowners' ability to realise their vision for the scheme. Figure 5 shows the main stakeholders involved in legacy schemes and the role they would usually play in the development process.

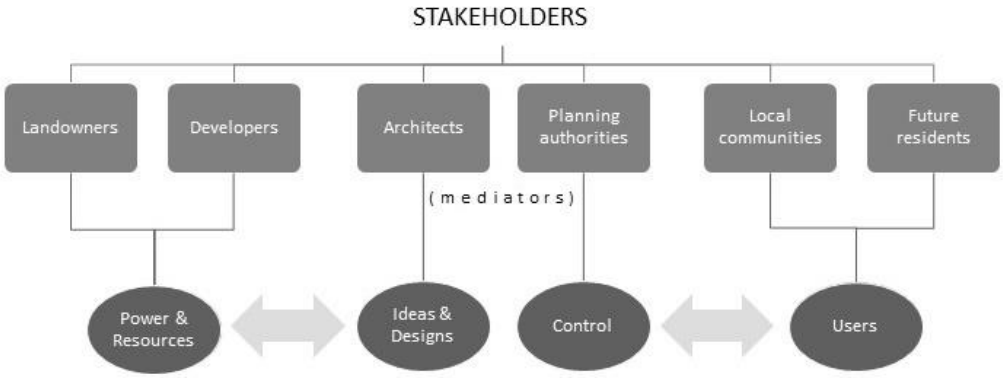


Figure 5: Stakeholders involved in legacy schemes and the role they would usually play in the development process.

A crucial element of the above framework seems to be the relation between landowners and developers (whose combined resources are vital in the delivery of housing schemes) and planning authorities (who exercise regulatory control over the development process).

Landowners and developers: land deals and design codes

The relation between landowners and developers, and the ensuing degree of control, depends heavily on how the land deal was structured. Some of the most common approaches to structuring a land deal between a landowner and a developer are as follows:

- Option agreement – landowners agree from the outset to sell the land under certain conditions, which gives them little to zero control over the development process.
- Consortium agreement – landowners and developers work together all the way through

[14] Knight Frank (2020) estimates that the additional costs resulting from high quality range between 18% and 30%. Since costs typically represent about 50% of the Gross Development Value, a premium of 15% would be sufficient to offset the 30% of added costs.

a project and land is being transferred to developers in the beginning of each phase.

- Joint Venture – land is transferred to a joint venture company formed by a landowner and developer who split the costs; the profits are divided in a pre-agreed manner once a development is complete.
- Agreement for Lease – landowners lease the land to a developer and transfer the freehold directly to the ultimate occupier once each house is sold, and the profits are divided in a pre-agreed manner upon each sale.

Alternatively, landowners can develop the land themselves, however, in most cases it is extremely unlikely they would be able (or willing) to finance it themselves, particularly without the expert knowledge of the development process (Stakeholders, 2018).

The safest way for a landowner to structure a deal with a developer is to retain the title to the land and only transfer the freehold once houses are developed to the agreed standards. Knight Frank (2020) also points out that arrangements such as Joint Venture and Agreement for Lease offset the initial costs associated with the land and improve the project's overall viability. They also encourage a long-term partnership, and in doing so, align the "investment time horizons" of a landowner (with a project length of many decades) and a housebuilder (who will usually complete their phases of development within a few years). However, these kind of land deals often come with a higher risk for the landowner and might not always be possible to negotiate. Consequently, landowners often get tied up in option agreements, either due to lack of funding or lack of knowledge and expertise, and lose control of the development (Building Better Building Beautiful Commission, 2020, p. 81).

In case of RES schemes, there are two main routes for structuring a deal with a registered provider (RP) who would usually develop the land:

- Landowner can sell the land outright at a price below market level to an RP, who then owns the properties in perpetuity;
- Landowner can retain the freehold and lease the land to an RP, who would manage and let the properties for the time being (the lease would usually include a reversion clause with a date agreed with the planning authority and coinciding with the local affordable housing needs being reassessed).

As with commercial schemes, landowners also have the option to develop the land themselves and lease the properties directly to the occupiers. In fact, retaining the ownership to the PRS and affordable properties (whether delivered through RES's or as part of an open market schemes) is becoming increasingly popular among landowners, who consider it a form of a low-risk investment and diversifying their portfolio (Walker, 2016; Sallabank and Daura, 2020), which is well illustrated by the Blenheim model briefly discussed in section 2.1.3. But again, this is more attractive to larger landowners with bigger portfolios (e.g. estate owners), who have the necessary expertise in property management (Walker, 2016).

Another method of development control widely used on legacy schemes are design codes and

pattern books, which are often built into the legal agreements.

Design codes are not a novel idea – they were already used in Georgian and Victorian times and have been known to have an enormous impact on our built environment (RIBA, 2009; Ben-Joseph, 2005). Back in 1911 Raymond Unwin already recognised the necessity, and the public value, of some sort of control over the overall appearance of buildings:

"*The external appearance of a building is so much more important to the public at large than it is to the individual occupant or owner, that there would seem to be clear justification for the exercise of some public supervision of the designs of buildings*" (Unwin, 1994, p. pp. 364).

Nowadays, design codes and pattern books are becoming an increasingly popular tool used to create consistent, yet diverse neighbourhoods. This is not without a reason as there is some evidence suggesting that design codes increase housing quality and speed up the planning process (CABE and Department for Communities and Local Government, 2006). According to an analysis of several new housing developments (RICS, 2016), they often prove to be successful because they provide developers with an alternative *"path of least resistance"* (alternative to a homogeneous and standardised product).

Design codes and pattern books have often been applied on new urban schemes, starting with Seaside, Florida – a development that put the TND concept on the map (Katz, 1993, pp. 1-17). They are believed to set the tone for the development and create a sense of place by controlling some aspects of housing quality (e.g., choice of materials, general character and architectural style), while at the same time leaving enough flexibility for architects and developers to produce interesting and distinct housing. They are also instrumental in ensuring that the overall vision for the development does not get lost over time (Sallabank and Daura, 2020). Incorporating the design code principles into a series of restrictive covenants forces residents to conform to the rules and guidelines that were initially set out by the architect and which informed the design of the estate.

It should also be pointed out that design codes have the potential to be used more widely by other stakeholders as well. Planning authorities are encouraged to use design codes to help deliver high quality schemes and the National Model Design Code is intended to serve as a template (Ministry of Housing Communities & Local Government, 2020b; *National Planning Policy Framework*, 2019; Hopkirk, 2020). And while there are some prominent examples of highly regarded design codes set by local authorities (e.g. Essex Design Guide), RIBA (2009) points out that it is unlikely for local authorities to engage in preparing design codes when they often struggle to develop their other policy documents. Therefore, it might be more plausible to encourage developers to contribute to the preparation of design codes by warranting a simplified and quicker process of obtaining a planning permission. RIBA (2009) also suggests that producing pattern books for housebuilders to use on their schemes could be a way for architects to play a more active role in the delivery of mass market housing.

Planning authorities and policy makers: regulation and guidance

There are numerous housing standards and indicators as well as guidance documents (see Appendix A) that are used alongside building and planning regulations to quantify and control housing quality. Importantly, they also provide technical advice to the public and planning authorities, allowing them to make well-informed choices, as well as helping to promote best practices (CABE, 2010). However, as they built up over the years, they became more and more inconsistent and overlapping (e.g., Lifetime Homes was partly incorporated in the building regulations, Lifetime Homes and Secured by Design were referenced in the Code for Sustainable Homes (CSH), Building for Life (BfL) used the recommendations from Manual for Streets). This made the existing regulations confusing, contributing to an already extremely complex planning system as illustrated by a housing standards map created by CABE back in 2010 (see Figure 6). Also, different standards are administered by different bodies and have different assessment processes, which makes the planning and design processes even more difficult to navigate (CABE, 2010).

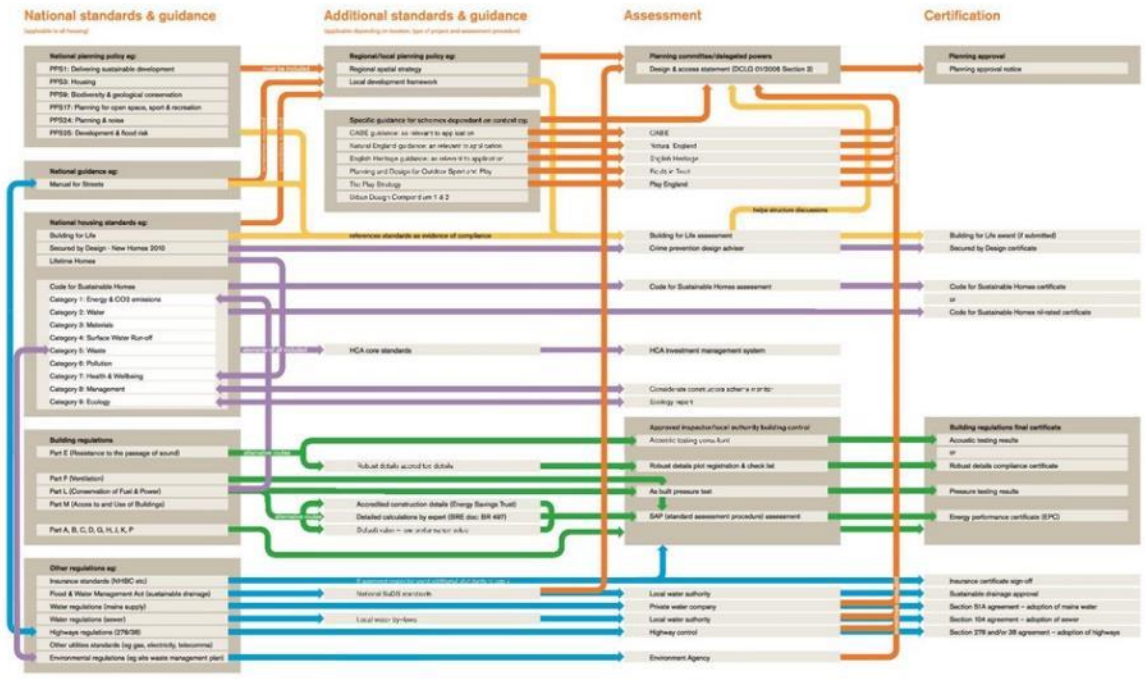


Figure 6: A map of housing standards (CABE, 2010).

Furthermore, the excessive amount of building and planning regulation often drives the design outcomes and ties architects to rigid templates, leaving no room for creativity and innovation, and consequently, results in a standardized and repetitive product (Ben-Joseph, 2005). Such an opinion is shared by many architects and housebuilders with some going as far as to suggest that all land-use prescriptions and housing standards should be abolished (Frearson, 2016; Mairs, 2017).

The government's Housing Standards Review concluded that the large number of standards, guides and practices related to housing quality reflected the belief that existing policy was insufficient or ineffective, and therefore, they should be consolidated into the building regulations.

Consequently, in 2015 several changes were introduced, including:

- The Code for Sustainable Homes (the only government-owned standard except for HQI) was withdrawn and parts of it were incorporated into the building regulations; and
- The nationally described space standard (defining the minimum floor area of new dwellings and its key parts) was included as part of the planning system (it can only be imposed on developers based on the local need reflected in the local plan).

The government argued that the introduced changes would simplify the methods of controlling housing quality and make it cheaper and easier to build to a higher standard. However, some concerns regarding the sensitivity of national-level regulations to a local context remained (Chen, Lee-Chai and Bargh, 2001). These issues were addressed in the government's Housing White Paper (Department for Communities and Local Government, 2017), which stressed the importance of local policy suited to the local need – having up-to-date local plans, locally appropriate design codes and providing a more diverse product with multiple types and tenures.

More recently, the planning white paper (Ministry of Housing Communities & Local Government, 2020b), suggested that planning process could be accelerated through "permission in principle" regimes and Local Development Orders (LDO), which would also take some of the burden of development control from the planning authorities. This would provide permitted development rights for specific developments and would be linked to masterplans and site-specific design codes in order to ensure that high quality schemes are delivered. Such approaches are already being implemented, e.g. at one of the Duchy's developments – Nansledan in Newquay (Cornwall Council, 2020).

This follows the recommendations made by 4B Commission that schemes demonstrating a certain commitment to quality should be given a simplified planning route, referred to as *"fast track for beauty"* (2020, pp. 71-85).

Other measures of housing quality control

In addition to methods described above, there are also some other less widely used measures that were introduced to ensure a certain standard of housing quality.

For instance, in the Design Review process (developed by CABE and endorsed by NPPF) planning applications are evaluated by an independent panel of professionals, who provide their feedback and expertise. However, usually only large-scale housing developments of public significance go through design reviews (RICS, 2016).

Enquiry by Design (EbD), which focuses on facilitating the collaboration between various stakeholders, was developed by the Prince's Foundation, and is advocated by many industry experts (Sallabank and Daura, 2020; RICS, 2016). Through a set of workshops, it enables the local community and other organisations to participate in the decision-making process, while the Prince's Foundation and other stakeholders provide technical expertise. In Upton, this process resulted in a

series of design codes that defined the future of the new development and arguably created *"strong sense of ownership within the settlement and within the wider community"* (RICS, 2016).

Design awards are yet another way of encouraging higher housing quality (e.g., Royal Institute of British Architects awards or British Construction Industry awards). However, as they are peer reviewed by a body of experts, they usually reflect the preferences of the architectural profession, which might be drastically different from other stakeholders' perspectives and has been known to be different from homebuyers' preferences (Smith, 2016).

Finally, there are numerous bodies and organisations that help to increase the quality of housing developments through dissemination of knowledge and good practice. These include the Advisory Team for Large Applications (ATLAS), which provides guidance for large-scale planning applications, numerous professional bodies (e.g., RIBA, RICS, RTPI) as well as other organisations and platforms (e.g., Design Council, the Prince's Foundation, the Academy for Urbanism, the Urban Design Group, Place Alliance, the Resource for Urban Design Information).

3.2. WHAT IS HOUSING QUALITY?

The notion of housing quality is extremely subjective and various stakeholders will inevitably have different perspectives and understandings of what constitutes "good" housing quality. Landowners, developers, architects and planners are likely to prioritize different aspects of housing quality, which makes the question of development control (discussed in the previous section) seem even more relevant.

In this section, the many aspects of housing quality are discussed, mostly from homebuyers' perspective due to the availability of literature, but with references to other stakeholders where possible.[15]

* * *

3.2.1. Homebuyers

Affordability

Surprisingly, house price is not always named as an important factor influencing homebuyers' choices and according to a research by the Joseph Rowntree Foundation (Leishman *et al.*, 2004) only one of the four consumer groups considered it particularly relevant.[16] However, due to the difficult housing market in the UK, it seems apparent that while homebuyers might have a long list of preferences, in the end their choices will be limited by what they can afford (or how much they can borrow). In fact, "Tomorrow's Home" report (Bernheimer, 2014) claims that given the low housing supply and inflated prices a significant portion of homebuyers will not be able to afford the kind of house they prefer. This is well illustrated by the increasing percentage of people living in a private rented accommodation despite extremely high home-ownership aspirations in the UK (Bernheimer, 2014; Appleyard and Rowlingson, 2010; Santander, 2019). According to another study (Homeowners Alliance, BLP and RESI, 2019), almost 8 in 10 renters want to own their home, but at the same time 6 in 10 renters wanting to own do not think they ever will.

Furthermore, high unemployment rates following the recession of 2008, particularly among young adults, make it extremely difficult for the Millennial generation to get on the property ladder. As a result, only 10% of all owner-occupiers are under 35 as more and more young people are forced to choose from a private rented sector or to continue living with their parents (Ministry of Housing Communities & Local Government, 2019a).

The housing market seems even more challenging in rural areas, which according to the Rural

[15] The aspects of housing quality discussed below are not ordered according to their importance.

[16] Some reports consciously decide not to deal with the issue of affordability and only look into homebuyers' preferences about a new house within their price range (CABE, 2005b).

Coalition are at risk of turning into "enclaves of the affluent" (Starkey, 2017).[17] The average earnings in rural areas are lower and the affordable housing stock smaller than in urban areas (see Figure 7 and Figure 8). Consequently, the average age of rural population is increasing as young people cannot afford their ideal of countryside living (Bernheimer, 2014).



Figure 7: Average earnings in rural and urban areas. Adapted from Walker (2016).

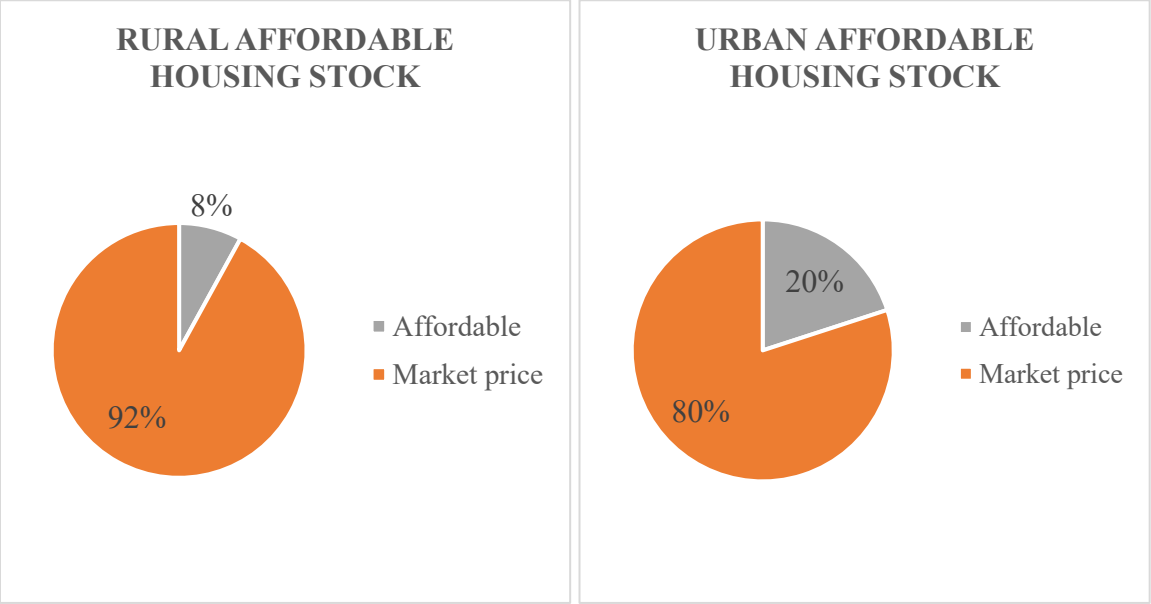


Figure 8: Affordable housing stock in rural and urban areas. Adapted from Walker (2016).

In these circumstances, it is understandable that affordable housing provisions are a key concern for local authorities and a principal requirement for developers, not just in terms of the amount but also the distribution and the design. The popular view is that affordable housing should be tenure blind (meaning indistinguishable from market properties) and distributed throughout the

[17] The Rural Coalition represents twelve organisations including the CPRE, the National Farmers Union and the Royal Institution of Chartered Surveyors.

development (rather than concentrated in one place). This is believed to create diversity, a more interesting streetscape, a more inclusive environment and better integration with the rest of the scheme (RICS, 2016).

Finally, the issue of affordability is also inherently linked with the questions of the legitimacy of inheritance and wealth accumulation. Research suggests that inheritance deepens wealth inequality, particularly when it comes to home ownership (see Table 1). Also, extended life-spans of home owners delay passing on wealth and render the situation even more difficult for young adults (Bernheimer, 2014).

Table 1: Receipt of inheritance by tenure. Adapted from Rowlingson and McKay (2005).

	Received (%)	**Unweighted base**
Own outright	56	677
Own with mortgage	51	694
Private tenant	34	153
Social tenant	30	335
Living with family	25	**115**

Location

It is a popular belief that the most important factor for homebuyers is location, location, location. However, more in-depth studies demonstrate a more balanced view of people's housing choices.[18] Furthermore, the emphasis on the location of the house can be variously interpreted as it might be related to many different aspects of housing quality, e.g., local facilities (schools, shops or restaurants); the local character and the visual attractiveness of the neighbourhood; ties with local community (friends and family living in the area) or employment. Clearly, there are many possible reasons why people might want to live in a particular area, and therefore, it might be difficult to draw any meaningful conclusions from the fact that location seems to be an important factor for homebuyers.

Nevertheless, there are some general statements about people's location preferences that can be made based on existing evidence. In England there is clearly a strong preference for out-of-town and rural locations, with some studies suggesting that as many as 84% of homebuyers want to live in suburban areas (Bernheimer, 2014; Leishman *et al.*, 2004; CABE, 2005b). This might be partially explained by people's preferences for detached and semi-detached low-density housing (see ***Density and building typology***) and higher availability of this type of housing in rural areas. Also, one should

[18] According to Leishman *et al.* (2004), location was the single most important factor only for double income households with no kids and mostly non-professional occupations. The other three groups of homebuyers showed a relatively good balance between location, price, neighbourhood, property type, layout and having a garden (with property type being another factor that stood out for younger single households and couples).

not ignore the historical background of countryside aspirations in the UK, which possibly exert a powerful influence on people's perceptions.

Size and layout

Property size and layout are consistently named as one of the biggest concerns when buying a new home (Leishman *et al.*, 2004; Angle and Malam, 1998; RIBA, 2009; CABE, 2005b). Property size is a particularly relevant issue in England, where in contrast to other European countries, the new builds are considerably smaller than the existing housing stock and in fact, the trend is that *"the newer the home, the smaller it is likely to be"* (RIBA, 2009; Roberts-Hughes, 2011). As a result, property size is often one of the main aspects that discourages people from choosing a newly built house (according to CABE (2005b) 40% of second-hand homebuyers quoted a lack of space as the reason for buying from the existing housing stock).

One of the reasons for the decreasing size of new homes in England might be the general overemphasis on the number of bedrooms rather than the floor area of a dwelling (see section 3.1.1). This is true for property agents, who usually advertise their properties solely by the number of bedrooms (RIBA, 2009), but also potential homebuyers (according to CABE (2005b) the number of rooms is one of the most important factors for homebuyers). The number of bedrooms strongly influences the market price, which encourages the developers to squeeze in as many bedrooms as possible at the expense of storage and living space and with little consideration for the functionality and convenient layout. Consequently, the new properties often have very small bedrooms, small living areas, limited storage and are generally characterized by the overall shortage of space.

On the other hand, the actual space per person in England is relatively high and still growing due to decreasing household size and under-occupation of dwellings (see Figure 9 and Figure 10), possibly caused by people putting off settling down and choosing to have smaller families (Bernheimer, 2014; RIBA, 2009; Roberts-Hughes, 2011).[19] Nevertheless, as the new homes are decreasing in size, it seems that the increase in space per person is occurring mostly in the existing housing stock. Also, under-occupation is significantly lower among younger households – less than 20% among under 35-year-olds' households compared to over 50% among over 55-year-olds' households – suggesting that it might be partially caused by young adults moving out of family homes (Bernheimer, 2014).

[19] According to the "Space in New Homes" report (CABE, 2009), 90% of considered homes were under-occupied.

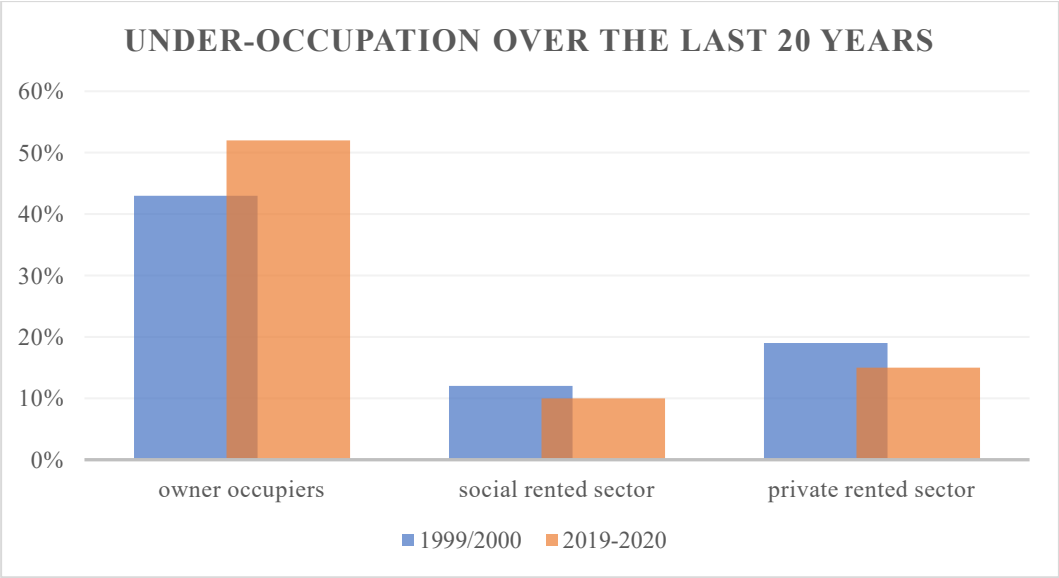


Figure 9: Under-occupation (i.e., having two or more spare bedrooms) over the last 20 years. Adapted from English Housing Survey (Ministry of Housing Communities & Local Government, 2020a).

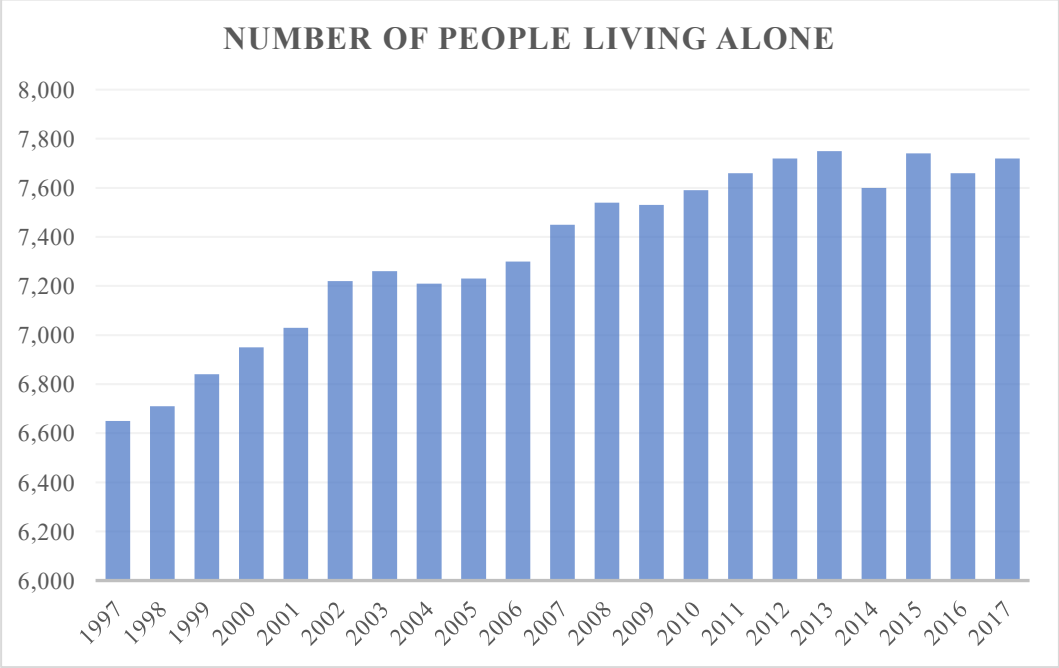


Figure 10: The number of people living alone in the UK, 1997 to 2017 (Office for National Statistics, 2019).

Adaptability and accessibility

Adaptability and accessibility are rarely mentioned by the homebuyers as a particularly important factor when choosing a new home (though there is some evidence suggesting that people favour the properties with additional roof space and basements, which can be adapted for a variety of uses (CABE, 2005b)). This might be due to the fact that first-time buyers often do not look for a home for life, but rather make their purchase in order to get on the property ladder with an intent to sell in a few years and move to a "nicer" house (RIBA, 2009). Nevertheless, with the typical building life

expectancy of 60 years and 55% of UK housing stock being pre-1965 (Anderson, Shiers and Steele, 2008), it is absolutely essential to build houses that are able to accommodate the changing needs and lifestyles of the population for years to come.

Density and building typology

Based on numerous surveys, it is clear that there is a general preference for low-density detached and semi-detached housing as homebuyers often associate higher-density schemes with limited space, lack of privacy and low security (Bernheimer, 2014; CABE, 2005b; Leishman *et al.*, 2004; Prince's Foundation for the Built Environment, 2014). This is despite the evidence against such claims, e.g. detached houses are actually the least secure type of dwelling and privacy issues can be eliminated by adequate design and construction solutions (CABE, 2005b). Furthermore, lower densities often render local services unsustainable and result in less affordable and potentially less spacious dwellings as developers struggle to render schemes profitable at current land prices (CABE, 2005b). Building at higher densities is also financially beneficial from landowners' perspective due to the additional premium that goes into land values (RIBA, 2009; Savills, 2016). This is particularly the case when high densities are achieved through intelligent design and effective use of land without compromising the size of dwellings or the quality of public realm.

Negative attitudes to higher densities might also be the result of people associating high densities with high-rise apartment blocks (which are often built with very little regard for the size or quality of dwellings), rather than with older neighbourhoods and developments such as Victorian terraces, urban villas, garden cities and garden suburbs (which are all denser than many modern estates and often extremely popular with homebuyers) (CABE, 2005a). However, the RIBA (2009) points out that such densities on newer schemes might not be easily achievable due to contemporary requirements on streets widths, streets layout, car parking, privacy and overlooking.

In terms of building typology, evidence suggests that the preferred building type might differ depending on age and life circumstances, though flats seem to be the least popular type of dwelling across all demographics. The UK Housing Review from 2017 showed that 92% of owner-occupiers live in detached, semi-detached or terraced houses, while only 8% of owner-occupiers live in flats. This is compared with 43% of social rented accommodation and 38% of private rented accommodation being flats. Based on these figures, it can be argued that buyers who decide to purchase a flat often do it as an investment (e.g., buy-to-let), while people who actually live in flats often do it because it is the only affordable option.

On the other hand, evidence suggests that for some schemes terraced houses and flats achieve higher premiums than detached and semi-detached properties, when compared with the local market prices (RICS, 2016). This shows that other factors such as high-quality design, layout and property price in particular might in the end be more important for the homebuyers than density or type of dwelling. "Tomorrow's Home" report (Bernheimer, 2014) reaches similar conclusions suggesting

that many homebuyers are forced to give up their preference for low-density rural housing and choose from more affordable options.

Finally, single-level properties, and bungalows in particular, are popular with older people and often supported by the government (CABE, 2005b).[20] The high demand for this sort of property is also reflected in the inflated prices of single-level homes, which can be up to two times more expensive than multi-level homes (Morley, 2016). In addition to meeting the needs of the aging population, building more bungalows might also encourage older people to downsize and make way for younger families. However, bungalows go against the current emphasis placed on high density.

Outdoor space

Another reason for people's adversity to higher density developments might be the demand for outdoor space (Leishman *et al.*, 2004; CABE, 2005b; Prince's Foundation for the Built Environment, 2014). There is some evidence suggesting that proximity to parks or similar public open spaces increases the property's value (Biddulph, 2007), and consequently, a RICS report (RICS, 2016) concluded that on higher density schemes developers tried to make up for smaller gardens by introducing communal open spaces on the estates. Nevertheless, many surveys show that having a private garden is one of the most important factors for homebuyers with large majority preferring a private garden over a shared communal space (RICS, 2016; CABE, 2005b; Leishman *et al.*, 2004; Angle and Malam, 1998).

Front gardens are also significant for the homebuyers as they encourage social interactions between neighbours and at the same time offer more privacy by separating private space from public space (CABE, 2005b). Front gardens also provide additional parking space, and consequently, 77% of all buyers (and 68% of those without a car) wishes to have at least 15 feet between the front of the house and the street, which is the minimum distance that allows to park a car (Angle and Malam, 1998). Also, only 1% of buyers would accept no space between the house and the street and only 20% would accept 6 feet or less (Angle and Malam, 1998).

Visual appearance

The external appearance of a house is probably the most controversial aspect of housing quality. When it comes to architectural styles, the Prince's Foundation consistently reports that people prefer traditional styles over contemporary architecture – the view which is also supported by other studies (Angle and Malam, 1998; ADAM Architecture, 2009; Prince's Foundation for the Built Environment, 2014). Consequently, projects such as Poundbury become more and more popular and increasingly

[20] Back in 2013 Planning Minister Nick Boles spoke in favour of building more bungalows and Housing Minister Brandon Lewis also expressed his support in 2015 (Lewis, 2015; Dominiczak, 2013).

sought after, which is often reflected in higher house prices of "traditional" homes.[21] On the other hand, evidence suggests that both conventional and contemporary styles can be financially successful, and therefore, architectural style does not seem to be a decisive factor in scheme's popularity (RICS, 2016). According to RICS (2016), it is more important for the scheme to be flexible and reflect the needs and preferences of local community in terms of housing mix, commercial provisions and architectural style as well.

Furthermore, the general preference for traditional styles might have little to do with the architectural style itself. A study commissioned by Create Streets (Smith, 2016) showed that people respond positively to houses with clearly defined frontages irrespectively of the actual architectural style (see also ***Safety***). Other qualities that seemed to be particularly valued were individuality, character, home-like features and variety and richness of architectural style (CABE, 2005b; Angle and Malam, 1998; Prince's Foundation for the Built Environment, 2014). Also, research suggests (RIBA, 2009) that people prefer traditionally-looking houses because they associate them with more space, better local services and facilities, better public transport and more walkable neighbourhoods, rather than they have a strong preference about the architectural style or the appearance of a house per se.[22]

However, the existing evidence on the importance of external appearance is rather inconsistent. Some studies suggest that the appearance of a house and its surroundings is one of the most, if not the most, important aspect of housing quality (Prince's Foundation for the Built Environment, 2014), while others list it as one of the least important concerns (Angle and Malam, 1998). Research also suggests that homebuyers have a certain minimum requirement for visual attractiveness of a property below which they would not make a purchase. However, once a property fulfils their minimum, the appearance of a house becomes irrelevant (Angle and Malam, 1998).[23] Furthermore, the distinction between the house itself, adjacent housing and local area makes the statistics even more difficult to disentangle. Research by Joseph Rowntree Foundation (Leishman *et al.*, 2004) suggests that the space immediately around respondents' home was more important than the neighbourhood in general. On the other hand, in the "Kerb appeal" report (Angle and Malam, 1998), external appearance of a house and adjacent buildings rated as second and third least important factors for homebuyers, while "nice area" was a top priority. However, the notion of "nice area" might just as well refer to a number of other issues such as local amenities (e.g. an area with good schools), safety

[21] Edwin Buitelaar and Frans Schilder (2018) from the Amsterdam School of Real Estate studied the new housing developments in the Netherlands and concluded that the purely neo-traditional houses achieved 15% higher selling prices than non-traditional developments.

[22] For instance, in the "Kerb appeal" survey (Angle and Malam, 1998) the single most important reason for choosing a certain design type was a perceived size of a property.

[23] This might suggest that there is a cap on additional value and marketability that can be achieved by investing in the external appearance of properties.

and traffic (e.g. an area that is free of crime and safe for families and children) or a more elusive notion of a character of place.

Character and sense of place

Research suggests that a lack of character is one of the main reasons why many prospective homebuyers prefer the existing stock over new builds (CABE, 2005b; Angle and Malam, 1998; Prince's Foundation for the Built Environment, 2014).[24] Older neighbourhoods are valued for their attractive streetscapes, sense of community and cultural reasons such as the *"British appetite for heritage or nostalgia"* (RIBA, 2009). Similarly, new builds are often considered to be bland, generic, monotonous and *"not in keeping with the character of adjacent buildings"* (Angle and Malam, 1998).[25]

However, the notion of character is not limited to historic values. The distinctive, but coherent and locally appropriate design of public realm (and houses themselves) seems to be crucial in achieving a sense of place (RICS, 2016) and is believed to be an important element of housing quality, as evidenced by the recently published National Design Guide (Ministry of Housing Communities & Local Government, 2019b). Architectural details such as the design of windows, railings, shape of roofs as well as quality of materials and high-quality landscaping are believed to enhance the character of local area (RICS, 2016; CABE, 2005b; Biddulph, 2007). This is despite the fact that landscaping is usually at the very bottom of homebuyers' priorities (Angle and Malam, 1998). Nevertheless, when presented with practical examples of housing exteriors, respondents showed a clear preference for houses surrounded by greenery or street furniture, suggesting that the quality of the public realm might play a significant role in homebuyers' decision-making (CABE, 2005b). Similarly, Biddulph (2007) suggests that incorporating trees into the public realm increases house prices and according to the "Kerb Appeal" survey (Angle and Malam, 1998), "leafy" was one of the key words used to describe ideal housing development (interestingly, this was particularly true for those living in urban and metropolitan areas).

Layout (masterplan)

Layout of a development is rarely mentioned by the homebuyers as a decisive factor when choosing a home. Nevertheless, it has huge impact on other aspects of a scheme such as security, access to local facilities and a character of the development. Following the New Urbanism principles, walkable neighbourhoods with home entrances overlooking the streets are believed to encourage social

[24] Other reasons include better local services and facilities (e.g., schools, pubs, shops), more employment opportunities and better public transport (RIBA, 2009).

[25] Research suggests that the most important elements of new build housing that should fit in with local context are architectural style, building height and materials (Angle and Malam, 1998; Prince's Foundation, 2014).

interactions, create a sense of community and are generally perceived as safer by the homebuyers (CABE, 2005b). Furthermore, adequate urban design, with permeable street pattern and street-calming measures, can mitigate traffic issues, help achieve higher densities and create more pleasant and pedestrian-friendly environments (RICS, 2016; Savills, 2016; RIBA, 2009).

According to many studies, the most popular masterplans, favoured by both developers and homebuyers, are based on the New Urbanism principles and imitate an urban form that evolved over time – with an organic layout supported by the height hierarchy of buildings and appropriate street design, both of which clearly indicate the centre of a neighbourhood and create distinctions between private and public spaces and pedestrian- and car-oriented areas (RICS, 2016; Savills, 2016). Such developments seem to be particularly popular with young adults, who value proximity to public transport and local facilities, mixed housing options and walkability (Bernheimer, 2014).

Safety

Many surveys suggest that safety is one of the most important aspects of a local area and a powerful driver behind homebuyers' choices (Angle and Malam, 1998; CABE, 2005b; CABE, 2002). For instance, in a MORI poll commissioned by CABE (2002) 59% of respondents named security against crime as a key aspect of housing design and 45% stressed safety from accidents and fires. However, a report by the RIBA (2009) suggests that concerns about crime and vandalism have been weakened and replaced by issues related to traffic and infrastructure, which are also believed to have a strong impact on the perceived safety of the area, particularly by families with children.

Furthermore, research suggests that the traditional design of the neighbourhood with houses overlooking the streets, which is commonly believed to prevent crime, is another reason for the strong preference for older properties; whereas perceived low crime levels in the out-of-town areas are the reason for the strong preference for the countryside (RIBA, 2009; CABE, 2005b).

Traffic and infrastructure

Traffic is considered one of the most relevant issues and one of the reasons why people prefer smaller neighbourhoods and lower densities (CABE, 2005b; RIBA, 2009). There is a general aspiration to reduce traffic and provide more pedestrian friendly areas (Prince's Foundation for the Built Environment, 2014; Prince's Foundation, 2020), reflected also in the government's guidance document – Manual for Streets – that emphasizes the importance of streets as places where people live and spend their time rather than just transport links (Department for Transport, 2007).

However, these aspirations can be somewhat difficult to reconcile with homebuyers' preferences for car-based living and adequate parking spaces.[26] For instance, CABE (2005b) reported

[26] According to CABE (2005b), only *"young people without families living in London, were prepared to consider public transport as an alternative to car ownership."*

that in housing schemes designed with the reduced parking standards introduced by the Planning Policy Guidance 3 (PPG3), parking was the single biggest issue with 45% of respondents complaining about that aspect of their property.[27] The limited storage also contributes to the parking issues as it often leads people to use their garages as additional storage space, further limiting the available parking space (RICS, 2016; CABE, 2005b).

Furthermore, following the Poundbury model and placemaking principles, there is a trend among developers and local authorities to provide rear parking instead of on-street parking which is believed to have unfavourable impact on the streetscape. This is unpopular with the homebuyers due to parking location further away from the house and concerns about vandalism and lack of safety (RICS, 2016; CABE, 2005b).

Infrastructure is another key element necessary for reducing traffic and providing a pedestrian friendly environment. Unfortunately, the community provisions and public transportation are often only introduced in the later stages of development, which renders the new-built estates car-dependent and makes it difficult to create long-term value (CABE, 2005b; RIBA, 2009). Also, the modern technological provisions, such as Internet connectivity, become increasingly relevant elements of infrastructure. This is due to the changing modes of employment (e.g. homeworking, self-employment) as well as increased role of social media and entertainment platforms in people's social lives and leisure activities (Bernheimer, 2014).

Flexible modes of employment, together with the emergence of economic "mega-regions", also influenced commuting patterns as daily commute is being replaced by fewer but longer trips. Consequently, sporadic access to major hubs such as London, Manchester or Birmingham becomes more important than access to local jobs (Bernheimer, 2014). Together with the decrease in car travel and the increase in train travel (Le Vine and Jones, 2012), this can mean that alternative long-distance transport infrastructure such as airports and railway lines may become increasingly important for the homebuyers.[28]

Employment

Access to employment is rarely mentioned by the homebuyers as a particularly important factor in choosing a new home, possibly due to the increased mobility and the rise of alternative modes of employment such as homeworking, self-employment and part-time work (Bernheimer, 2014). On the other hand, according to the research by the Prince's Foundation (2014), the most welcomed developments were the ones *"support[ing] 'employment' and the 'local economy' leading to*

[27] On the other hand, the same report concluded that parking, even though a source of frustration for many residents living in PPG3 housing, was not considered important by the prospective homebuyers (CABE, 2005b).

[28] CABE (2005b) reached similar conclusions based on surveys, which indicated that proximity to a main railway line was considered an asset, while local public transport was not considered that relevant.

'revitalised' district, town or village centre." However, this can be interpreted as a concern about access to local facilities (e.g., shops, cafes, restaurants) and a general preference for self-sufficient, mixed-use, mixed-economy neighbourhoods, rather than a concern about availability of jobs.

Furthermore, according to "Tomorrow's Home" (Bernheimer, 2014) homeworking makes living and working less spatially separate and *"diversif[ies] the function of residential areas"*, which might suggest that there is a need for more live/work districts, work hubs and co-working spaces to be integrated in the design of new developments (particularly as they help increase footfall necessary for the viability of other commercial facilities such as shops and restaurants). However, as Savills (2016) points out, the decision on whether to include significant employment space ultimately depends on *"the strength of the local economy, the location of the scheme, its connectivity and what is already available in the areas surrounding the development."*

Local facilities and services

Local facilities and services play a crucial role in newly built neighbourhoods and they consistently rank highly among homebuyers, especially since the rise of home-based living (Bernheimer, 2014; CABE, 2005b; RIBA, 2009; Prince's Foundation for the Built Environment, 2014). Commonly, smaller shops and independent retailers are preferred over larger centres with supermarkets, which might be linked to the general desire to reduce traffic (CABE, 2005b; Prince's Foundation for the Built Environment, 2014).

Facilities for children are extremely valued by homebuyers and schools in particular are considered the single most important local amenity (RICS, 2016; RIBA, 2009; CABE, 2005b). Schools are also valued by developers, as they attract potential buyers as well as people from outside the area. This is particularly important as commercial and leisure facilities require a certain footfall in order to become financially viable, and therefore, are often only introduced in the later stages of the development when a critical mass is reached (Savills, 2016). The lack of such provisions makes the site highly car-dependent, decreases the long-term value of a development and is considered to be one of the main reasons why people choose to buy from the existing stock (RIBA, 2009).

Research also suggests that schools drive up sales rates and prices and that *"there is a 20% house price premium around the best performing state schools"* (Savills, 2016). For instance, at Heyford Park development approximately a quarter of buyers claimed that the school was the main reason they bought their property (Savills, 2016). For these reasons, developers might be keen to provide school facilities more than other non-residential uses.

Energy performance and environmental concerns

Energy efficiency has long been a major concern for the government, but it is now becoming increasingly relevant for the homebuyers as well. According to the survey conducted for CABE, 35% of respondents named energy efficiency as one of the most important elements of the housing design

(CABE, 2002). One of the reasons for such attitudes is inevitably the direct link between energy efficiency and affordability. With the UK's housing stock being among the least energy-efficient in Europe (RIBA, 2009), more and more homebuyers realise that the energy costs have a serious impact on households' expanses and that low energy efficiency makes houses expensive to occupy. As a result, there is an increasing interest in eco- and passive houses, low energy design and alternative energy sources, particularly solar heating.

However, the environmental concerns are not limited to the energy efficiency and other sustainable solutions are more and more frequently applied to housing design, landscaping and neighbourhood planning, for instance by minimising the carbon footprint, advantageous building orientation and rainwater management. Green infrastructure is often quoted as having health and well-being benefits and adding to neighbourhood's value, but it can also significantly increase sustainability. For instance, in Upton, Northampton ponds, lakes, swales and rain gardens were incorporated into the design as part of the sustainable urban drainage systems (SUDS), which mitigates the flood risk, encourages biodiversity, and enhances the street design (RICS, 2016).

Technology and smart solutions

With new demands of home-based living, new technologies become an integral part of a modern house design (Bernheimer, 2014). As leisure and work activities move into our domestic life, new properties have to accommodate a multitude of devices and appliances such as game boxes, TVs, sound systems, computers, tablets, printers, dishwashers, washing machines and microwave ovens. While these technologies make our lives easier, they also eat up a lot of space, which (as discussed above) is already considered insufficient by most homebuyers. Consequently, additional rooms for utilities and computers are a significant advantage (CABE, 2005b). Smart solutions (e.g., smart lightning and heating, water meters, surveillance technology) are also increasingly valued for their energy efficiency and increased security. Most of these technologies rely on fast broadband connection, which becomes an increasingly important factor influencing homebuyers' choices (Bernheimer, 2014)).

Construction quality and management

The overall quality of construction is an important concern for prospective homebuyers, particularly that new-build homes are notorious for being poorly built. A YouGov survey for Shelter found that *"51% of homeowners of recent new builds in England […] experienced major problems including issues with construction, unfinished fittings and faults with utilities"* (Kollewe, 2017). The poor maintenance and management of properties and communal areas (e.g. streets, pavements, parks, gardens) further exacerbates these issues and is often the main reason why shared outdoor spaces are being underused (Bernheimer, 2014). Consequently, "built to last" and "ease of maintenance" were named as key elements of housing design by 56% and 41% respondents respectively (CABE, 2002).

Commercial value

Finally, profitability of a scheme is a fundamental concern not only for developers and landowners, who profit from the sales, but also homebuyers, for many of whom buying a house is the biggest investment of their lives (RICS, 2016). Whether they plan to sell the property in a few years or intend to live there for years to come, the promise of long-term value of a development is a powerful advantage.

Conclusions

Based on the above overview of existing literature, it is clear that homebuyers' choices are affected by many aspects of housing quality and their preferences are not particularly well-defined. Those that have been most consistently listed as top priorities include the number of bedrooms, property type, safety, having a private garden, access to local facilities, general appearance, character of the neighbourhood and price (see Figure 11). However, there are significant inconsistencies between various surveys suggesting that perhaps different groups of prospective homebuyers might have very different preferences depending on their age, family situation, background and income, and it might be difficult to make any generalised statements about homebuyers as a whole.



Figure 11: Homebuyers' priorities (marked with orange).

For instance, some studies suggest that young childless couples prefer flatted properties with no garden or shared communal space, which is in sharp contrast with the preferences expressed by older buyers with children (CABE, 2005b). Also, each of the groups identified in a JRF research (Leishman *et al.*, 2004) had slightly different priorities, e.g. couples in non-professional occupations considered the location the most important factor, while younger single households found it the least important. Research also suggests that trends differ across various age groups, e.g. the popularity of bungalows among the older population or different preferences about the degree of open-plan living (i.e. younger people seem to prefer more open-plan layouts, while families prefer a greater separation between adult and child spaces (CABE, 2005b)). Furthermore, some of the inconsistencies in the reviewed surveys result from a different respondent pool – some surveys only consider the new-build buyers or first-time buyers, which can produce very different results than when the entire population is

considered.[29]

These differences across various groups of homebuyers, together with changing lifestyles (Bernheimer, 2014) and alternative types of ownership (e.g. shared ownership), suggest that more choice and diversity among the properties available on the market is crucial for satisfying homebuyers' diverse needs. This view is often supported in the surveys – the Prince's Foundation (2014) identified "homogenisation" and "generic housing" as the most disliked characteristics of new schemes, while the "Kerb Appeal" report (Angle and Malam, 1998) suggests that most homebuyers prefer each house to have a distinctive design (within the same style).

Therefore, new-build housing should cater for all types of consumers, but also respond to local market needs in terms of affordability, architecture, tenure, building typology as well as other aspects discussed above. As argued in section 3.1.1, this is not being delivered and the housing market is dominated by a standardized product. Consequently, the housing stock in the UK is generally considered to be less diverse than in other countries (Bernheimer, 2014).

Finally, the above overview also illustrated the prevalence of new urbanist principles within the current discourse on housing quality (see section 2.1.3 for reasoning). Homebuyers' opinions seemed to correspond with many aspects of new urban approach, particularly those related to the character of new housing developments, visual appearance, layout and local facilities. However, the principle of high density was significantly less popular and conflicted with homebuyers' preferences for car-based living, ample parking provisions and having a garden.

* * *

3.2.2. Other stakeholders

In contrast to the literature on homebuyers' preferences in the UK, which is rather extensive, the existing literature on landowners', developers', architects' and planners' perspectives is limited. Therefore, other stakeholders' priorities will be further investigated as part of this research. Nevertheless, some conclusions can be drawn based on the available data, which are presented below.

Architects

Despite the lack of contemporary literature on the architects' priorities in relation to housing quality, a quick look on how architectural theory changed throughout history provides compelling evidence suggesting that historically speaking architects' concerns included size and layout, typology, outdoor space, density, affordability (particularly in a sense of social inclusion), safety, aesthetics and character.

[29] "Kerb Appeal" report (Angle and Malam, 1998) illustrates the differences in opinions between people buying from new and existing stock.

The issue of housing quality became a growing concern during the Victorian era due to growing poverty and poor living conditions of the working classes (Morris, 2001). A potential solution came from Ebenezer Howard in the form of Garden Cities, which were designed to balance the residential, industrial and agricultural uses and provide open space and greenery for their residents (Howard, 2015). Raymond Unwin and Richard Barry Parker, known for designing the first garden city in Letchworth as well as Hampstead Garden Suburb, were particularly instrumental in advancing the contemporary thinking on housing and planning. They advocated for the economic and social benefits of co-operative living and developed multiple designs with housing units and communal areas arranged around a central lawn (Parker and Unwin, 1901; Swenarton, 1989).

In "Town Planning in Practice" (1994), Unwin also argued for site-sensitive and socially inclusive development that would provide a good housing mix and aesthetic variety, while retaining a consistent style and building materials. His social principles seem to be particularly relevant today:

"*Both in town and site planning it is important to prevent the complete separation of different classes of people which is such a feature of the English modern town … There is nothing whatever in the prejudices of people to justify the covering of large areas with houses of exactly the same size and type. The growing up of suburbs occupied solely by any individual class is bad, socially, economically and aesthetically*." (Unwin, 1994, p. pp. 294)

Following the military conflicts of the early 20th century (Boer War and World War I), which further showed the extent of health issues particularly in relation to the nation's efficiency, productivity and military power (Darling, 2007), the concerns with health remained extremely prominent among architectural profession. However, modernist architects had a very different idea on how to tackle them. Fresh air, natural light and adequate space became key aspects of design to be provided by high-rise buildings with open spaces between them, a separation of vehicles and pedestrians, large windows made possible by free (non-supporting) facades and functional open-plan layout. In the UK, white pristine buildings stood out against the backdrop of dark Victorian and Georgian architecture, successfully conveying the ideals of health and modernity (Darling, 2007; Brown, 1967). At the same time, the distinctiveness of modern architecture was the reason for frequent controversies surrounding modernist houses, which were often considered an eyesore in the traditional neighbourhoods (e.g. Frognal 66 house in Hampstead designed by Connell Ward and Lucas was called "one of the greatest pieces of vandalism ever perpetuated in London" by Sir Robert Tasker (Sharp and Rendel, 2008, p. pp. 34)).

Another significant aspect of the post-war period was a growing emphasis on research and science, which were considered essential for progress in almost all disciplines. The interdisciplinary approach offered new perspectives on architecture, and anthropology was one field that had a particular impact on concerns related to housing density. The preoccupation with spatial distances in social interactions (Sommer, 1969; Goffman, 1966) and growing numbers of citizens within

metropolitan areas resulted in an almost irrational fear of overcrowding.[30] In parallel, aerial photography became commonly used in urban planning offering a detached and abstract bird's-eye view of urban developments, which, as Tanis Hinchcliffe points out, was extremely superficial and only confirmed an already strongly rooted conviction that high density is the main problem of modern cities (Higgott and Wray, 2012). As a result, architects tried to accommodate the growing population either by designing high-rise buildings with open spaces and greenery in between or advised to abandon the cities altogether (leading to equally dreaded urban sprawl).

However, post-war large-scale (re)developments quickly left people with disappointment and disillusionment, as evidenced by the increasing number of community struggles, e.g. Covent Garden and Coin Street development (Cowan, 1991; Anson, 1981), which eventually led (even modernist) architects to turn back to the traditional concepts of street and neighbourhood.[31] This change in thought is well illustrated by the horizontally-organised low-rise urban housing projects of the 1960s and 1970s, such as Alexandra Road estate or Brunswick centre (Swenarton, 2011; Swenarton, 2012; Brown, 1967). It also resulted in a more user-oriented, bottom-up approach to architectural design, evident in the writings of Jane Jacobs and William Whyte (Jacobs, 1961; Whyte and Conservation, 1980), and in the growing emphasis on public participation and community-led design (e.g. Ralph Erskine's social housing project Byker Wall (Abrams, 2003), or Walter Segal's self-build housing system (Harwood and Powers, 2012)).

During the 1980s architects also recognized that the interdependence of architecture and culture had been overlooked (Canizaro, 2007, p. 128). The critique of modernism and the seemingly universal International Style, resulted in a renewed interest in architectural regionalism – a movement that places tradition, history and sense of place at the heart of architecture and can be traced back to the 19th century (Pavlides, 2007; Pallasmaa, 2007).

There have been many different approaches to regionalism in architecture, but little consensus on what generates quality (Pavlides, 2007, p. 157). Some of those approaches include folkloric regionalism which focused on plans and typologies; ideological regionalism practiced by modernist architects who used vernacular architecture as a source of inspiration and functional solutions; experiential regionalism practiced by post-modern architects who focused on experiential qualities of vernacular architecture and emphasized well-being, social interaction and visual variety; and anthropological regionalism which focused on sociocultural factors and anthropological studies of

[30] Expressed for instance by an American anthropologist Edward T. Hall who argued that space is one of the essential needs, just as food or water, that has to be satisfied in order for people to survive, and blamed overcrowding for the pathologies within society. In his book *Hidden Dimension*, Hall describes the experiment with white Norway rats trapped in overcrowded cage, in which overpopulation leads to pathological behaviour among rats (Hall, 1990).

[31] One of the reasons for criticism of modern architecture were relatively high crime rates at many modernist estates. Though arguably, this had little to do with the architectural style itself, but rather the relation between public and private space as argued by Oscar Newman, whose idea of *defensible space* in many ways echoes the writings of Jane Jacobs (1961) and Neave Brown (1967).

a community (Pavlides, 2007). All these approaches were considered to have certain limitations, i.e., folkloric regionalism was often criticized for being a nostalgic re-creation; ideological (modernist) regionalism for ignoring qualities that do not fit with their ideology; experiential regionalism for lack of understanding of users' perceptions; and anthropological regionalism for being too time- and resources-exhaustive. Architects also saw the danger of regionalism potentially leading to superficial interventions, which is why Pavlides (2007, p. 167) considered experiential and anthropological regionalism to be of far greater value than the other two. A similar argument was made by Pallasmaa (2007) and by Lefaivre and Tzonis (2003). Pallasmaa differentiated between a situational or culture-specific regionalism and architecture based purely on geographic or ethnographic connotations. He argued that a sense of place cannot be achieved by simply adding on the surface of design, and that without continuity of an authentic tradition, the use of historical motifs and regional materials leads to little more than "sentimental provincialism". Similarly, Lefaivre and Tzonis advocated for *critical* regionalism – a bottom-up approach that *"recognizes the identity of a physical, social and cultural situation, rather than mindlessly imposing narcissistic formulas from top down"*.

Current debates are dominated by similar issues as those illustrated by the above historical overview, although technological advances and a growing environmental agenda have led to a greater emphasis on sustainability and energy efficiency (e.g. low-energy and passive houses). The importance of community-led design and affordable housing seems to be the driving factor behind many contemporary schemes (e.g. LILAC development in Leeds), while the New Urbanism principles (see section 2.1.3) encapsulate the ideals of community, walkability and social mix promoted by the likes of Jane Jacobs, William Whyte, Neave Brown, or even Raymond Unwin and Richard Barry Parker. The aesthetic considerations remain important, and as always, there seems to be a certain amount of controversy surrounding that aspect of housing.

What is more troubling, however, is that there is evidence suggesting that architects' preferences often go against what most people like and want – an argument also made by Léon Krier (1998, p. 21) who believed that growing public demand for community engagement and public participation was a direct result of the failures of the architectural profession (and modernist and brutalist architecture in particular). Interestingly, a study from the 1980s (Julean, 2016), which asked the participants to judge the beauty of the built environment, found that all the respondents had very similar views except for architecture students. Moreover, the longer someone studied architecture the more evident this disparity became. More recently, a study commissioned by Create Streets (Smith, 2016) showed that based on photographs of different schemes shown to the respondents, the two least popular ones actually won architectural awards. Create Streets goes as far as to suggest that *"architectural awards are a good indicator of popularity – but only if you invert them"* (Smith, 2016).

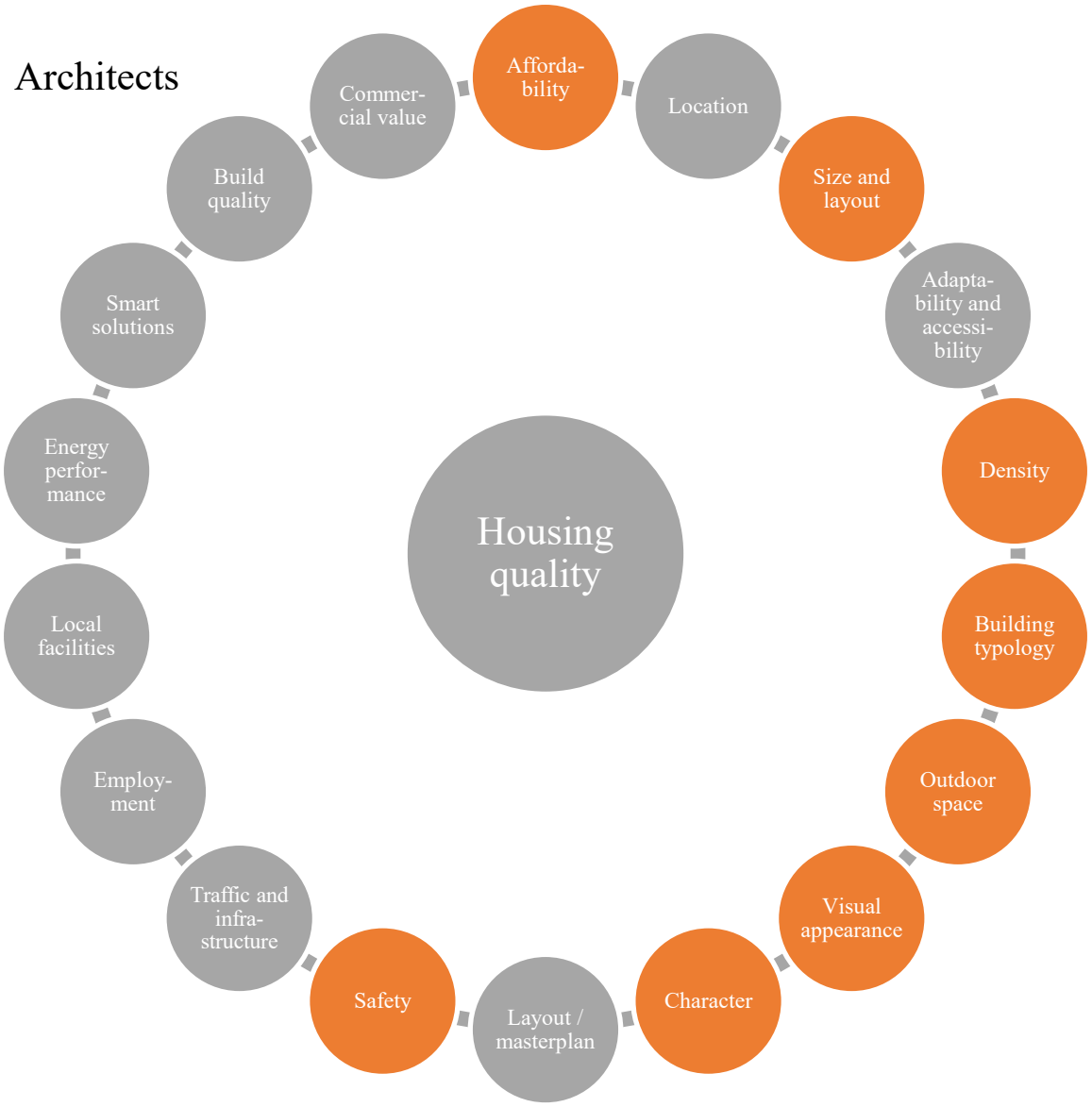


Figure 12: Architects' priorities based on historical evidence (marked with orange).

Landowners

There is little evidence on landowners' perceptions of what constitutes good housing quality. Some conclusions can be drawn based on contemporary legacy schemes, which tend to reflect the landowner's idea of what constitutes good housing quality. As discussed in section 2.1.3, many landowners are likely to share the Prince of Wales's appreciation for traditional architecture and new urbanist principles. Based on landowners' concerns about their reputation and status, they may take a slightly superficial view of housing quality, focusing mostly on the building facades and whether the development "looks good" (Aslet, 2017).

Also, some studies suggest that private landowners have wider and often more philanthropic objectives than volume housebuilders and often aspire to benefit a local community and preserve the local character (Walker, 2016; Prince's Foundation for Building Community, 2016). And while industry reports often leave these claims unsubstantiated, a historical overview of landed estates

provides evidence for landowners' philanthropic, if slightly paternalistic, housing interventions (Robinson, 1988). Therefore, larger landowners might emphasise the importance of local facilities, access to employment and affordability as they affect the sustainability of landed estates and the ideal of "countryside living".

Finally, it should be kept in mind that the profitability of a scheme is in all likeliness one of the landowners' concerns. Consequently, landowners are expected to share many of the developers' priorities, e.g., a preference for higher densities, but also to focus on the long-term investments in higher quality, which could increase land value over time.



Figure 13: Landowners' priorities (marked with orange).

Developers

Developers, as listed companies with responsibilities towards their shareholders, focus on maximising profits and are unlikely to invest in higher quality unless they are convinced it will bring higher returns (RIBA, 2009). Therefore, it is crucial to continue to demonstrate that higher quality

can be financially beneficial.

As mentioned above, developers are already aware of financial advantages of providing school facilities as part of the scheme, and therefore, are likely to prioritize them over other non-residential uses (RICS, 2016). Also, due to high land values, additional premiums on neo-traditional architecture and the way that mortgage valuations and viability appraisals work, developers generally prefer high density schemes with traditional design, where the number of bedrooms is prioritized over the actual size of a house.

However, the most important aspects of housing quality from developers' perspective are probably the location of the scheme and housing mix. As mentioned above, due to characteristics of the housing market developers compete more for the site than the product, and therefore, securing an attractive location with a strong local housing market is key in insuring the marketability of the scheme (RICS, 2016). Similarly, providing appropriate housing types that correspond with local market need is essential to achieve higher premiums and the evidence suggests that smaller properties are more likely to accomplish that (RICS, 2016).[32]

In terms of design itself, research suggests that developers *"do not believe [it] has much of an effect on prices or sales rates"* (RIBA, 2009). The main issue here is that developers have no long-term stake in land. There is evidence suggesting that investments in higher quality and placemaking increase the value of the scheme (RICS, 2016; Savills, 2016; Prince's Foundation for the Built Environment, 2007; Knight Frank, 2020), however, the resulting added value only appears over time when the developer has already moved on to the next project. Consequently, the profits go either to the homeowner or the landowner through the increased land value (RIBA, 2009). This means that developers have no financial incentive to take a longer-term view and invest in higher quality, which has particularly severe consequences on the quality of construction and often defines the quality of the entire scheme – without a proper execution even the best designs result in a poor-quality end product.

[32] Larger properties can only be afforded by more affluent buyers, who often prefer the existing stock over the new-build developments (RICS, 2016).



Figure 14: Developers' priorities (marked with orange).

Planning authorities and policymakers

The main priorities for planning authorities are represented in the planning policy including the National Planning Policy Framework (NPPF) and earlier planning policy guidance (PPG) and statements (PPS), which again in many ways reflect the new urbanist principles e.g., high density and mixed-use developments (as already mentioned in section 2.1.3). Based on these documents, planning authorities are expected to place emphasis on affordability, infrastructure, local facilities, public transport, reducing car use, encouraging cycling and walking, sustainability and protection of the natural environment (see Figure 15).



Figure 15: Planning authorities' priorities (marked with orange).

The design itself used to be one of the priorities for local authorities, expressed in PPS 1, which identified design as one of the key issues, and PPS 3, which stressed the importance of *"high quality housing that is well-designed and built to a high standard."* The particular importance was placed on being sensitive to the local context and respecting the scale and character of a surrounding area, which had to be demonstrated in design and access statements. However, the RIBA (2009) suggested that planning authorities often lacked the confidence to reject planning permissions purely on a design basis and that this part of planning policy needed further clarification. Back in 2017, in the spirit of increasing the certainty of the planning system, the housing white paper (Department for Communities and Local Government, 2017) shifted this responsibility away from councillors by stating that design alone should not be a reason to object to a development as long as it conforms with regulations specified in statutory plans. However, this was met with significant criticism from the industry professionals (Weir, 2017) and the more recent 4B Commission's report strongly argued that the planning system needs to be able to refuse planning permissions based on design alone, i.e. *"for being too ugly"* (Building Better Building Beautiful Commission, 2020, p. 2). Correspondingly,

one of its recommendations was that *"[b]eauty and placemaking should be strategic and cross-cutting themes"* that are set out in the NPPF as well as other government strategies (Building Better Building Beautiful Commission, 2020, p. 55).

Finally, planning authorities are also more likely to promote public participation and community engagement as these concerns are reflected in the Localism Act.

3.3. SUMMARY

This chapter provided a brief overview of the development process and the concept of housing quality – the many obstacles that might impede legacy schemes' aspirations (and indeed any sort of investment in higher housing quality), methods of development and quality control used by different stakeholders and stakeholders' understanding of housing quality. In doing so it illustrated that:

1. *Excessive amount of building and planning regulations drives the quality down.*

The extremely complex and slow planning system is one of the main barriers to both higher housing quality and landowners' involvement. The excessive amount of building and planning regulations, combined with emphasis on delivery targets, ties stakeholders to rigid templates, leaving no room for creativity and innovation, and consequently, resulting in a standardized and repetitive product. The effectiveness of housing standards and indicators is somewhat questionable as well, though they do seem to eliminate the worst examples of poor quality housing.

The popular belief today is that placing the responsibility of ensuring a satisfactory level of housing quality solely on statutory plans and regulations might not be the best solution and planning officers should have more control over the process, e.g. they should be able to refuse planning permissions based purely on design quality. However, this could potentially make the planning process even more unpredictable and thus more resource-exhaustive.

2. *Housing market is dominated by a standardized product and more choice and diversity is crucial for satisfying homebuyers' needs.*

The housing stock in the UK is generally considered to be less diverse than in other countries (Bernheimer, 2014) and the emphasis on number of bedrooms above other aspects of housing quality further contributes to that. While inconsistencies in the existing literature make it difficult to make any generalised statements about homebuyers as a whole, they also suggest that homebuyers might have very different preferences depending on their age, family situation, background and income. Also, "homogenisation" and "generic housing" were identified as the most disliked characteristics of new schemes (Prince's Foundation for the Built Environment, 2014). Therefore, it seems undeniable that more diverse and locally appropriate housing is needed if it is to suit the often-contradictory needs of homebuyers.

3. *Within the current system it is extremely difficult to capture the added value of "good" design.*

Viability studies and mortgage valuations are based predominantly on number of bedrooms and do not take into account the added value of "good" design. Therefore, in order to increase profits,

developers lower the build costs and squeeze in as many bedrooms as possible, rather than invest in housing quality. This is particularly problematic for legacy schemes, which often use the "good design pays off" argument as a selling point. And while the evidence suggests that a premium of 15% is achievable and sufficient to offset additional costs, this has proven to be challenging particularly for schemes in low-value areas and schemes with innovative and bespoke designs where additional costs are higher (Knight Frank, 2020).

4. *Developers have little incentive to deliver a better product.*

Studies suggest that developers are willing to invest in higher quality if they believe it will be financially beneficial – they are often keen to build schools as part of a development as they drive up sales prices. However, shortage of housing, combined with high home-owning aspirations and a reduction in occupancy, leads to a seller's market where anything will sell, giving housebuilders no incentive to invest in higher quality. Also, high land values make developers compete over the site rather than the product, i.e. they try to lower the costs in order to provide the highest bid. The added value of "good" design is not only hard to capture, but also benefits the landowners more than developers, who have shorter investment time horizon and move on once their phases of development are completed.

5. *A long-term view of housing delivery is crucial but difficult to achieve within the confines of the planning system.*

Land allocation process based on a 5-year land supply creates too short of a timeframe for a sustainable development and lack of funding for early infrastructure and facilities only exacerbates this issue. Tax law further discourages landowners to take a long-term approach as it is more tax efficient to sell the land in bigger blocks.

It was suggested that arrangements such as Joint Venture and Agreement for Lease, which defer the transfer of land until each phase of a development is completed, offset the initial costs associated with the land and improve the project's overall viability (Knight Frank, 2020). They also encourage a long-term partnership between landowners and housebuilders, which aligns their investment time horizons.

A long-term value of a scheme is an important concern not only for landowners, but homebuyers as well, for many of whom buying a house is the biggest investment of their lives and the promise of a long-term value of a development is a powerful advantage (RICS, 2016).

6. *One of the main concerns for landowners and their legacy schemes is the issue of control over the development process.*

Having in mind different stakeholders' agenda and the complexities of the planning system,

ensuring that their agenda is realised is one of landowners' main concerns. There are two main approaches widely used on legacy schemes to ensure that the landowner stays in control of the development process – securing a favourable land deal with a developer and including design codes in the legal agreements. Design codes, combined with restrictive covenants, are particularly popular among landowners as they set the tone for the development and help to maintain their vision over time.

7. Design codes are an effective way of increasing housing quality.

According to RICS (2016), design codes provide developers with an alternative *"path of least resistance"* and prove to be successful in increasing housing quality and speeding up the planning process (CABE and Department for Communities and Local Government, 2006). Planning authorities are also encouraged to use design codes, however, as the RIBA (2009) points out local authorities are unlikely to have the capacity to engage in preparing design codes. Instead, it was suggested that perhaps developers and architects are better suited to pick up this task in return for a simplified and quicker process of obtaining a planning permission. This would also give architects the opportunity to play a more active role in the delivery of mass market housing (RIBA, 2009).

8. The concept of housing quality is extremely complex and subjective.

There are many aspects of housing quality, which makes it difficult to quantify and control. These aspects are all interrelated and influence each other – e.g., higher quality materials increase the house price and energy-efficient design has an impact on the appearance of a house, and therefore, improving just one of them does not necessarily lead to a higher quality product.

Also, different stakeholders are likely to have different understandings of what constitutes "good" housing quality and prioritise different aspects of housing quality. However, it seems that there is a certain consensus among the industry as a whole and many of the new urbanist principles, such as mixed use, high density, good social mix and well-designed public realm, have been widely accepted by policy makers, planning authorities, architects, landowners and to a certain extent homebuyers.

9. The importance of architectural style has been largely overstated.

Even though the question of modern vs. traditional style often dominated the discourse on housing quality, evidence suggests that it is not a decisive factor in scheme's popularity and other aspects such as character, walkability, housing mix, commercial provisions and local facilities are more important (CABE, 2005b; Angle and Malam, 1998; Prince's Foundation for the Built Environment, 2014; RIBA, 2009; RICS, 2016).

Furthermore, the general preference for traditional styles might have more to do with clearly

defined frontages and buildings' relation to the street than the architectural style itself (Smith, 2016). This is important in the context of contemporary legacy schemes, which often adhere to traditional architectural style, advocated by the Prince of Wales and the Prince's Foundation on the basis that it is more popular. Landowners' focus on architectural style might also be symptomatic of a slightly superficial view of housing quality and overemphasis on the visual appearance of the development (Aslet, 2017).

4

METHODOLOGY

This chapter describes the methodological approach of this research, starting with the philosophical stance, the literature review and the conceptual framework. The chapter continues by describing the rationale behind the selection of case studies and the methods for data collection and data analysis.

Throughout this research, efforts have been made to achieve all types of triangulation – triangulation of measures, observers, theory and method (Neuman, 2014, pp. 165-167). Triangulation of measures is achieved by defining housing quality in relation to numerous aspects and indicators. Triangulation of observers is achieved by interviewing various stakeholders including not only landowners, but also developers, architects, planners and local residents. Triangulation of theory is achieved by using various motivation theories in order to analyse stakeholders' decision-making process and various architectural theories in order to identify the elements of housing quality (e.g., regionalism, new urbanism, sustainability, public participation). Triangulation of method is achieved by using both qualitative (interviews, observations) and quantitative approaches (questionnaire, statistical data), and by collecting the data using oral (interviews), visual (photographs) and textual methods (literature review, planning documentation).

4.1. THE PHILOSOPHY OF RESEARCH

This research focuses on the area of knowledge where the concepts of legacy, housing quality and land ownership overlap. For this purpose, the idea of some kind of independent reality seemed necessary from a practical point of view. However, purely positivist stance was considered inappropriate to investigate such an abstract concept as legacy, which is abstract both in the sense of vague and the sense of precise, as explained by Sayer (1992, pp. 85-96). Vague because the concept of legacy is considered to be a subjective and personal issue, often with multiple definitions. Precise because in this research legacy is conceptualized as a particular motive contributing to specific behaviour patterns that characterize a certain group of people.

As a result, this research follows the principles of critical realism as it allows to "*'abstract' from particular conditions, excluding those which have no significant effect in order to focus on those which do*" (Sayer, 1992, p. 86). In relation to the nature of reality, critical realism compensates for the limitations of positivism (identified with empiricism) and interpretivism (associated with the philosophy of idealism) (Bryman, 2001, pp. 5-16; Seale, 2004, pp. 34-37). Empiricism recognizes only the top empirical level of reality seeing world as a surface, and therefore, providing only a superficial explanation of complex social phenomena based more on assumptions derived from statistical regularities rather than deeper understanding of underlying processes. Idealist position provides a more complex view of the world as a structure rather than surface by recognizing empirical and actual levels of reality. However, according to this philosophy reality exists only in people's minds and therefore is always relative. Critical realism, on the other hand, offers a desirable compromise between idealism and empiricism by introducing the third real/deep level of reality consisting of objects of knowledge that according to Bhaskar (2008, p. 15) "*are neither phenomena (empiricism) nor human constructs imposed upon the phenomena (idealism), but real structures which endure and operate independently of our knowledge, our experience and the conditions which allow us access to them.*" (Smith, 1998, pp. 297-307).

The critical realist approach also recognizes the importance of language, discourse and culture by acknowledging the complexities of the subject-object relationship and the social structures in general (Smith, 1998, pp. 297-307). However, this poses a challenge in finding the right balance between "structure" and "agency". In Roy Bhaskar's transformational model of social activity, social structures constrain or enable certain actions but at the same time they are constantly reproduced by human agency (Bhaskar, 1998, pp. 206-257). Therefore, it is necessary to recognize the coexistence and interdependent relation of both. In case of this research, this means it has to be acknowledged that the understanding of such concepts as legacy and quality and related processes and social structures are in constant flux. At the same time realists suggest that, despite undergoing certain transformations, some social structures can be extremely enduring and difficult to change (Archer, 1998; Bhaskar, 2008; Lawson, 1998; Sayer, 1992); and therefore "*we should recognize the legacy of*

the past in shaping our present concerns and desires" (Smith, 1998, p. 305). For these reasons, critical realism provides a practical and workable understanding of reality that can be empirically studied and verified but at the same time is open to interpretation and allows to see the considered concepts in their social and historical contexts.

4.2. LITERATURE REVIEW

The literature review focused on the two main subjects of this PhD thesis – the concept of legacy and the concept of housing quality – and was mostly based on secondary sources such as books, articles and other publications. One of the main objectives of this research was to demonstrate that the drive to leave a lasting legacy affects decision-making, and therefore, has an impact on the quality of legacy schemes. Literature review and case studies approach were considered the most appropriate methods to achieve this objective.

The concept of legacy was reviewed in relation to different academic fields including economics and law, which provided insights on the role of legacy in wealth accumulation; psychology, which provided insights on the role of legacy in human motivation; and finally, architecture and built environment, which focused on the role of legacy in housing developments. This demonstrated that legacy motive can manifest itself architecturally (section 2.1.2 and 2.1.3), while various theories in the field of psychology and human motivation provided a framework to interpret people's motives and decision-making process (section 2.2).

The second part of the literature review focused on the concept of housing quality. Based on existing literature, different aspects of housing quality were identified, which provided the basis for evaluating the quality of selected housing schemes and analysing the different understandings of housing quality, i.e., which aspects of housing quality are important to different stakeholders.

The issues identified through literature review were further investigated through interviews and questionnaires conducted as part of the case study approach.

4.3. CONCEPTUAL FRAMEWORK

The conceptual framework of this research (Figure 16) captures the main aspects of decision-making process discussed in section 2.2 and the relationship between various stakeholders. It illustrates that motives, identity and cognition (e.g., legacy motive, personal and collective values, understanding of housing quality) affect stakeholders' behaviour and have impact on legacy projects.

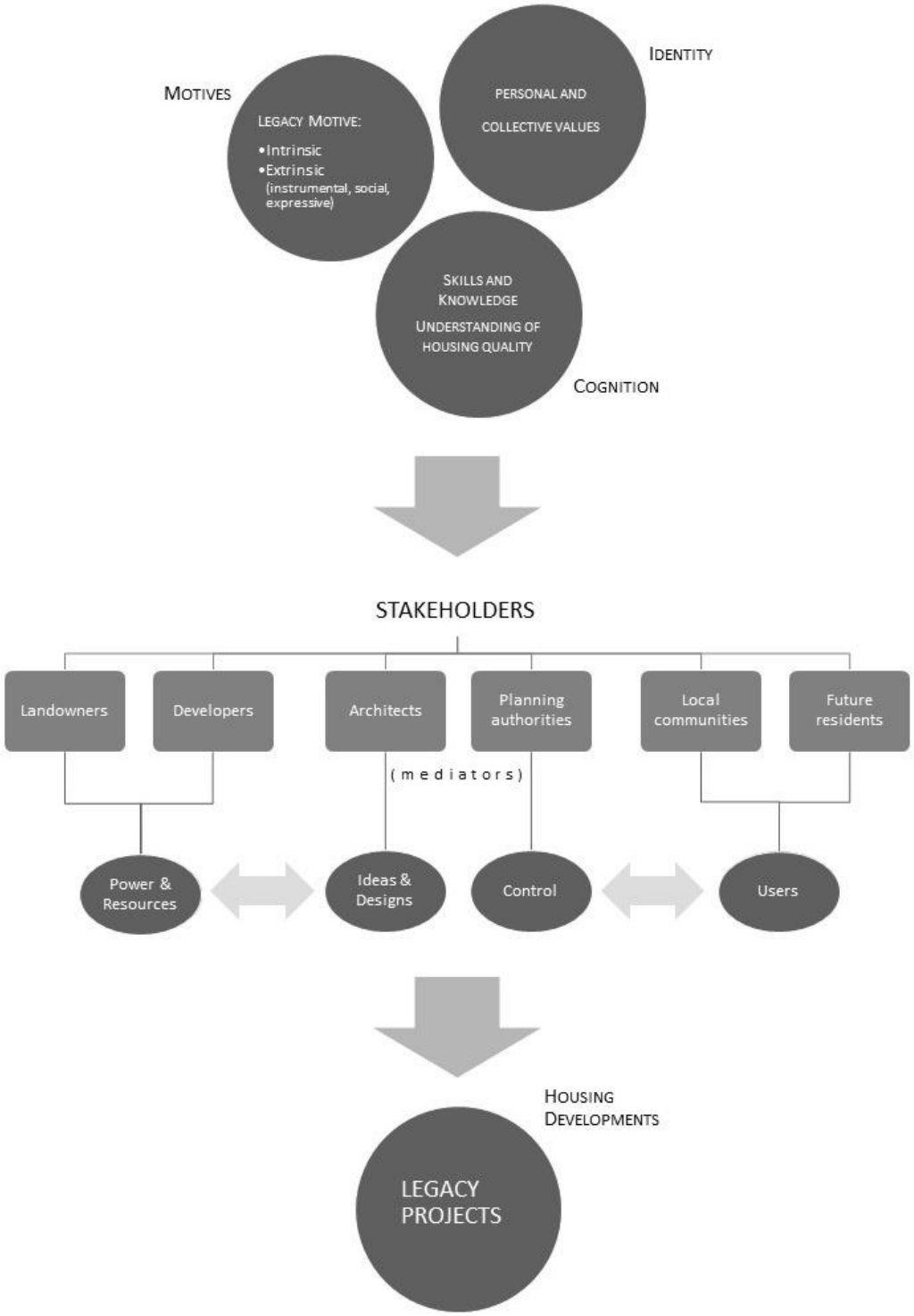


Figure 16: The conceptual framework for this research.

In principle, this conceptual framework bears some similarities with Burton's approach (2004),

in which he argues that in order to provide a reliable behavioural study one has to take into account the impact of perceived social norms, perceived behavioural control and identity (all of which are captured within the conceptual framework). The concept of perceived behavioural control, according to which lack of control over the outcome weakens one's motivation (Ajzen, 1991), is present in many motivation theories (e.g. Bandura's (1997) self-efficacy theory, Vroom's (1982) expectancy model) and seems particularly relevant in case of housing developments as they require specific skills and knowledge and co-operation with other stakeholders. Its impact was further investigated through the case studies.

Following Burton's suggestions, this research sought to:

- identify subjective norms relevant to participants;
- identify factors that facilitate and restrain control over development process and assess their impact; and
- identify social groups with which participants identify themselves and assess how salient these identities are within their self-concept.

Such an approach also addresses some of the common criticisms of interview-based research such as being individualistic and idealistic, and ignoring the social context of human interactions and experience (Kvale, 1996, p. 292).

4.4. SELECTING THE CASE STUDIES

Following the literature review and the development of conceptual framework, three contemporary housing projects were selected as case studies, according to the criteria discussed below that would ensure feasibility and comparable characteristics.

First, it was decided that at least two of the case studies should be comparable in size and commercial success (schemes around 500 units were considered big enough to minimalize the margin of error, yet still feasible to investigate within the given timeframe), but preferably different in terms of aesthetics and architectural design. Based on accessibility of data and willingness of landowners and other stakeholders to get involved, the following schemes were selected: Tadley Acres (also known as Field Farm) in Shepton Mallet, which was built on a site owned by the Vagg family and the Duchy of Cornwall, and Newhall in Harlow, which was built on land owned by the Moen brothers.[33]

Next, it was decided that the remaining case study should be an affordable housing scheme on a Rural Exception Site (RES). Even though this kind of projects are by nature very different from the commercial schemes, it was believed that they might provide valuable insights on the role of legacy due to particular circumstances under which land is made available in these projects. A small-scale scheme in Burwell, Cambridgeshire developed by Hastoe Housing Association was selected due to the long-term nature of the project (first phase began in the mid '90s) and stakeholders' willingness to participate in this research. Also, this case study was investigated first in order to allow the researcher to test the methodology on a smaller and less complex scheme and refine it before moving on to the other two case studies.

Each of these case studies was analysed in relation to the quality of the development and the role of legacy in the development process, using both qualitative and quantitative methods. Also, the relationships between various stakeholders were investigated with the intention to identify the opportunities for better collaboration between landowners, developers, architects, planning authorities and local communities.

[33] Tadley Acres was suggested as a case study by ADAM Architecture, who worked on the scheme with the Duchy of Cornwall. They were keen to have this scheme investigated as out of many housing developments they worked on with the Duchy, this project was particularly challenging and its success questionable. They expressed a hope that the analysis would uncover what went wrong at Tadley Acres and whether it could have been avoided.

4.5. DATA COLLECTION

Methods used to collect the data included desk-based research, site visits, semi-structured interviews with stakeholders and questionnaires for residents.

* * *

4.5.1. Desk-based research

The analysis of each of the case studies begun with desk-based research that included Land Registry data, Office for National Statistics (ONS) data, newspapers and online articles, maps and architectural drawings, and any other documentation relevant to each scheme. Geographical data was obtained from the Digimap online services.

The Land Registry data and Land Insight platform were used in order to analyse the house prices based on type of property and number of bedrooms, which were then compared with the average prices in the surrounding area. Both initial sales and re-sale values were taken into consideration.[34]

It was also acknowledged that the data on building costs and profits is confidential and might not be possible to obtain. Therefore, this research does not provide evidence on the economic aspects of housing developments, but rather uses basic financial analysis in order to compare the commercial success of selected projects and to explore the relation between commercial values and different elements of housing quality (e.g., size and layout, open space, aesthetics and landscaping, local facilities). At the same time, it was recognized that this relation could be somewhat intuitive and subjective.

The desk-based research was further supported by site visits and interviews with key stakeholders, and later on by a questionnaire with residents and follow-up interviews.

* * *

4.5.2. Interviews

For each of the case studies, semi-structured tape-recorded interviews were conducted with the key stakeholders from the following groups: landowners, developers, architects and planning authorities. The ‘snowball’ sampling was also applied – e.g., after talking to the key stakeholders, other people were identified and included in the sample. Three to six residents from each housing estate were also interviewed.

The main topics discussed during the interviews included interviewees’ understanding of the

[34] This part of analysis was not applied to the affordable housing scheme in Burwell, which was not a commercial project, and therefore the properties are owned and managed by the Hastoe Housing Association.

concepts of legacy and housing quality and their motives and experiences in housing development. The exact questions were developed based on the conceptual framework and information gathered from the literature review. The data collected from the interviews was also provided insights on other subjects, which were not necessarily explicit in the interview questions but emerged during the analysis. See **Appendix B** for the list of issues that were addressed during the interviews.

The interviews were designed to last 45-60 minutes. The questions were grouped into five categories: personal information, motives, quality, legacy and closing remarks. More specific questions were scheduled at the beginning of each category in order to get the interviewee talking and give them time to gather their thoughts before moving on to some more general and abstract questions, e.g. *"How would you define housing quality?"* or *"How would you define legacy?"*, which at first might be difficult to address. More sensitive questions, e.g., concerning political affiliations, were moved to the very end as it was expected that some interviewees might consider them too personal.

The questions were designed to focus on interviewees' intentions and particular events rather than opinions, for example:

Are you planning to make a will?
What would encourage your involvement in a housing development?
What were the main obstacles for your involvement in this particular project?

instead of:

How important the issues of inheritance are for you?
What do you think are the main obstacles to higher housing quality?

Such an approach required the interviewees to explain situations to the researcher rather than address some abstract issues, which encouraged more detailed and insightful answers. It also prevented the interviewees from providing false answers just because they considered them generally acceptable or expected from them.

The interview guides were designed so that to avoid overly leading questions. However, sometimes leading questions can be used to gather more insightful and detailed information (Kvale, 1996, p. 158) (Russell, 2013; Kvale, 1996), and therefore, it was accepted that they might be helpful for the purpose of this research, especially if used as probing questions or in case of particularly uncooperative or reserved interviewees. Moreover, it was believed that leading questions would not reduce the reliability of the interviews with the key stakeholders as these participants were relatively powerful, intelligent, knowledgeable and not easily suggestible. It was also expected that the interviewee's immediate reaction to a leading question might be as revealing as the answer itself. Finally, Kvale (1996, p. 159) suggests that the reluctance to use leading questions in interviews stems from empirical approach to research, however, in line with the philosophical stance of this study, it

was accepted that the interviewer inevitably plays a part in coproducing the knowledge (with or without the use of leading questions).

Finally, the guides were memorized by the researcher in order to allow the interviewer to focus on the respondents and *"listen for what's left out"* (Russell, 2013).

* * *

4.5.3. Questionnaire

There were several methods considered for investigating landowners' motivations and the role that the legacy motive plays in decision-making process, including large-scale online and postal surveys. Even though survey methods are often used in behavioural studies due to their simplicity and repeatability, they have often proven to be ineffective in studying human behaviour and attitudes either due to respondents' failure to understand the question, multiple interpretations of the question, conscious or subconscious refusal to respond truthfully, lack of interest and attention, incapability to objectively judge one's attitudes, and low response rates (Brown, 2001, p. 77; Wolf, 2016, pp. 409-424, 613-629; Brace, 2004, pp. 13-22). Also, they are rooted in a positivist approach, which was considered inappropriate for the purpose of this research, and it is generally recognized that they tend to be deductive and over-simplistic (Kings and Ilbery, 2010; Burton, 2004). Finally, it might have been difficult to achieve reliable results as some types of landowners are more likely to participate than others, which produces biased results (for instance socially inclined landowners versus absentee owners).

The difficulties discussed above were expected to be even more evident in case of such an abstract and personal concept as legacy as the standardized format of survey questions oversimplifies complex issues and makes it difficult to provide meaningful answers to complicated problems (Wolf, 2016, pp. 59, 613-617). Consequently, collecting and interpreting data on human motives poses many challenges as illustrated by the empirical studies on bequest motives, which often lead to unreliable results and contradictory conclusions (Arrondel, Masson and Pestieau, 1997). This might also suggest a certain lack of objectivity among academics confirming that the issues of legacy and inheritance are deeply personal and emotional.

In order to overcome the difficulties and flaws of questionnaire-based methodology, Burton (2004) suggests an approach based on Ajzen's theory of planned behaviour that allows to view the respondents' in their social contexts. However, this approach was also considered too positivistic and over-relying on quantitative methods. Furthermore, it would require a pilot study, focus groups, large respondent sample and ethnographic study (Burton, 2004), which were considered unrealistic to achieve within the workload and timeframe of this project. As a result, it was decided that a household survey combined with follow-up interviews would produce the most reliable results.

Administration of the questionnaire

In each of the case studies, the residents living on the selected housing estates were invited to take part in a questionnaire concerning how they perceive the quality of their estate and their priorities when choosing a home.[35] Administration of the questionnaire was believed to be crucial in ensuring adequate response rates. Therefore, it had been decided to administer the questionnaire in person as impersonal methods (such as online or mailed questionnaires) are believed to have low return rates (Brown, 2001). Also, distribution by mail would incur additional costs of envelopes and post stamps without any guarantee of generating a higher response rate.

The questionnaire was distributed through mail slots and mailboxes together with the information sheet and a brochure explaining the purpose of the research and the character of their involvement. The questionnaire specified the date (within 3-4 days) when the researcher was going to come back to collect it (giving participants the option to leave it outside under the doormat). The researcher then walked through the housing estates collecting the questionnaire and answering any questions that residents might have had concerning their participation or the research itself. If necessary, the investigator made more than one visit. In order to ensure that this method was not too intruding, the researcher rigorously recorded the households that have already participated, or refused to participate, and did not bother those residents again.

This approach generated response rates above 25%, which was considered satisfactory. Also, as shown on Figure 17 there was a striking difference in response rates depending on whether the researcher had the opportunity to talk to the participants in person (response rates at almost 32%) or only delivered the questionnaire through a mail slot (response rates at almost 18%). This confirmed that administering the questionnaire in person has a positive impact on people's participation.

[35] Multiple responses from one household were allowed. Every effort was made to have both genders and different age groups represented in the sample. All the participants were 18 or older.

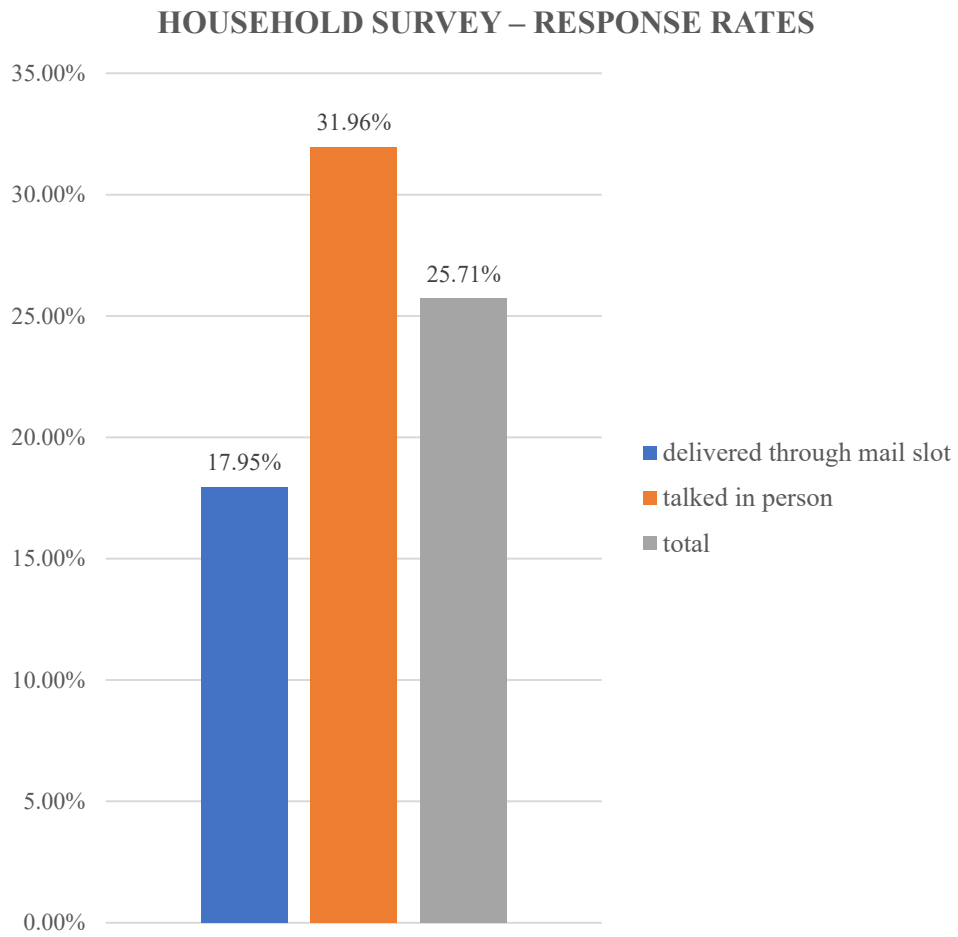


Figure 17: Household survey – response rates.

Design of the questionnaire

The questionnaire form begun with a short introduction that summarized the purpose of the research. The questions were determined based on the existing literature on housing quality and homebuyers' preferences. Issues that were addressed in the questionnaire are presented in Table 2. The residents were also asked some personal details, such as their gender, age, size of a household and income.[36]

[36] These personal characteristics were used to identify differences between various demographic, social and economic groups and their perceptions of quality.

Table 2: Issues to be addressed in the questionnaire and main question focus.

Issues:	**Question focus:**
Understanding of housing quality	Which aspects of housing quality the respondent finds most important?
Perceived quality of the housing scheme	Perceived overall quality (property itself, neighbourhood) General impressions
Health and well-being	Safety Size and layout Adaptability and accessibility Density Traffic Estate management Environmental issues Technology / smart solutions Fresh air
Social life and local amenities	Local facilities and services Public realm (walkability, open space) Community engagement (community groups) Social inclusion (affordability) Employment Location Traffic and infrastructure
Aesthetics and visual impact	Architectural design and style Quality of materials Character and local identity Building codes (if any)
Dwelling details	Building type Tenure Size (in square feet) Number of bedrooms Bills
Conceptualization of housing scheme as a legacy project	Respondent's knowledge on the scheme and the stakeholders Purchase motives (first home, downsizing, investment, financial security, children's security) Expected length of residence (for life, temporary, etc.)

Occupancy	Household size (number of children)
	Tenure
	Household income
Personal characteristics	Age and gender
	Marital status
	Respondent's occupation
	Respondent's education

After specifying the focus of the questions, the appropriate question types were selected. Every effort had been made to use simple and concise language, clear and legible layout and as few question types as possible. Likert scales were used in order to generate rated responses, which were considered less confusing and easier to discriminate between than ranked responses. Most numerical questions were left open (e.g., age, household size) in order to increase precision, except for questions that might be considered difficult or sensitive (e.g., income), in which case appropriate bands were used. Though it was generally believed to be a good practice to leave non-numerical questions closed, there are several that have been purposefully left open in order to give the respondents a possibility to provide answers that the researcher might not have anticipated. These usually preceded a closed question on the same issue so that generated responses were more spontaneous and uninfluenced by the suggested closed options. The closed questions generated data that was easier to analyse and interpret using quantitative methods. Multiple choice, 'Yes' / 'No' and negative questions were generally avoided. The "don't know" option was provided where appropriate.

The sequence of the questions was determined so that the questions are grouped thematically into several categories and follow a logical order. Questions about personal characteristics were moved towards the end as they might have been considered sensitive, and therefore, the respondents were more likely to provide answers when they were already committed to filling out the questionnaire. This also allowed to begin the questionnaire with more interesting questions, which would hopefully attract respondents' attention.

At the end of the form, the respondents were asked to participate in the follow-up interview and from those that agreed between 3 and 6 participants from both genders and different age range were selected and contacted either by email or by post.

After piloting the questionnaire among people with no architectural nor construction background, slight changes were introduced.

Selection bias

The steps have been taken in order to ensure that the residents of the selected housing estates constitute a representative sample, however, due to a limited number of subjects in this study the potential selection bias has to be taken into consideration. It is necessary to assess the characteristics

of the three housing schemes that might potentially make their residents unrepresentative of the whole population. The following issues were considered:

- Income and house prices

  The schemes in Shepton Mallet and Harlow might attract more affluent sections of the society. The affordable scheme in Burwell provides a very different perspective, but it is much smaller than the other two housing estates, and therefore, the results of quantitative analysis are expected to be skewed towards more affluent people. Also, the statistical analysis of Burwell case study might not be very generalizable due to small sample size.

- Location

  In order to increase the representativeness of the sample, it was also important to include housing schemes in both rural and urban settings. Nevertheless, each of the case studies has certain specific geographic characteristics, which again might have prevented the data from being easily applicable nationwide (e.g., Harlow's proximity to London or differences between local markets in the South and in the North of England).

- Residents' architectural preferences

  It was also important to include people with different aesthetic preferences. This was achieved by selecting two schemes with very different architectural styles (the residents at Tadley Acres were generally expected to prefer traditional architecture, while people buying a house in Harlow were expected to prefer modern design).

4.6. DATA ANALYSIS

The qualitative data collected from the desk-based research, site visits, interviews and questionnaires were coded and analysed looking for insights and patterns identified in the literature review. In this respect, the analysis of case studies was mostly deductive, however, every effort was made to try to identify themes and categories other than those that emerged from the literature review.

Summary sheets and research diary were used throughout the fieldwork in order to facilitate the analysis, which was conducted using the NVivo software and included the following steps:

- Structuring – transcription of interviews, familiarisation with the data;
- Clarification – eliminating non-related or irrelevant material (e.g., repetitions, digressions), condensation of data, distinguishing between essential and non-essential data;
- Content analysis – coding and categorizing, looking for themes, patterns and differences, interpreting the meaning;
- Writing up – data display, conclusions.

In order to uncover a deeper meaning of the data collected during the interviews, it was interpreted on three levels – subjects' self-understanding, critical common-sense understanding and theoretical understanding (the meaning within the theoretical framework of this research) (Kvale, 1996, pp. 213-218). Furthermore, the analysis focused not just on what was said but also how it was said – delivery, pace, language, participants' reactions and emotions – in order to look for information and patterns that might not be immediately apparent.

The qualitative analysis was supported by the quantitative analysis of the data gathered from questionnaires and other secondary sources (e.g., published materials, Land Registry, ONS data). The quantitative analysis included descriptive statistics such as averages, percentages, minimum and maximum values for different category variables (e.g., age, gender, income, household size, etc.). The quantitative data was analysed using the SPSS and Excel software.

4.7. LIMITATIONS

In addition to limitations that have already been touched upon in this chapter, there are the following issues that should be taken into consideration.

This research is exploratory in nature and is based on three specific case studies. Therefore, it is difficult to generalise the results, particularly when it comes to the role of landowners, who have more personal and individualistic approach to housing developments than other stakeholders.

Further research is necessary, particularly regarding landowners' motives. Perhaps a large-scale survey could be administered, however, designing the questions would be challenging as survey methods have proven to be ineffective in studying human behaviour and attitudes (see section 4.5.3).

This research investigated housing schemes which have been completed for some time, which was necessary in order to allow for an exhaustive analysis. The gathered evidence suggests that the legacy model of delivery is being constantly improved upon and has the potential to deliver more than what the investigated schemes would suggest. More contemporary examples of legacy schemes already exist, e.g., Nansledan development in Newquay, and could provide further insight.

5

CASE STUDIES

Following the literature review and the development of the conceptual framework, three contemporary housing developments were selected as case studies – Tadley Acres in Shepton Mallet, Newhall in Harlow and a small affordable scheme in Burwell. This chapter provides an analysis of those schemes and is divided into three sections: legacy motive, development process and housing quality. Chapter 5.1 focuses on landowners' motives as they were the only stakeholders who explicitly conceptualized housing schemes as their legacy. It is examined why they decided to get involved in housing developments and what were the factors influencing their decisions. Chapter 5.2 provides a historical overview of how the three estates developed over the years with a particular emphasis on the role of different stakeholders. It highlights the challenges that were encountered along the way and how they were dealt with. Chapter 5.3 focuses on the final outcome – the built environment that has been created. Different aspects of housing quality are investigated and evaluated based on stakeholders' perceptions of the schemes.

5.1. LEGACY MOTIVE

Based on various motivation theories, discussed in Chapter 2, it was argued that leaving a legacy is a universal human motive, which influences people's decision-making on instrumental, social, expressive and intrinsic level. However, interviews with stakeholders illustrated that landowners were the only stakeholder group to conceptualize housing schemes as their legacy. Most stakeholders (even architects) either explicitly said that they do not perceive housing schemes as their legacy, or when asked what their legacy would be, immediately went to other topics such as children or environment, without ever mentioning housing developments (Stakeholders, 2018). Consequently, legacy motive would not affect other stakeholders' decisions pertaining to these housing schemes – their drive to leave behind a lasting legacy would manifest itself differently.

Therefore, this section focuses on landowners' motives and describes the reasoning behind their decision to get involved in housing developments. The data was gathered through semi-structured interviews[37] and then analysed using a model developed in Chapter 2.2 (see Figure 18) based on Maslow's pyramid of needs (Maslow and Frager, 1987).

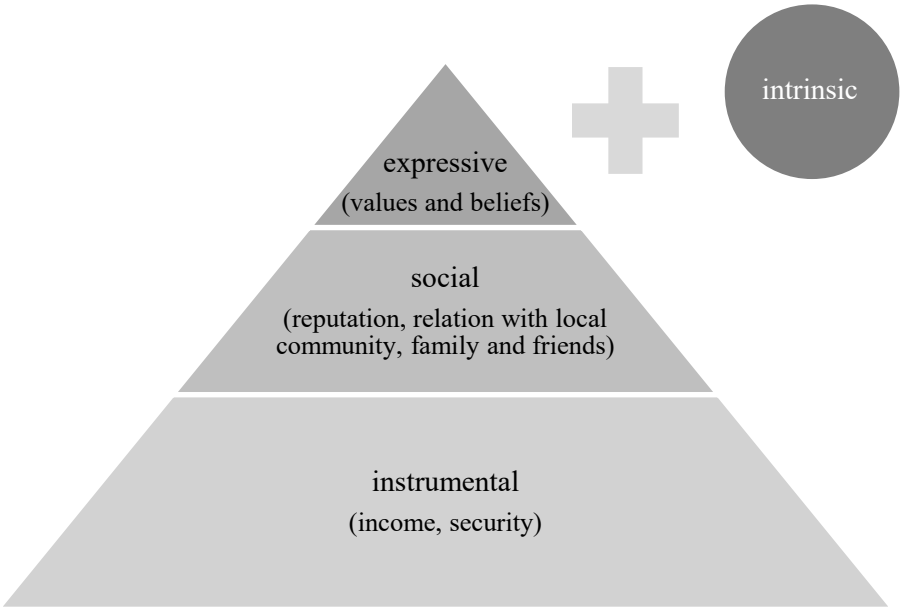


Figure 18: Model for the analysis of landowners' motives.

[37] In case of Tadley Acres, where the Duchy of Cornwall was the landowner, it was not possible to interview the Prince of Wales. The Duchy's two representatives were interviewed instead – one had been working on the Tadley Acres project from the very beginning and one had been working for the Duchy since 2000. They are both currently working at Landowner Legacy promoting the work of the Prince of Wales and building the legacy movement.

* * *

5.1.1. Overview of landowners and their land holdings

Burwell

In Burwell, the land on which the new housing estate was developed was originally bought by the landowner's – Patrick Faircliffe's – grandfather in the 1920's. Originally, it was an agricultural land – a small farm with some fruit trees. After Patrick Faircliffe's grandfather's death in 1946 the land was inherited by his two children – Patrick Faircliffe's father and his father's sister. Patrick Faircliffe's father was a director of a large farming group so the revenue from the farm was just a small contribution to his income. He later sold some of the land he owned in the village sometime in the 1950's / 1960's for open market housing making a reasonable profit. He also sold another piece of land at a "very" nominal price in the middle of the village for a new children school. Due to his failing health the remaining land and the farmhouse was later sold as well, which allowed the family to buy a retirement bungalow for Patrick Faircliffe's mother. Part of that remaining land – a small field of about 6-7 acres – was purchased by Patrick Faircliffe and was eventually developed for affordable housing as a rural exception site (Stakeholders, 2018).

Newhall

Newhall was built on land originally forming part of Soper Farm and owned by the Moen family (largely by the two brothers – William and Jon Moen), who also inherited the land from their grandfather. William and Jon Moen's family came from Cornwall at the turn of the century, "they came on the train with all of their cattle," (Stakeholders, 2018) and started farming at the outskirts of London. Their grandfather then moved to Harlow and eventually became a successful farmer, which allowed him to purchase the land in the early 1920s, then known as Newhall Farm. The farm was mostly arable, including vegetables, a lot of roses and some limited cattle grazing. Jon Moen was born in the farmhouse and eventually inherited the Newhall Farm alongside his siblings and cousins, including his brother William, who runs the Newhall Projects together with Jon (Stakeholders, 2018).

Tadley Acres

At Tadley Acres the housing development was built over the land mostly owned by the David Vagg – called Field Farm – and a small piece of land owned by the Duchy of Cornwall. Sadly, David Vagg has passed away and it was not possible to interview other members of the family. However, to interviewees' best recollection, David Vagg's father was a tenant farmer, who on the death of the landlord, the Collettes, bought his tenancy out and later bequeathed the land to his son. David Vagg was also a tenant of the small landholding owned by the Duchy (Stakeholders, 2018). The Duchy owned their piece of land (as well as significant amount of adjacent land, which at the time was not considered for development) since 1421 (Stakeholders, 2018).

* * *

5.1.2. Burwell

When asked how he would define legacy, Patrick Faircliffe seemed to focus his attention on his children and even more so, due to Patrick Faircliffe's children's age, his grandchildren.

The notion of uncertainty seemed to particularly dawn on him and the fact that he might be able to help secure his grandchildren's future (particularly in terms of their education i.e., helping with university fees) thanks to the profits from the land sales was certainly a powerful motivation:

"When it comes to legacy, in my age group, one is looking more and more how you can help your grandchildren […] in the world we don't even know what it's going to be like but it's going to be very different from this one with everything that's happening" (Stakeholders, 2018).

It seems clear that instrumental motives, i.e., ensuring the financial security of his family, were particularly significant in Patrick Faircliffe's decision to get involved in housing development. However, looking at the history of the site, he also seems very much preoccupied with the well-being and needs of the local community, particularly in terms of difficult housing situation in the village which he mentioned multiple times:

"[The development] was going to meet the need of local people. It was such a problem for families in the village to stay in the village [due to] raising property prices." (Stakeholders, 2018).

Also, he sold a strip of land to the residents on the main road, who were concerned with the new development behind their homes, at a nominal price so that they can introduce screen planting in their rear gardens, which was very much appreciated by the residents (Stakeholders, 2018).[38] Similar concerns were behind Patrick Faircliffe's proposal to build retirement bungalows on the site.

On the other hand, being a relatively small landowner, Patrick Faircliffe does not seem to be particularly motivated by the concerns about his own reputation. However, he clearly recognizes its importance in other stakeholders' decision-making, particularly when talking about the ways in which good built quality can be achieved: *"partly now through regulation but also with the view of [builders'] reputation."* (Stakeholders, 2018).

Patrick Faircliffe also admits to being inspired by his father's *"philanthropic"* attitude towards the village, i.e. selling land at nominal price to allow for a new school to be built (Stakeholders, 2018). His own views seemed most evident when asked about the definition of legacy and what it might entail. One of the issues he focused was the protection of land *"but not to exclude people from land"* (Stakeholders, 2018), which echoes his personal fear over his grandchildren's future, but also expresses his greater concerns about the difficult housing situation in the UK:

"When [me and my wife] married 50 years ago the average house price was about 3 times one person salary (most wives didn't work). Now it is between 8 and 9 times the combined household

[38] These were the residents living in houses built on the land sold by Patrick Faircliffe's father.

income and the effect on property prices is absolutely devastating." (Stakeholders, 2018).

In addition to those extrinsic motives, Patrick Faircliffe also seemed to be influenced by some intrinsic motives, particularly his personal connection to English countryside and to his father. He admitted himself that he initially bought that piece of land from his father partly for sentimental reasons as there was no guarantee that the development would ever be allowed on the site. The emotional aspect of landownership is also visible in his description and frequent mentions of beautiful countryside views offered by the estate:

"It's all open farm land and the view across […] is to the new market racecourse, it's a lovely aspect and would have been a lovely site for a nursing home, for people to be able to sit and look at the countryside." (Stakeholders, 2018).

The summary of Patrick Faircliffe's motives is presented on the model below.

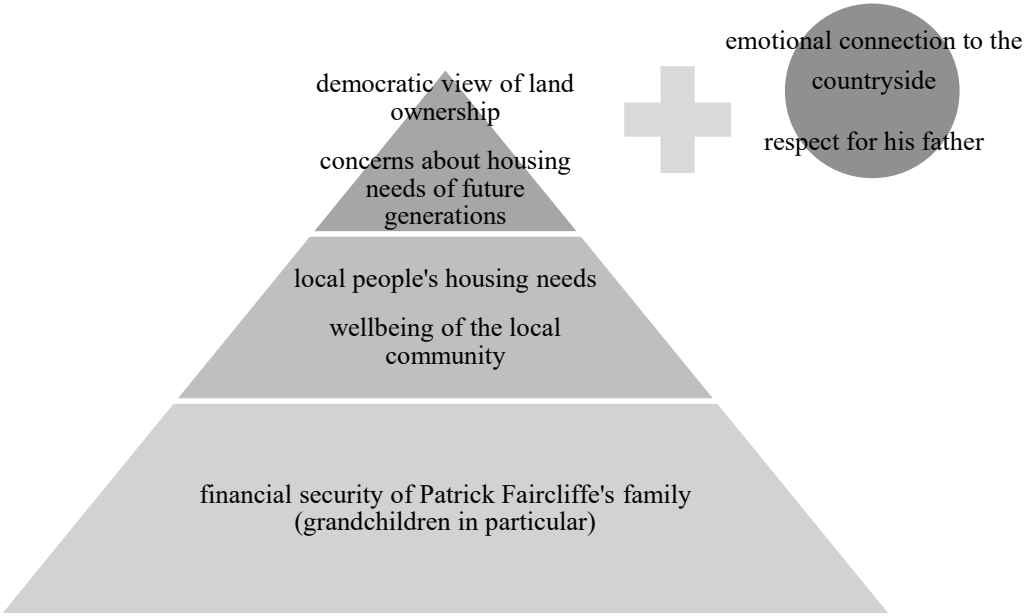


Figure 19: Patrick Faircliffe's motives.

* * *

5.1.3. Newhall

Instrumental motives seemed to be quite relevant in case of Newhall development and manifested itself through concerns related to land value, viability of the scheme, house prices, funding for the scheme and planning and building costs. They were also reflected in Jon Moen's approach to affordable housing:

"There's a lot of affordable housing in Harlow already and we wanted to make some profit out of this as well so we obviously fight to keep that as low as possible." (Stakeholders, 2018).

The amount of affordable housing for Phase II was only 15%, which was a contentious point for the Harlow District Council, but the landowners were adamant to keep the number low in order

to allow for higher quality standards and a reasonable land value, particularly in face of losses incurred due to the housing market crash in 2008.

Commercial aspect of the development came up repeatedly, also in relation to how the land deal with developers could be structured and what are the financial ramifications, which provides strong evidence that financial return is not only a powerful motive but also potentially a prerequisite to landowners' involvement in housing developments:

"I think most landowners, unless they're institutional landowners like National Trust, […] are not going to take on such a challenge and try to influence [the development] to the degree that we have. And because of the huge difference in price between agriculture land value and development land value […] they're more interested in just getting the best price for the land and selling it than the design of the end product. That's what a businessman would be interested in […] – the profit." (Stakeholders, 2018).

One might wonder why then the Moen brothers decided to play such an active part at Newhall and while there certainly were numerous other reasons (discussed below), Jon Moen was also convinced that in the long-term good design brings higher profits:

"We've always argued that if you take a huge interest in design from the beginning and stick with it, […] if you establish a place and a sense of interest in the site, you create more value and I think that's been shown to be the case in other places [as well]." (Stakeholders, 2018).

Through his experiences at Newhall, Jon Moen was also very much aware of difficulties that smaller landowners might face in procuring funding necessary to go through the planning process and to get the project off the ground. Consequently, he recognized the importance of tax exemptions and grants and their potential to further encourage landowners to get involved in housing developments:

"I think it's essential. I don't think any landowner would do what we did if they didn't have some funding assistance because they would be forced into an option agreement with a developer when your hands get tied." (Stakeholders, 2018).

Consequently, it is no surprise that Jon Moen believed that material legacy seemed to him to be an important drive for most people:

"We're all motivated by that […], there's no question. […] But the acquisition of material things in a capitalist society seems to be what we all strive for, it's just the way it functions." (Stakeholders, 2018).

Despite that, when asked about what legacy is, Jon Moen's first instinct was to focus on legacy of values:

"I think it's more the achievement that you're leaving behind […]. When I think of legacy that's what I think of. I don't think of the amount of money or material things that you could leave. I think it's more the impact that you could make in the field that you're in." (Stakeholders, 2018).

And he continued by talking about a lasting impression and influence one might have on the future of housing industry, for instance by providing a template that could be replicated on other developments:

"So not only will the development that we've been involved in endure and last and be there to be observed, but it will influence what happens on other developments and in housing." (Stakeholders, 2018).

Expressive motives were also evident in relation to architecture and urban design. Despite appreciating traditional styles, particularly Georgian and Victorian architecture, Jon Moen admitted to having a preference for contemporary design for new housing developments. He attributed this preference partly to his family's connections to Scandinavian countries, which made him realize that *"we were long way behind in innovation in housing architecture in this country compared to rest of Europe"* (Stakeholders, 2018), and partly to a conviction that we *"need to develop housing for the period [we] live in"* (Stakeholders, 2018). Jon Moen also seemed to be strongly influenced by his belief in the importance of architectural profession, which is possibly being underutilised on other schemes:

"It's about wanting to use the architectural design profession, to free them up to be creative and develop housing for the future." (Stakeholders, 2018).

Social motives, on the other hand, did not seem all that relevant for Jon Moen except for maintaining good relationship with his extended family which arguably took precedence over brothers' other aspirations:

"Because of the experience here […], I don't think the rest of the family had an appetite for us to be developers anymore. So, we reverted to the original idea of selling the land with legal agreements and clauses where we could enforce things. And we needed to sell larger pieces partly because we needed to get the funding to pay the bank back and partly because we needed to speed up the whole process, it was going to slow." (Stakeholders, 2018).

Despite being born in the room up in the farmhouse, Jon Moen grew up in Canada and only came back to the area in the 1960's when he was 16, therefore he did not have a very strong relation with the local community.[39] Nevertheless, he acknowledged having a certain attachment to the local community, through the fact that his grandfather farmed there and was quite a prominent member of the community, and Newhall Farm in particular:

"I was born in the room up in the farmhouse on the end there, so I'm told. So I have quite an attachment to the land and to the property." (Stakeholders, 2018).

He also felt very strongly about his emotional connection to the countryside and natural landscape stemming from living in the countryside for a significant amount of his life and growing up in northern British Columbia in Canada (which, as Jon put it, is probably more of a wilderness than countryside).

The connection and respect Jon Moen felt towards his grandfather also contributed to his sense of duty and responsibility in relation to the development:

"We feel that our grandfather who was a farmer probably wouldn't be all that happy about putting

[39] His younger brother William, who leads the project together with Jon, did grow up in the area though.

houses on his land so we felt that if we did put houses on the land we ought to try and do a good quality development of high design standards" (Stakeholders, 2018).

The summary of Jon Moen's motives is presented on the model below.

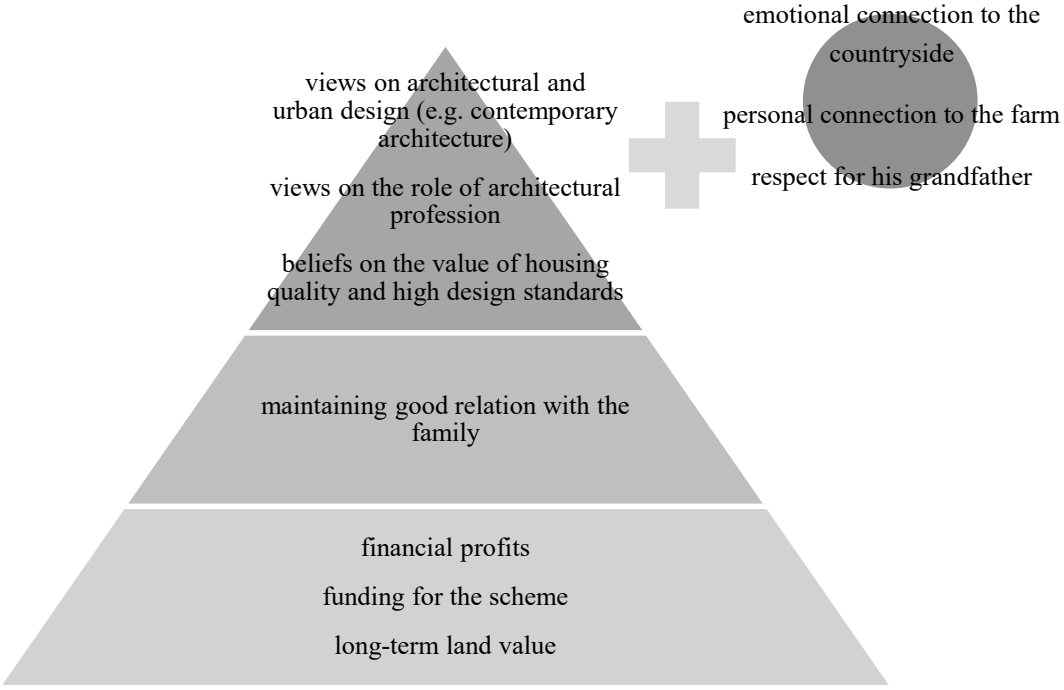


Figure 20: Jon Moen's motives.

* * *

5.1.4. Tadley Acres

The Duchy of Cornwall

Having in mind the position of the Duchy of Cornwall and their considerable wealth, one might think that instrumental motives did not play a significant role at Tadley Acres. However, nowadays most landed estates operate as businesses and scheme's viability definitely factors in their decision-making. The Duchy's representatives confirmed that profitability was one of the most important aspects that might encourage landowners to get involved in housing developments:

"A real belief that by doing it well and making great places they get a better value over the longer term, […] I think, is the key. […] So there's a commercial purpose in doing [this]" (Stakeholders, 2018).

He also pointed out that housing developments can potentially contribute to other segments of landed estates' many commercial activities:

"If we had on the estate some very good quality food production and the ability to buy that food from a farm shop or to go to a pub on the estate which serves only local food at a premium price, […] these people who come to a new development actually help to bring the estate back to life." (Stakeholders, 2018).

These various activities on landed estates, and interviewees' ability to talk about them extensively, illustrate a strong connection to the countryside, or more specifically, to countryside living (and a rather elitist version of it). The Duchy's representatives also recognized the unique relationship with the local area that only long-term landowners have, which often results in a more ethical response to housing and doing *"what's right for the countryside [and] what's right for the community"* (Stakeholders, 2018). It was important that the scheme serves the needs of the town and therefore the Duchy insisted on providing affordable housing at Tadley Acres despite the fact that there was no legal requirement for them to do so and the Mendip council was not asking for it either.[40] It was they Duchy's belief that it was their duty to provide housing for all sections of the society:

"This is a view that the Duchy held that housing development should cater for all tenures, […] we should be building homes for people who can't afford to buy." (Stakeholders, 2018).

Tim Grey also recognized that such a strong relationship with the local area and community is quite unique and not every landowner would feel the same responsibility:

"I think the Prince is the inspiration behind this […] and I'm not convinced if the Vagg family, although they're incredibly thoughtful and certainly understood a lot of what the Duchy wanted to do […], would have raised the subject of affordable housing." (Stakeholders, 2018).

The Duchy is also strongly motivated by expressive motives, particularly in relation to their views on architecture and urban design, which is most evident in their preference for traditional architectural styles and street patterns – a common denominator at all of their developments. The Duchy's representatives shared a similar view:

"I think it's undeniable that people feel reassured and comfortable in a place that follows a traditional typology, that's just a fact of life." (Stakeholders, 2018).

Another example of Duchy's expressive motives is their comprehensive view of housing quality, which focuses on broader social outcomes – neighbourhoods having low crime rates and people being healthy and satisfied with their life for generations to come. And this is what they strive to achieve through their schemes:

"And that's [social outcomes] the measure of good housing. Because it's a place that you're proud of, that you will look after and cherish, and in 200-300 years' time it will look better than it does now for that reason." (Stakeholders, 2018).

Finally, it seems quite self-evident that the Duchy would be particularly concerned with their reputation having in mind their status and how recognizable they are. They were understandably concerned with what people would think of Tadley Acres scheme, as is most likely true for all of their developments. Interestingly, people working on behalf of Prince Charles were additionally

[40] The Duchy's representatives also recalled a similar situation on one of their other developments – Ticket Mead in Midsomer Norton – where the local planning authority – Bath and Northeast Somerset – not only did not want affordable housing on the site but actively fought the Duchy over it (Stakeholders, 2018).

motivated by the concerns about what the Prince would think:

"We were motivated by fear rather than greed and the fear is that the Prince comes and has a look at the scheme and says 'this isn't very good, is it?'" (Stakeholders, 2018).

Additionally, the Duchy was determined to maintain good relationship with other stakeholders, and the Vagg family in particular, as evidenced by the fact that they were understanding of the Vagg's situation and ready to compromise even if it meant giving up some control over the development.

The summary of Duchy's motives is presented on the model below.

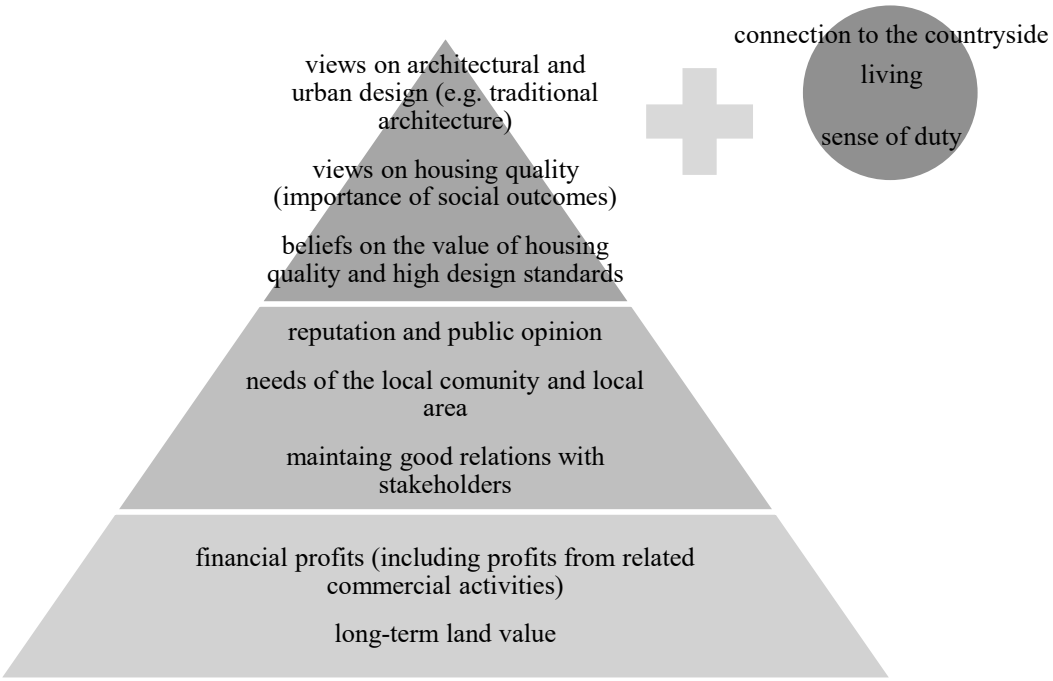


Figure 21: Duchy of Cornwall's motives (based on an interview with Duchy's representatives).

The Vagg family

As mentioned before it was not possible to interview anyone from the Vagg family, however, the Duchy's representatives suggested that they were particularly concerned with their reputation in the village – they wanted the development to be of good quality because they planned to continue living in the area and *"be smiled at walking down the high street, not spat at"* (Stakeholders, 2018).

Instrumental motives also seemed to play a significant role. As mentioned before, the Duchy owned the adjacent land which at some point was considered by the Mendip District Council for housing development and the Duchy's representatives believed that one of the reasons the Vagg family wanted to form a joint venture was so that the Duchy would take their land off the table and help with the promotion of the their site, therefore increasing the chances of the development on Vagg's land to move forward. Also, when the planning permission for the site was granted, the housing market was in recession and the landowners were coming from a particularly weak position when looking for a developer and negotiating a deal with them. The Vagg family was determined to

move forward with the scheme nonetheless, even though they did not incur any significant costs to date:

"The Duchy had funded everything to date, so it wasn't as if the Vagg family were running out of money, but they wanted to get on and I understand that. So it was very much the Vagg desire to go into the market when we did and it was not a great moment, I have to say." (Stakeholders, 2018).

The Duchy's representatives also pointed out David Vagg's rural background and the fact that his father bought the land he farmed from his landlord, suggesting that this connection to rural way of life might be the reason for his responsible view of landownership and land development:

"He was a landowner in a different sense, he was really a yeoman farmer, […] he had a very responsible view. […] I think [David Vagg] really understood what landownership was about." (Stakeholders, 2018).

The summary of David Vagg's and his family's motives is presented on the model below.

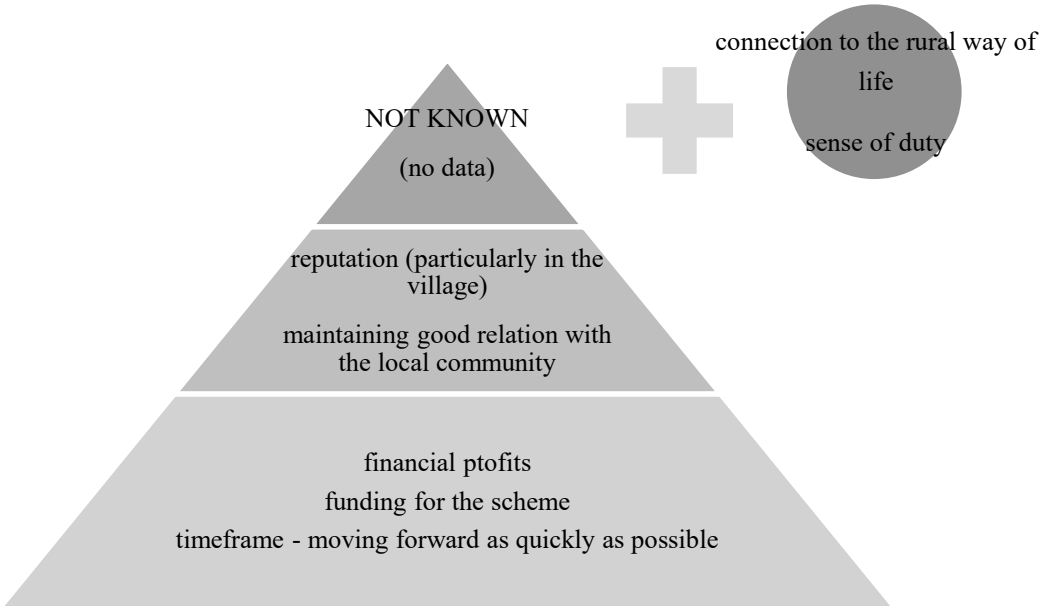


Figure 22: David Vagg's and his family's motives (based on an interview with Duchy's representatives).

* * *

5.1.5. Comparison between landowners' motives

Extrinsic motives

Based on the above analysis, it can be concluded that instrumental motives are a powerful drive for all landowners irrespective of the size of their landholdings. The long term land value seemed to be a bigger concern for larger landowners, partly because they expected to reap the benefits on later phases of the development (instrumental motive), and partly because they believed land value to be strongly related to 'good housing quality' and that was very much part of their development model (expressive motive).

Smaller and mid-size landowners seemed to be particularly concerned with funding for the scheme, especially at the early stages of the development. Going through planning is usually a very long and expensive process that requires significant upfront investment, which is what smaller landowners often struggle with and why they might get forced into unfavourable deals with developers requiring them to give up the control over the development. Similarly, less wealthy landowners tend to be more preoccupied with the timeframe of the project and are often eager to move things along as quickly as possible, which was true for all landowners except for the Duchy of Cornwall.

In section 2.2 it was also suggested that on the instrumental level landowners are motivated by death anxiety, which can be triggered by the proximity of death. The history of the Burwell site provided some evidence for that as the family decided to sell parts of their land after the landowner's father fell ill.

On the social level, landowners' motives seemed to depend less on the size of a landowner and more on the nature of their relationship with the local community, their family and other stakeholders. At Newhall, the landowners' family had a significant influence over their decision-making process as many family members had a stake in the project. Family relations can be a significant factor for large landed estates, where younger generations often play an active role in running the estate:

"Most landowners would plan for the future in terms of inheritance tax, which is why in most cases we find we're dealing with the younger generation of landowners […]. And that's because I suspect most of the estates have already entrusted the main asset, the land, into the hands of the younger generation." (Stakeholders, 2018),

as well as smaller landowners as in case of Burwell:

"[W]hat we'll be doing is setting up a trust fund, so the trustees, who would be my daughters […], will be in charge of all the capital assets." (Stakeholders, 2018);

Furthermore, local landowners with a personal connection to the community appeared to be more concerned with their reputation in the local village or town, while larger landowners might focus more on public opinion and their reputation at large (though it is important to point out that both of these motives have the potential to encourage catering to the needs of local community). For instance, the landowner at Newhall, who did not grow up in the local area, did not feel as much personal responsibility towards the local community as the landowner in Burwell. The Duchy's concerns with the needs of the local community also seemed to be based on the their expressive motives – their idea of what constitutes good housing – and their general sense of duty rather than their relation with the local people.

On the expressive level, landowners' motives reflected their personal values and beliefs, e.g. the Newhall landowners' preference for contemporary architecture and the Duchy's preference for traditional architecture. Interestingly, despite opposite views on architectural style there seemed to be a significant overlap between the Moen brothers' and the Duchy's approach to housing

developments, e.g. use of high-quality materials, use of design codes and pattern books, traffic and street design, which might constitute the evidence for effective dissemination of knowledge and best practice among landowners.

Expressive motives seemed to be more evident at Newhall and Tadley Acres than in Burwell, potentially due to the landowners' active interest in architecture and urban design, while in Burwell the landowner readily admitted that he left the design up to the architects and developers:

"My only concern was that the principles aim at the people living and working in the village. […] I was happy to leave it to the professionals. They know better." (Stakeholders, 2018).

Hierarchical order of extrinsic motives

As explained in section 2.2, the pyramid model was loosely based on the Maslow's hierarchy of needs according to which people's lower-level needs must be satisfied in order for them to be motivated by higher-level needs (Maslow and Frager, 1987). More specifically, this would suggest that the landowners are not motivated by their social or expressive needs unless their instrumental, i.e., financial needs, are satisfied. But the evidence gathered during fieldwork would suggest that higher-level motives sometimes do take precedence over instrumental motives. For instance, even when Newhall scheme was facing financial difficulties (due to extremely difficult market situation and developers going bust), that did not mean that the landowners' approach to housing developments went out the window. They did continue to invest in high quality materials and design, despite the higher build costs. Similarly, in Burwell the landowner sold part of his land at a lower value in order to allow for screen planting and please the concerned local residents (i.e., in that particular situation social motives seemed more important than additional profit).

On the other hand, Maslow's theory would also suggest that wealthier landowners whose financial situation is secured are no longer strongly motivated by financial incentives. However, there is strong evidence against that as all the landowners in the considered case studies, regardless of their size or financial circumstances, had financial motives. The Duchy's representatives also emphasized that, based on their extensive experience working with many landowners, landowners are unlikely to get involved in housing developments and invest in higher housing quality if they do not believe this will lead to higher land value over time (Stakeholders, 2018).

The above observation also suggests that some sort of hierarchy between motives might exist and certain needs, e.g., profitability of a scheme, might take precedence over the others. For instance, in order to mitigate the already mentioned financial difficulties at Newhall, the landowners (potentially pressured by other family members as well) decided to sell the land for Phase II in bigger plots in order to move things along; and also fought with the planning authority to lower the number of affordable homes (Stakeholders, 2018). This would suggest that their instrumental motives (profits) and social motives (relation with the family) affected in some way their expressive aspirations. Similar situation took place at Tadley Acres, when the Duchy agreed to go to the market

at a particularly difficult time and potentially give up some control over the development in order to maintain good relationship with the Vagg family (i.e. social motives over expressive).

Consequently, based on the evidence gathered through the case studies, it is argued that some sort of hierarchy between motives does exist and lower-level needs often undermine higher level needs. At the same time, it was recognized that the division between higher- and lower-level motives is significantly less rigid than Maslow proposed and that some overlap between levels inevitably exists.

Intrinsic motives

Intrinsic motives, such as love for countryside, way of life and sense of duty, are believed to act alongside extrinsic motives and potentially influence landowners' behaviour. Ilbery (1983) and Gasson (1973) provided evidence for the relevance of intrinsic motivation in farmers' decision-making and based on the case studies that seems to be the case for landowners as well.

The emotional aspect of landownership seemed to play an important part in landowners' attitudes towards housing developments and there appears to be a particular attachment to the way of life – whether it is rural life (as in case of Patrick Faircliffe or the Vagg family) or the ethos of countryside living (as in case of the Duchy of Cornwall and other landed estates). In section 2.2 it was also suggested that love for countryside may lead to protectionist views and anti-development attitudes that prevent new housing estates from being built. While all the interviewed landowners cared deeply about English countryside, rather than leading to anti-development attitudes, it led to increased concerns for the quality of what was being built on their land as well as aspirations to protect their "way of life."

This sense of duty and responsibility stemmed not only from the landowners' connection to the countryside but also their connection to their forefathers who used to own the land. As mentioned in section 2.2 parents' values and beliefs often have a strong influence on offspring's behaviour and bequeathing patterns among families often stay the same for generations leading to the so-called retrospective bequests. This is evidenced by Patrick Faircliffe's concerns about what his father would think of the development and his aspiration to build a school on his land:

"I certainly think my father would be pleased because he sold another piece of land in the middle of the village for a new children school to be built on it […] having taken sort of philanthropic view of helping the village – releasing the land at a very nominal price for the school. In fact, I also contacted the council about the final piece of land for a school cause I was told there were children who had to go to another village because village schools were full. The council was not interested." (Stakeholders, 2018).

Retrospective bequests can also play an important role on landed estates where they are often reinforced by years of tradition.

However, there is an aspect of innovation and change when it comes to housing developments, and consequently, the investigated case studied showed that, while landowners were often influenced

by the respect they felt towards their forefathers, their idea of a positive legacy might have differed significantly. At Newhall, the fact that, as a farmer, the landowners' grandfather probably would not have wanted the land developed was one of the reasons why the brothers were so determined to make sure the development was of good quality:

"We had a lot of respect for our grandfather, and we knew that he wouldn't really have liked development on the land. But if it did come, we felt if we made a strong effort to make a very good development and make a difference, he would probably be quite happy about it." (Stakeholders, 2018).

In section 2.2 it was also pointed out that external rewards undermine intrinsic motives and consequently most behaviour in our adult life is extrinsically motivated (Deci and Ryan, 2000). While there is a good argument for that in case of other stakeholders, it does not seem to be true for landowners and the above evidence suggests that intrinsic motives strongly influence their decision-making, possibly due to landowners' unique and personal attachment to their land.

5.2. DEVELOPMENT PROCESS

This chapter presents the history of the three housing developments selected as case studies. The stakeholders and timeline for each project is described and the collaboration between stakeholders is analysed with a particular emphasis on landowners' involvement.

* * *

5.2.1. Burwell

Stakeholders

Landowner:

- Patrick Faircliffe

Developer:

- Hastoe Housing Association (originally Sutton Housing Association)

Planning authority:

- East Cambridgeshire District Council:

Parish council:

- Burwell Parish Council:

Architects:

- Hollins Architects (phase 1 and 2)
- mlt architects (phase 3)
- Parsons + Whittley Architects (phase 4)

Timeline

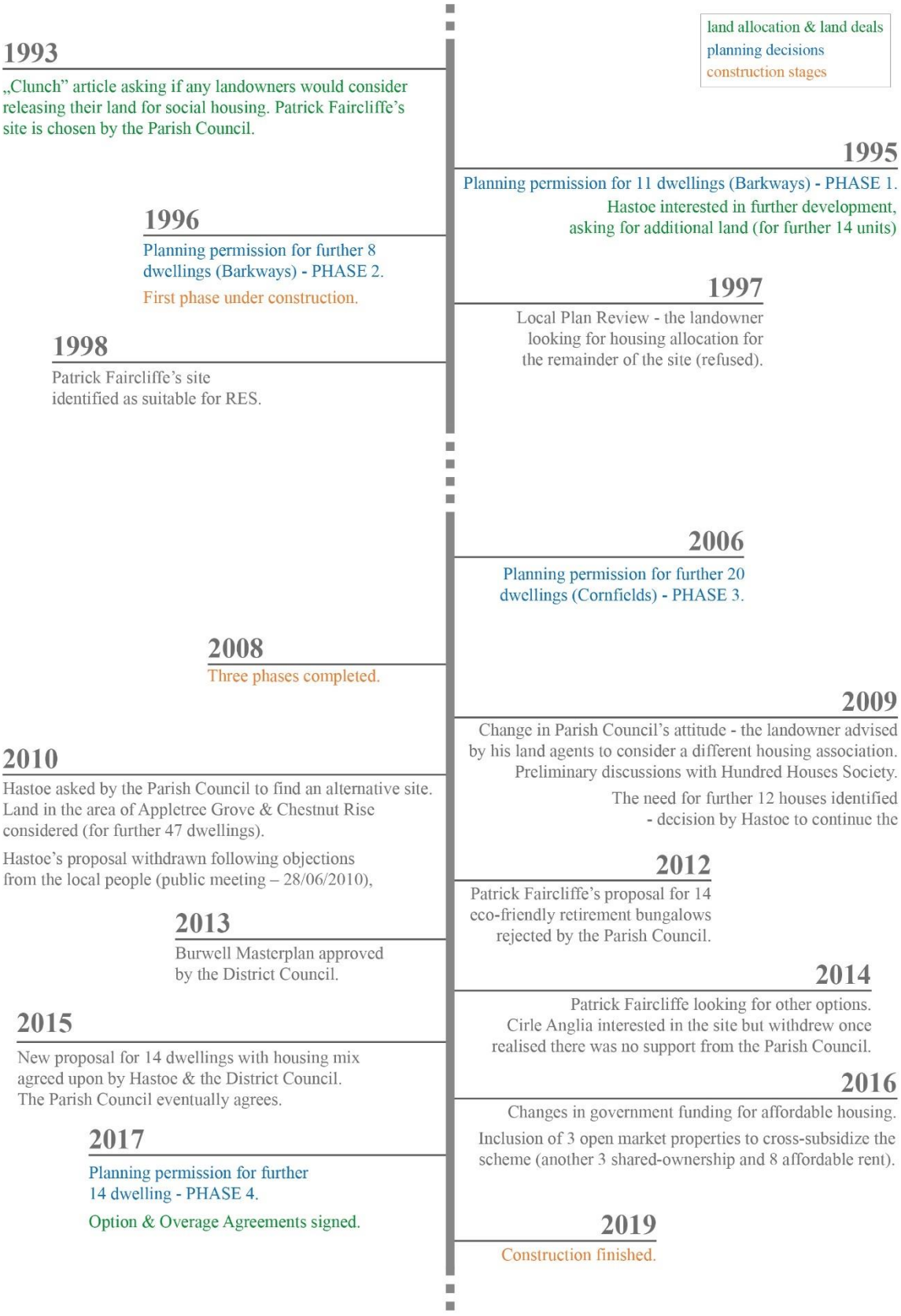


Figure 23: Timeline of the Burwell development.

The scheme in Burwell began in 1993 when the Burwell Parish Council decided there was a need for affordable housing in the village. They approached a number of housing associations and chose Hastoe as the most "community-minded," which was particularly important for the Parish Council (Stakeholders, 2018). In order to identify the potential sites, an article was published in the local magazine "Clunch" asking local landowners if they would consider releasing land for a housing development. Six submissions were made and Patrick Faircliffe's site was selected as the most suitable for an affordable housing scheme. This site was outside the village boundary but was suitable for development as a RES scheme and in 1995 East Cambridgeshire District Council granted a planning permission for 11 dwellings – Phase 1. Both Hastoe and the Parish Council were interested in further development and a planning permission for another 8 dwellings was granted in 1996 – Phase 2 (see Figure 24).

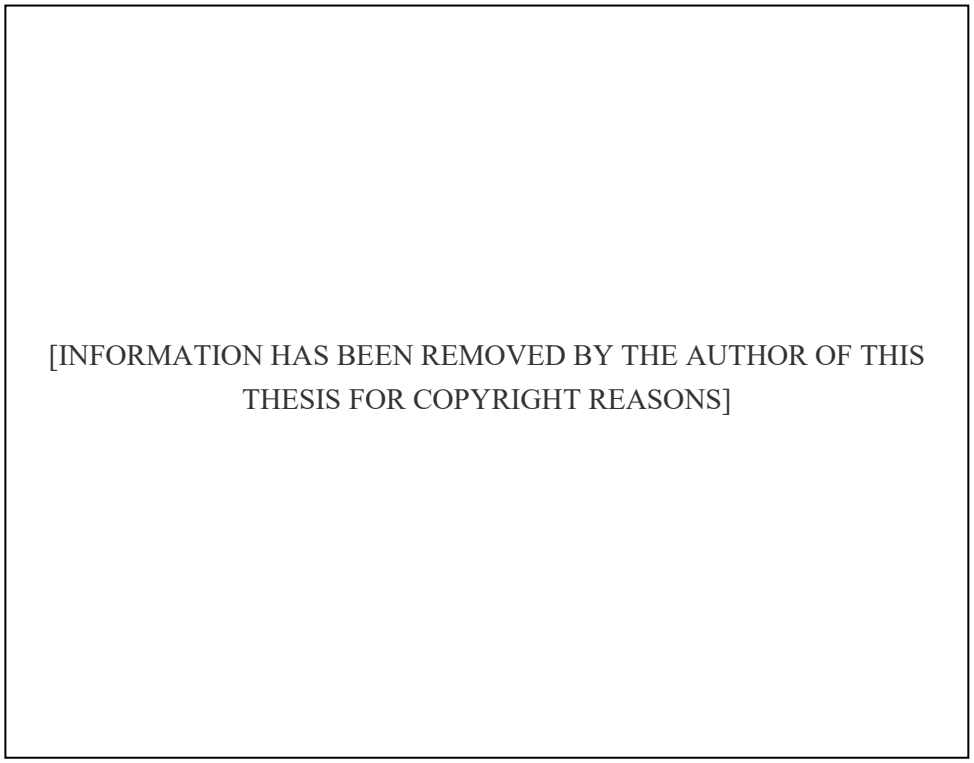


Figure 24: Phasing – Burwell scheme. Image adapted from Parsons + Whittley (2017c).

In 1997-1998 a Local Plan Review took place and Patrick Faircliffe was looking to get an allocation for open market housing for the remainder of his site. This was refused by the Inspector as the District Council had already over-allocated land for housing, but again the remaining land was deemed suitable for a RES scheme (Stakeholders, 2018).

In 2002 a new round of discussions with Hastoe took place as there was still a demand for more housing in the village. In 2006, with the support of the Parish Council, a planning application was granted for further 20 units (Phase 3), which were completed in 2008.

Since then, Patrick Faircliffe had been looking to develop the last piece of land (Phase 4), but the attitude of the Parish Council had changed. Despite the fact there was a need for further affordable

housing in Burwell, the proposal for further 12 houses was rejected by the Parish Council, who asked Hastoe to identify an alternative site. The proposal for 47 dwellings in the area of Appletree Grove and Chestnut Rise was prepared and presented at a public meeting on the 28th June 2010. It faced a strong opposition from the local residents and Hastoe withdrew the proposal.

In 2012 Patrick Faircliffe, with the professional support of his estate agents, Cheffins, submitted another proposal for 14 eco-friendly retirement bungalows, which was partly motivated by an interest from the local community in retirement homes.[41] This proposal was also rejected by the Parish Council, after which Patrick Faircliffe decided to re-establish contact with Hastoe. Following discussions with the District Council, Hastoe prepared yet another proposal for 14 dwellings and in 2015 a letter of intent was signed with Hastoe committing to buy the land subject to a planning permission. Following a series of presentations by Hastoe, the Parish Council eventually approved the scheme.

Due to changes in the government funding for affordable housing, the last phase had to include three open market houses in order to make the scheme viable (in addition to three shared ownership properties and eight affordable rent properties). There was no objection from the Parish Council and the planning permission for the final 14 units was granted in 2017 (Phase 4).

Collaboration between stakeholders

The collaboration between stakeholders worked smoothly in the beginning of the project, however, a member of the Burwell Parish Council took some convincing as they were not particularly keen on green land development:

"It was quite hard work I've got to say, because the parish council at the time … were not necessarily that enthusiastic [and] kept saying 'we need grass, we need fields to grow things on'." (Stakeholders, 2018).

Nevertheless, they approved the first three phases and seemed pleased with the outcome (Stakeholders, 2018). For the last phase of the development, the Parish Council withdrew their support and there were definitely some tensions, particularly between the landowner and the Parish Council. It is not entirely clear why the Parish Council no longer supported the development on that site, especially that East Cambridgeshire District Council seemed supportive of the scheme and there was a demand for more affordable housing in the village (as evidenced by the response to the article in "Clunch" (Stakeholders, 2018), Hastoe's housing needs survey (Stakeholders, 2018) and East Cambridgeshire Housing Register, which in 2017 included 52 applicants with a local connection to Burwell (East Cambridgeshire District Council, 2017)).

[41] Patrick Faircliffe run an article in the "Clunch" magazine in order to verify if the demand for retirement homes existed. He received seven replies – six from Burwell residents wishing to downsize and one from a local resident who wished for their parents to retire in the village (Stakeholders, 2018).

One of the considerations was that housing on Patrick Faircliffe's site would block the view of the Church Tower coming from Newmarket, however, that was not the case for the single-storey bungalows and even the final designs for two-storey houses made sure that the Church views were preserved.

Another reason why the Parish Council could have been hesitant was the size of the development as 39 units already built on the site constituted a relatively high number for a RES, according to some members of the council:

"[...] that makes it quite a big development [...] I think what they didn't want was another council housing estate." (Stakeholders, 2018).

However, at the same time the Parish Council seemed to endorse the development proposed by Hastoe on an alternative site, which included 47 units.

It seems plausible that some of the tensions resulted from Patrick Faircliffe's decision in 2009 to approach another housing association, Hundred Houses Society (following the advice from Cheffins). The Parish Council seemed to have trusted Hastoe, who had a track record of working closely with local communities and parish councils:

"[Hastoe] works very closely with the parish councils. [...] we do meetings before we take site into planning, which private developers tend not to do. And we ask people to comment on the style, the look, the mix, the density. You never can carry everybody, there will always be objectors. [...] So we never get 100% support but we get a lot of support in parish councils." (Stakeholders, 2018);

and was pleased with how the cooperation looked like during the first phases:

"Hastoe worked very closely with the Parish Council, because Hastoe themselves have a policy of not doing any development where the parish council is not in favour. And that's not true of all social housing providers [...] but Hastoe have always said – we want to work with the community, not against it." (Stakeholders, 2018).

Patrick Faircliffe confirmed that the stance of the Parish Council was that Hastoe were to be the only housing association they would approve. Consequently, Patrick Faircliffe decided to continue the project with Hastoe, however, this situation might have had a negative impact on the future relations.

For whatever reason, the Parish Council decided to restrict all new housing, affordable or otherwise, to the site off Newmarket Road (Stakeholders, 2018), which was allocated for 350 homes in the Burwell Masterplan approved by the District Council in February 2013 (East Cambridgeshire District Council, 2020). Even with the support of the District Council, the development could not proceed without the approval of the Parish Council. From Patrick Faircliffe's perspective, this was particularly frustrating as he believed the site was already deemed suitable for development back in 1998 during the Local Plan Review, and he had spent a considerable amount of time and resources (working with Cheffins) to include the site in the Burwell Masterplan (Stakeholders, 2018).

Patrick Faircliffe also claimed that the communication between the Parish Council members was lacking, pointing out that before the alternative sites were considered many members were not

even aware of his proposal and as far as he could tell it was only considered by a sub-committee of the planning committee.[42] Patrick Faircliffe also criticized the fact that there was no opportunity given to him or Hastoe to defend the proposals in front of the Parish Council (Stakeholders, 2018).

All those frictions resulted in Patrick Faircliffe going as far as suspecting a personal grudge among the members of the Parish Council (Stakeholders, 2018), though it has to be pointed out that there is no evidence of that.

On the other hand, Patrick Faircliffe had only good things to say about the collaboration with Hastoe:

"Cooperation with Hastoe couldn't be better. They spent a vast amount of time in producing proposals to get this site completed […]. The cooperation was fantastic right back to the 1990s. The only issue was the attitude of the Parish Council at that final phase." (Stakeholders, 2018).

And so did the Parish Council, who also praised the architects appointed by Hastoe (they do not have inhouse architects) for presenting their designs to the Parish Council and welcoming their feedback:

"It sounds as if I'm glowing [about] Hastoe but actually they haven't put a foot wrong, I don't think […] They continue to liaise with us, consult with us, talk about design." (Stakeholders, 2018).

Hastoe were very accommodating throughout the project, though a member of the Parish Council admitted that this had not always produced the best results:

"I remember to this day, we had one gentleman on the Parish Council who looked at the design of the houses, looked at the whole thing, and said 'well, I think those rooftiles are dreadful. […] I think we ought to change them to this rooftile.' And that's exactly what Hastoe did. And actually, it's better now, but when you used to come from Newmarket it stuck out like a sore thumb, because the rooftiles were actually the wrong colour. But they accepted it because that man was adamant they needed to be changed and sometimes you just have to compromise." (Stakeholders, 2018).

Patrick Faircliffe was not involved in the design stages and was perfectly content to leave the design to experts – Hastoe and their architects. The only aspect of the design that he was concerned with was typology (e.g. pushing for bungalows) and that the housing mix reflects the needs of the local community, which Hastoe would determine based on local housing needs survey and with consultation with the District Council (Stakeholders, 2018).

Hastoe also worked with the Parish and District Councils on housing allocation. All nominations came from the East Cambridgeshire District Council's register, though there was a local connection requirement specified through a s106 agreement. Hastoe was responsible for interviewing the applicants and making the final decision, often with the input from the Parish Council (Stakeholders, 2018).

Hastoe's all-round professional attitude and good working relation with other stakeholders is

[42] According to Patrick Faircliffe, the proposal was never recorded in the minutes of the Parish Council meetings (Stakeholders, 2018).

perhaps best demonstrated by a response of Hastoe's representative to a question about whether there were any difficulties related to going through planning, which was a firm and simple "no" (Stakeholders, 2018).

The relationships between stakeholders are presented in Figure 25.

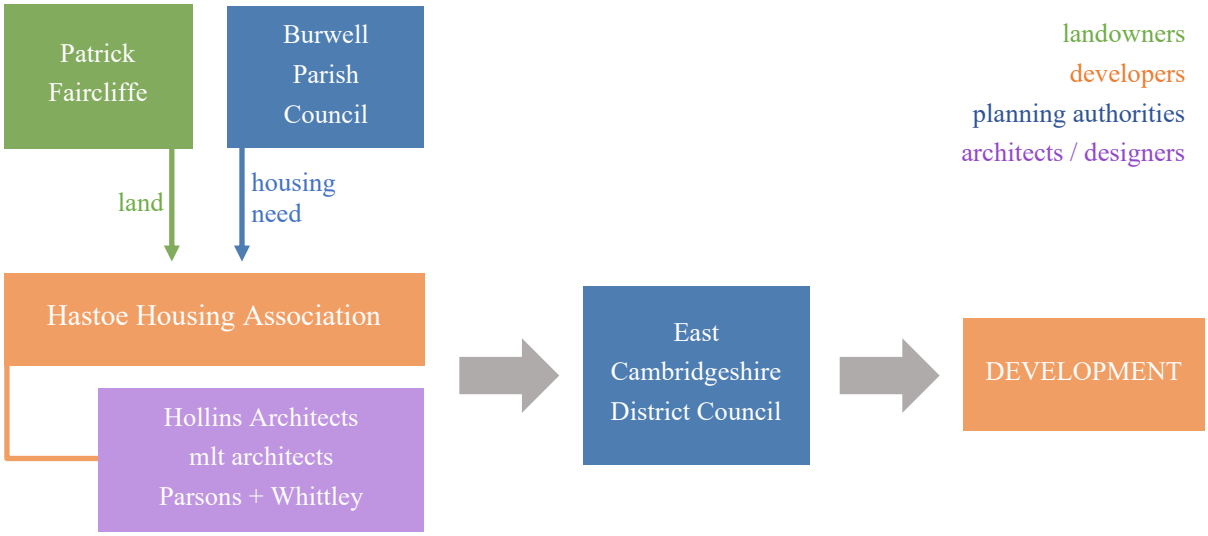


Figure 25: Stakeholders' map for the Burwell scheme.

* * *

5.2.2. Newhall

Stakeholders

Landowners:

- Newhall Projects Ltd. (the Moen family)

Urban designers / masterplanners:

- Studio REAL / Roger Evans Associates Ltd. (commissioned by the landowner to prepare masterplan for the site; highly involved throughout the project)

Planning authority:

- Harlow District Council – (second tier planning authority)[43]
- Essex County Council – (first tier planning authority)

Developers-architects teams involved in the project:

- Barratt Homes + Robert Hutson Architects
- Countryside Properties (Copthorn Homes at the time) + Proctor & Matthews Architects

[43] In England, most planning authorities are split into two tiers – county and district. County councils are responsible for such services as schools, highways, public transportation, social services, waste disposal, etc., while district councils focus (among other things) on local planning within the district.

- CALA Homes + PCKO
- Moat Homes + Roger Evans Associates
- Newhall Projects Ltd. + Richard Murphy Architects, ECD Architects, ORMS
- Newhall Projects Ltd. (project overtaken) + Proctor & Matthews Architects
- Galliford Try, Linden Homes + Alison Brooks Architects

Timeline

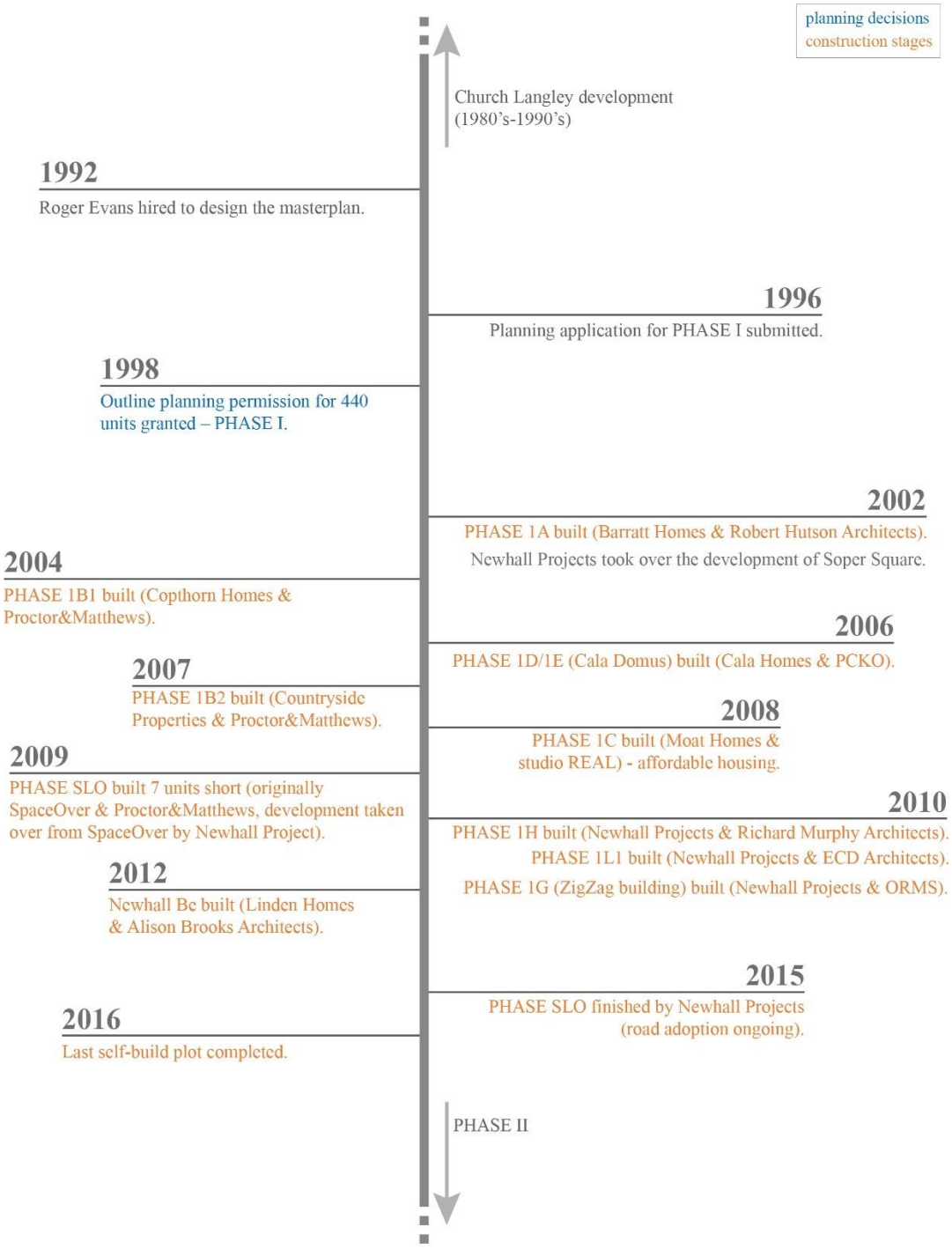


Figure 26: Timeline of the Newhall development.

Before the Newhall development, the landowners had been involved in another development, Church Langley, which was built in the late 1980s and early 1990s on a nearby site also owned by the Moens. On that site the landowners signed an option agreement with a consortium of developers and consequently had little input into the development process. They were disappointed with how Church Langley development turned out and when an opportunity to develop Newhall came about, they decided to take a much more hands-on approach.

Newhall site was not originally in the local plan, however, its strategic location within Harlow made it "an obvious place to push for development" (Stakeholders, 2018), particularly when the Harlow District Council identified a shortfall of 440 houses in their housing delivery. In order to keep control of the development, the Moen brothers decided to get the planning themselves and started looking for an urban designer to help them develop a masterplan for the site. After interviewing 12 or so candidates, chose Roger Evans Associates in 1992, who then prepared the masterplan (see Figure 27) for 440 housing units (Phase I) with the possibility to build that out into a neighbourhood of between 2500 and 3000 houses including employment and other local facilities (Phase II – not analysed as part of this research).

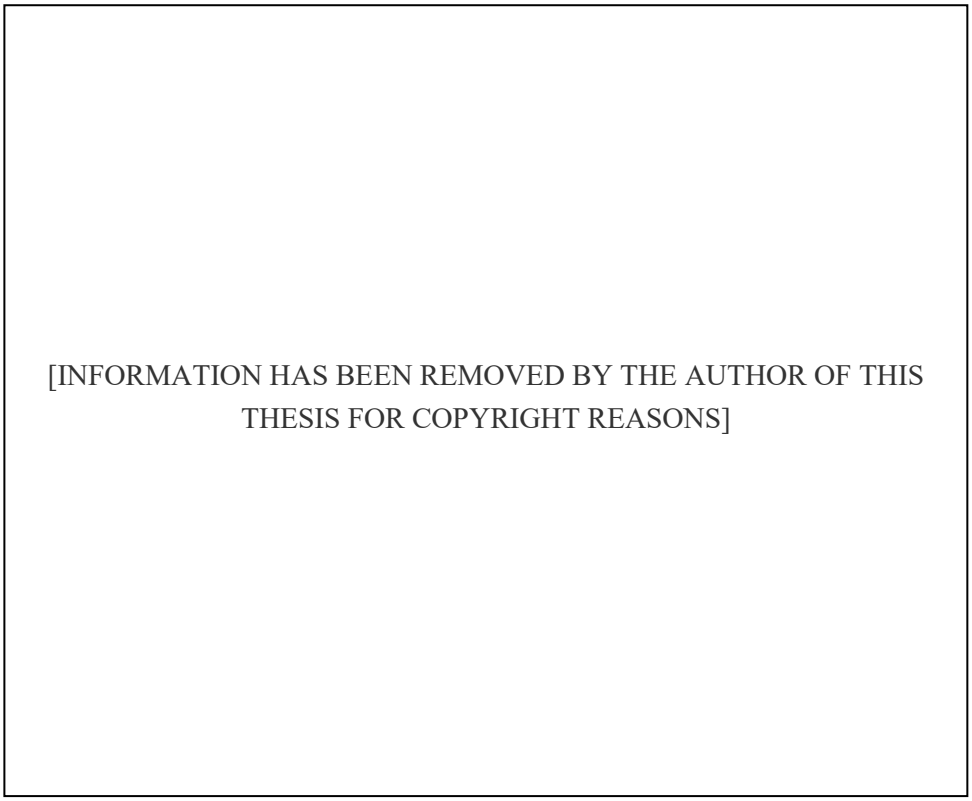


Figure 27: Newhall masterplan – Phase I (in red) and Phase II. Image adapted from Roger Evans Associates (2004).

Despite always assuming that the whole site would be developed, the landowners were not able to promote that in their arguments for developing Phase I as at the time the site was not in the local plan and only 440 houses were required by the council. The proposal went through a judicial review and a local plan inquiry, and it was not until 1998 when the planning permission for Phase I was

eventually granted.

Once the consent was granted, the masterplan for Phase I was subdivided into development parcels (see Figure 28), which were then developed in stages.

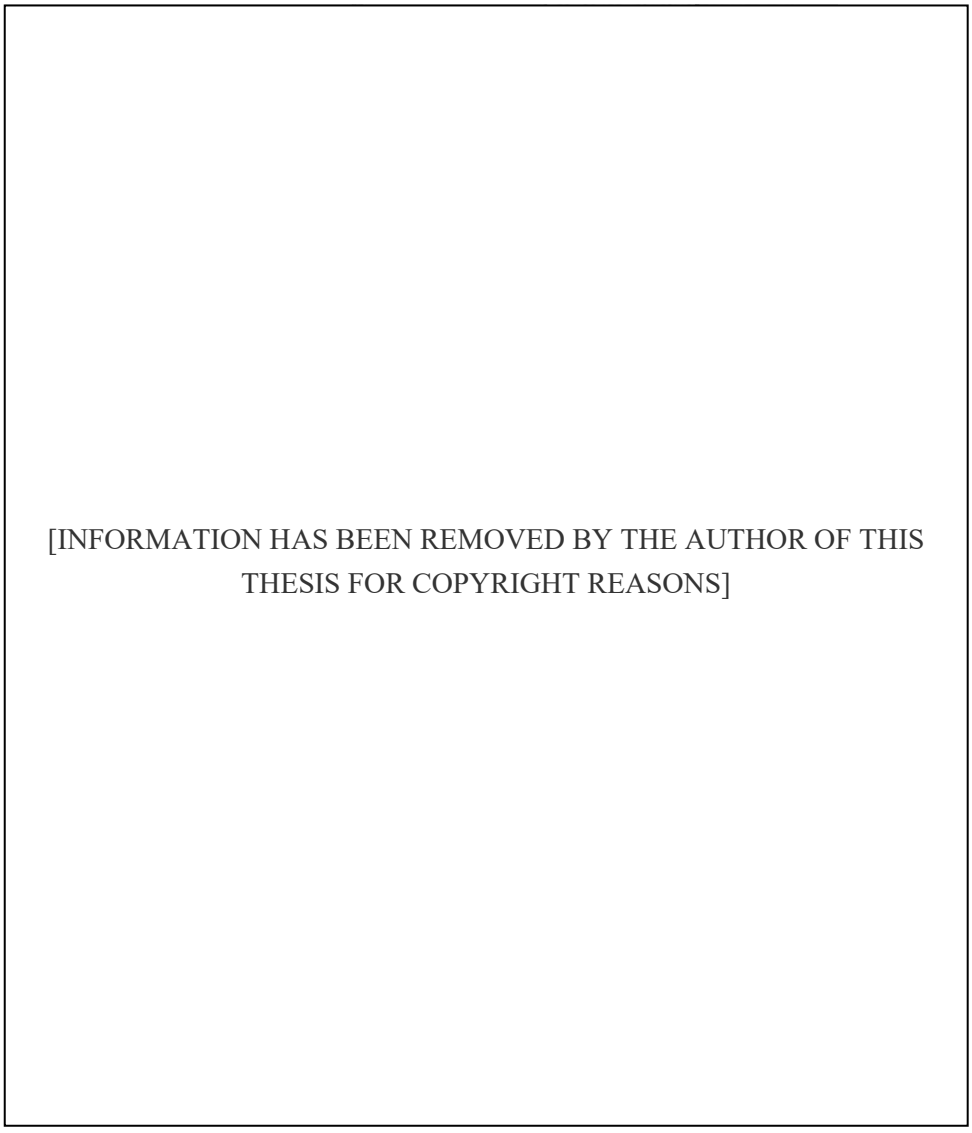


Figure 28: Phase I of the Newhall development. Image adapted from © Crown copyright and database rights 2018 Ordnance Survey (100025252).

The first plot to be developed was 1A and it was one of the largest consisting of 96 units. In this first stage, the landowners decided they needed a fairly large and experienced developer in order to build all the infrastructure. Consequently they sold the land upfront to a volume housebuilder (Barratt Homes) with a certain amount of control built into the deal, which the landowners then used to take out an injunction against Barratt Homes and stop them developing when they started deviating from the agreed designs (Stakeholders, 2018). The scheme was designed by Robert Hutson Architects and completed in 2002.

The next stage was 1B, also called Abode, that was awarded to Countryside Properties (Copthorn Homes at the time) and Proctor & Matthews Architects through an internal design

competition. It consisted of 86 units in total and became very successful winning numerous awards. The first part of the plot was completed in 2004 and the remainder of the site was finished by 2007.

This was followed by CALA Domus scheme (lot 1D/1E) by PCKO and CALA Homes, which was developed as a joint venture with the landowners. The scheme consisted of 74 dwellings and was completed by 2006.

The lot 1C consisted of 17 affordable housing units designed by Roger Evans Associates and developed by Moat Homes. It was completed in 2008.

With the next stage (consisting of lots 1H, 1L and 1G), the Moen brothers decided to develop the land themselves. They hired three different architectural practices to design the scheme – Richard Murphy Architects were responsible for lot 1H (55 dwellings), ECD Architects for lot 1L (a shop and 35 apartments) and ORMS for lot G (the ZigZag building including a restaurant and 13 apartments). This part of the development run into trouble when the housing market crashed in 2008 and the contractor went into administration. As a result, only a small part of lot 1L was developed (1L4) and 1L1 through 1L3 were still under construction in 2018. Nevertheless, the rest of the scheme was built by 2010 with Richard Murphy designs being particularly successful winning "What House" Gold Award in 2007 and the RIBA Award in 2011.

The Newhall SLO scheme designed by Proctor & Matthews, which was being developed around the same time, also faced difficulties with the contractor going into administration. Though most of the 78 houses were built in 2009, the remaining 7 units were not constructed until 2015 and the public realm was not delivered as promised either. Consequently, the landowners decided to buy back the land in order to ensure that the roads get adopted and the scheme gets finished.

The final plot of land – Newhall Be – is certainly the most renowned part of the development with Alison Brooks' design wining multiple awards. It consisted of 84 densely built houses and was developed by Galliford Try and Linden Homes by 2012.

Phase I of Newhall development also included some self-build plots which were all completed by 2011.

As Phase I was being developed, the landowners also promoted the rest of the site (Phase II), which was eventually identified as a strategic housing site and included in the local plan, not in small part thanks to the efforts of one of the planning officers at Harlow District Council (Stakeholders, 2018). The planning permission for 2300 dwellings, including employment, community facilities and open space, was granted in 2012 and the scheme is under way.

Collaboration between stakeholders

Due to the split of the Newhall Phase I into smaller plots, the project was characterized by a relatively high number of stakeholders, particularly many different housebuilders and architectural firms. The collaboration between those stakeholders was heavily driven by a strong vision and a very hands-on approach of the Moen brothers, who were committed to producing a high-quality contemporary

architecture:

"The landowners were very involved and very influential on both who bought the sites, how they were developed and the design. So they were very influential in terms of making sure that they got what they wanted in terms of the finished article and how the overall development would look." (Stakeholders, 2018).

For each land parcel there would be a development brief, which included a set of design requirements such as density, mix of housing, building lines, heights, massing, materials palette, etc. There was also a detailed design code developed by Tom Porter, which was applied to the entire development. Those urban design requirements, together with the masterplan and the design code, were intended to maintain a cohesion throughout the estate, while at the same time leaving the architects enough room for creative design and innovation within each plot.

Each of the development parcels was tendered to developers or advertised through calls for expression of interests in the press, e.g. building magazines. The developers would then prepare a bid together with their chosen architects, which would include concept designs within the given design framework as well as tender for the land. These proposals would then be judged by the Moen brothers and Roger Evans and had to be approved before they were submitted to the Harlow District Council. Interestingly, the tender for the land would be sealed and only opened until after the schemes were assessed in order to ensure that the decision was not influenced by the land bid and the best design was chosen. And, as confirmed by Roger Evans, "in every case the landowners […] always went for the best scheme rather than the highest price. I can vouch for that" (Stakeholders, 2018).

Such an approach not only generated interest among architectural profession, but also allowed the architects to take a more proactive approach to housing developments, as confirmed by the architects:

"I saw a call for expressions of interest […] for developer-architect teams to bid for next lot at Newhall […]. I thought that was an opportunity for me to contact developers to invite them to join me in a bid rather than waiting for […] the phone call." (Stakeholders, 2018).

Arguably, entering into a more equal partnership, as opposed to just being employed by a developer, strengthened the architects' position within the development process giving them more freedom to deliver an innovative design and allowing to push back against developers' preference for conventional building methods, which was quite evident throughout the development.

With a very clear development brief and design principles set from the outset, one might assume that developers would know what they should expect and what they were signing up for. And while some developers were keen to deliver innovative and architecturally demanding designs (despite some difficulties in adjusting to a different development process (Stakeholders, 2018)), other housebuilders were more reluctant, with some downright ignoring the legal requirements they committed to:

"Even though they've seen the design codes, […] signed up to it, you then find on site something different is being built." (Stakeholders, 2018);

"I think what happened is that in the competition they showed us one or two of their landmark buildings which were quite interesting and we assumed that would be the style of building for the whole site, but they had in mind to use the standard house types on the rest of it. So we fought a very strong rear guard action, we took quite a few houses off their architect and had Roger Evans redevelop them." (Stakeholders, 2018).

These difficulties were also evident on CALA Domus scheme, where the Moen brothers developed the land through a joint venture with the housebuilder, whereby they split the costs of developing the designs already prepared by the chosen architectural firm (PCKO):

"A lot of the developers were not happy to work with a design that wasn't developed by them or at least with them at the table." (Stakeholders, 2018).

Admittedly, pushing the envelope has not always worked out for the landowners at Newhall, though market difficulties certainly had contributed to that:

"You had a contractor working with initially three different architects and they don't like that, so we converted it all into one architect, 4th architect, who then took on the designs and rationalised it into a system that they could actually use […]. We ran into serious trouble with this because we pushed the design really hard so built costs were quite high, it was during the recession of 2008 and 2009 so people weren't buying houses […] and that was really quite draining on our whole project, although some of the best designs [according] to us are here." (Stakeholders, 2018).

This kind of fine grain development also caused some issues for the planning authorities:

"We had a very slow build rate, because [developers] were only allowed small parcels, which meant that they couldn't volume build. […] And therefore I was getting it in the neck because I wasn't meeting my housing requirement." (Stakeholders, 2018).

However, while the development itself was not progressing as quickly as it would with a volume housebuilder, this approach, with designs being pre-approved by the landowners before the applications were even submitted, significantly sped up the planning process and was clearly appreciated by many architects and developers:

"There were very little further meetings that we needed to hold, because [the Harlow council] was already sold on the idea […] So we had very little kickback from the planning side of things. They already bought into Newhall in totality." (Stakeholders, 2018);

"There was an agreement between the Moens and the Harlow council, once the outline masterplan was consented, that if each phase that's brought forward is approved and accepted by the Moen brothers and Roger Evans, then it is more or less deemed to have achieved planning consent. […] So, when we submitted it to Harlow council, it basically sailed through in 8 weeks […] and the minute they got planning consent, Galliford Try started digging. It was like a race to finish the drawings, to stay one week ahead of the diggers and timber guys." (Stakeholders, 2018).

Also, a strong working relationship between the Moen brothers and the Harlow council, developed through regular meetings and the landowners' continuous commitment to high quality, meant that the council was willing to give landowners more leeway when it came to delivering on some of the s106 agreements:

"Because the Moens were the landowners and they had […] history of trying to do the best, trying to bring things to the community, trying to make sure there will be the affordable housing, trying to

get high design, we could give them a bit of a slack […] which we probably wouldn't give to other people." (Stakeholders, 2018).

The only issue raised in relation to the collaboration with the Harlow District Council was the staff turnover:

"Unfortunately, there's a turnover of staff in local authorities. So, you tend to have a relationship with one planning officer, then somebody else comes along. And I think we're now 6, 7 or 8 planning officers down the line. It becomes more difficult." (Stakeholders, 2018);

"There was a little change of personnel and each time a new person came along they presented their own difficulties, that always happens, but by large [the Harlow District Council] was very supportive." (Stakeholders, 2018).

Collaboration with the highways authorities, which for most of the project was Essex County Council, was more challenging, mostly due to their prescribed standards for street design:

"Highways have been probably the most troublesome local authority aspect to work with. […] If you look at Church Langley, […] there's standard highway designs, curbs, footpaths. There's a large distributor road with no direct frontage access, big distributor road, fast traffic, quite hostile. And then there's a series of cul-de-sac developments off it with fairly standard house types. And we really used that as an example of what we didn't want to do." (Stakeholders, 2018);

"The idea of putting a tree in the road … they had an athletic fit. So it took quite a long time to get the highways people on board, to look at a different approach." (Stakeholders, 2018).

Consequently, there were some issues with getting roads adopted:

"Mainly because the highways haven't got the money to repair things, they are very reluctant to adopt surfaces that are costly to repair." (Stakeholders, 2018);

forcing the landowners to revert back to more traditional design and materials, which at least in one case might have been the way to go from the beginning:

"Some materials […] we really pushed for, and manufacturers were wrong. We managed to persuade the local authority that it was good material, and they were right, and we were wrong – the material hasn't stood up. So we're replacing all of that [now]." (Stakeholders, 2018).

To sum up, the collaboration between stakeholders at Newhall was driven by landowners working closely with Roger Evans Associates (see Figure 29). They were heavily involved in the design stages evaluating the proposals put forward by developers and architects. This in turn significantly streamlined the planning process.

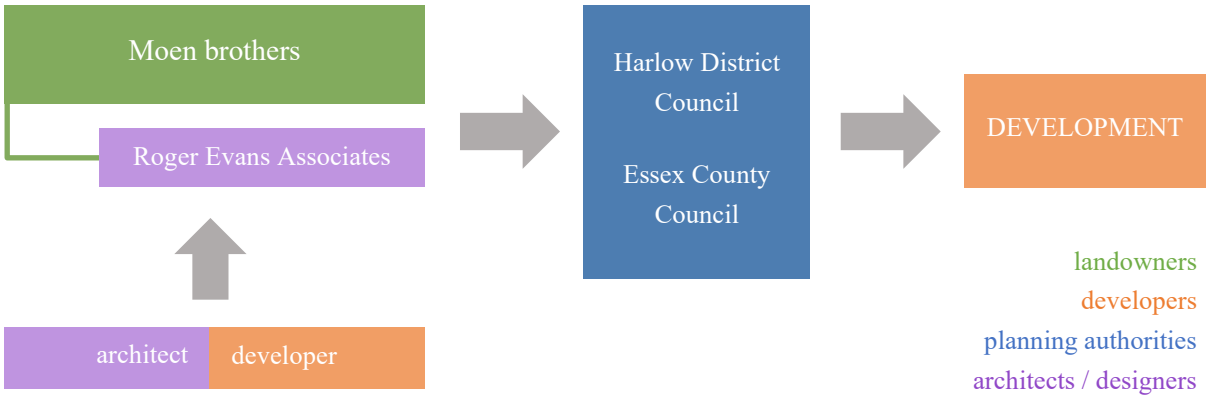


Figure 29: Stakeholders' map for the Newhall development.

* * *

5.2.3. Tadley Acres

Stakeholders

Landowners:

- David Vagg / the Vagg family (owning most of the site and an adjacent farmhouse – their primary residence)
- The Duchy of Cornwall (owning a small part of the site; the estate traditionally owned by the eldest son of the reigning British monarch, currently HRH The Prince of Wales, who inherits possession of the duchy and the title of Duke of Cornwall).

Architects / urban designers:

- ADAM Architecture / ADAM Urbanism (architecture and urban design practice hired by the landowners to design the original masterplan; also responsible for design codes and design of some buildings)
- Oldfield King / King Dale Sharpe / Tetlow King / Thrive Architects (initially hired by Bloor Homes to design individual buildings and standard house types; also responsible for the masterplan of the southern part of Tadley Acres)
- Relph Ross Architect (architects responsible for the design of the affordable phase of the scheme)
- Douglas Smith Associates (architectural practice hired by Thorner Homes)

Developers:

- Bloor Homes (company founded in 1969 by John Bloor; already a large and established housebuilder at the time)
- Thorner Homes (the local housebuilder responsible for some parts of the later phases; family run business)
- Shaftesbury Housing Association (housing association responsible for the development

of the affordable phase of the scheme)

Planning authorities:

- Mendip District Council (second tier planning authority)
- Somerset County Council (first tier planning authority)

Timeline

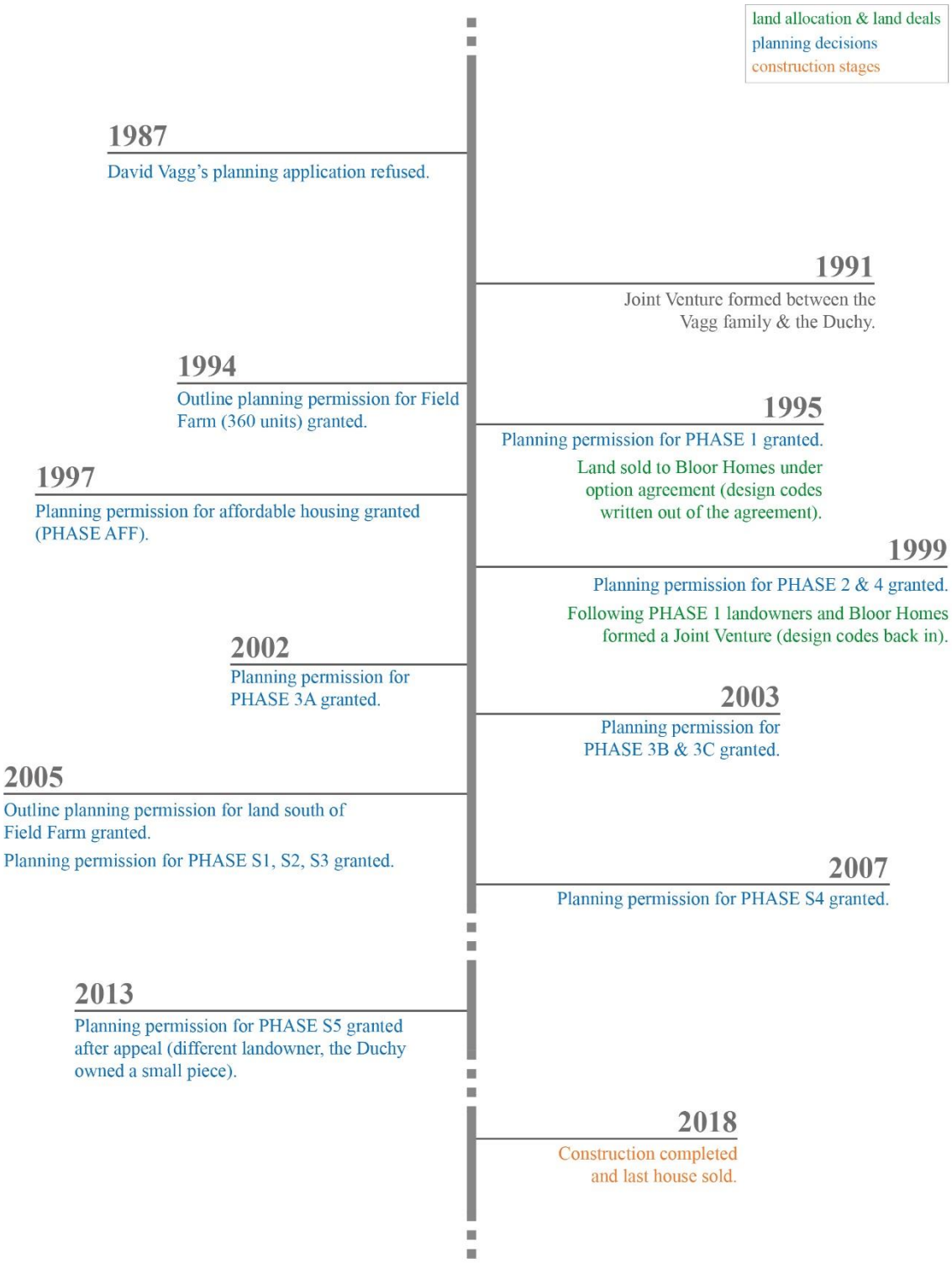


Figure 30: Timeline of the Tadley Acres development.

The land at Field Farm was first being promoted for housing development by David Vagg back in the mid-1980s when the Mendip District Council was looking to allocate housing sites in response to the town's growing housing need. Originally the council was looking to allocate land for about 600-700 houses which would have occupied the land owned by the Vagg family and the Duchy of Cornwall. After the council had decided to reduce the scheme to 300 houses, the Vagg family approached the Duchy asking to form a joint venture and together promote the northern part of the site, of which the Duchy owned only a small plot of about 1.8 acre (see Figure 31). The Joint Venture Agreement was formally signed in December 1991.

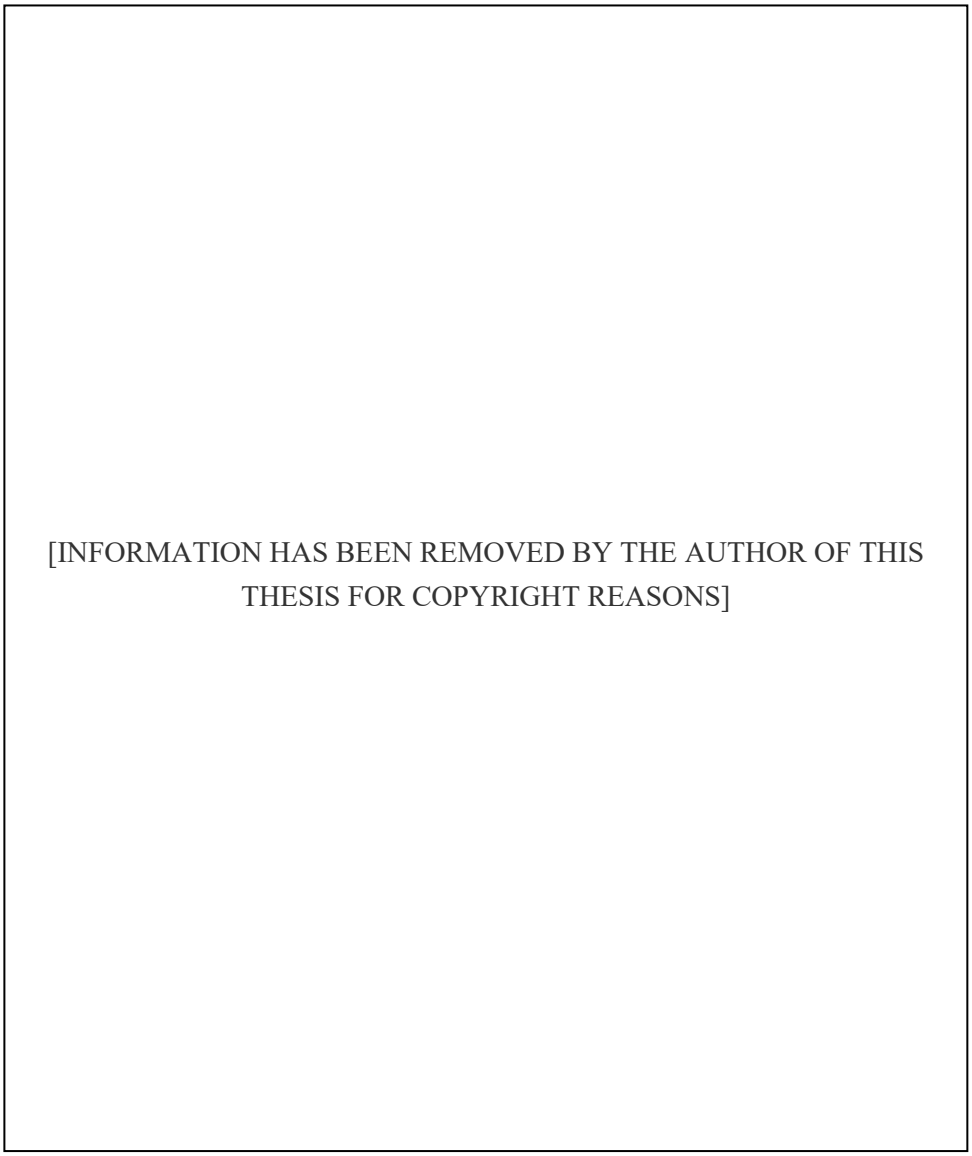


Figure 31: Land ownership at Tadley Acres. Image courtesy of ADAM Architecture.

The Duchy then approached Robert Adam Architects who prepared the masterplan for 360 houses, including 60 affordable units, a primary school and a shop (see Figure 32). The proposal was taken through a local plan inquiry and the scheme was granted a planning consent in 1994. Interestingly, this happened at the time when there was no requirement for developers to produce affordable housing as part of the scheme and therefore the Mendip council was not asking for it.

However, the Duchy felt that the development should cater for all tenures and agreed with the council to deliver 60 affordable units on top, rather than as part of, the agreed 300 dwellings, this way not affecting the number of open market homes. In these early stages of the development, the affordable housing was restricted to a separate phase at the western edge of the site.

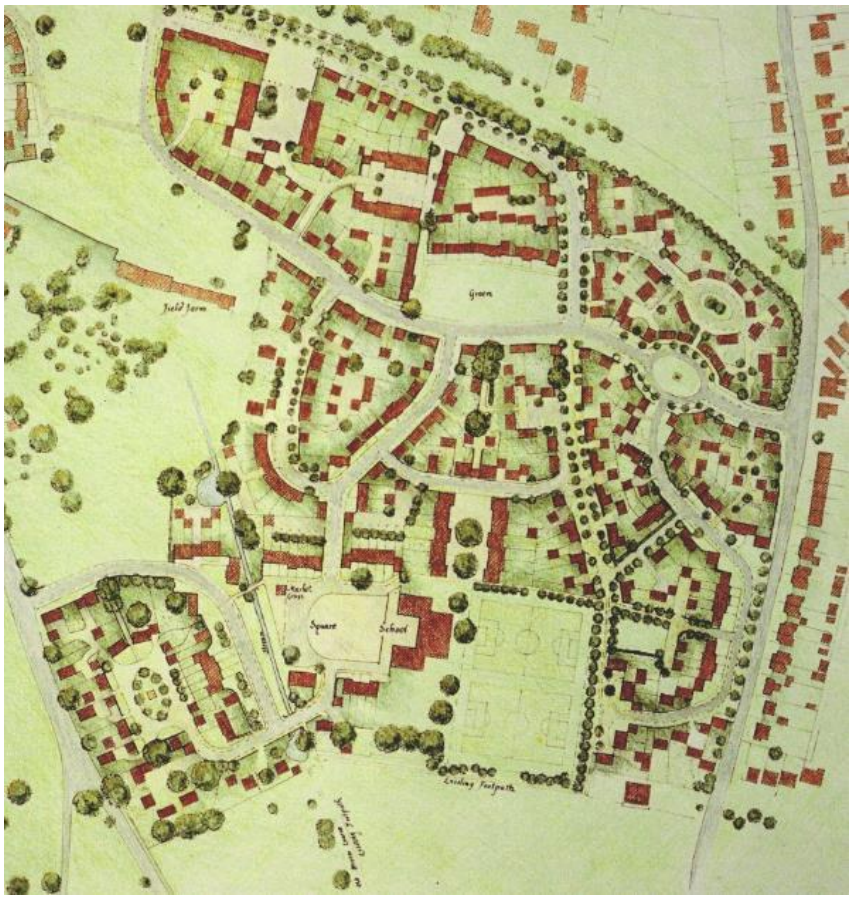


Figure 32: The original masterplan for Tadley Acres. Image courtesy of ADAM Architecture.

Having a clear vision for the development and a planning consent, the Duchy and the Vagg family then tendered the land to developers, but due to market recession at the time, there was only one housebuilder bidding for the land (Stakeholders, 2018). This was Bloor Homes and they bought the land for phase 1 in August 1995.

The scheme was then developed in stages between 1995 and 2005 (phases from 1 to 4, see Figure 33) with some changes to the original proposal, resulting in 349 market houses and 40 affordable homes. Most of the market houses were built by Bloor Homes and designed by Oldfield King and later Tetlow King (now known as Thrive Architects) and some buildings were designed by Robert Adam Architects. Phase 4, constituting 14 dwellings, was bought by a local housebuilder, Thorner Homes, and designed by Douglas Smith Associates. The affordable part of the scheme (phase AFF) was built by Shaftesbury Housing Association and designed by Relph Ross Architects. Also, and most notably, the Somerset County Council decided they do not wish to have a new primary school built and this part of the site remains empty to this day.

[INFORMATION HAS BEEN REMOVED BY THE AUTHOR OF THIS THESIS FOR COPYRIGHT REASONS]

Figure 33: Phases of the Tadley Acres development. Image adapted from © Crown copyright and database rights 2018 Ordnance Survey (100025252).

As the development progressed, the land to the south was promoted. Thrive Architects were hired to prepare the masterplan for that part of the scheme (see Figure 34), which would build on the original masterplan and reflect the design principles already established in the earlier phases. The proposal, which included significant employment provisions, was granted outline planning permission in 2005 and was developed by Bloor Homes and Thorner Homes. 240 homes were built between 2005 and 2010 as phases S1 through S4.



Figure 34: Masterplan for the southern part of Tadley Acres prepared by Thrive Architects. Image courtesy of Thrive Architects.

The most southern part of the site (phase S5) was not owned either by the Duchy nor the Vagg family, but was later bought by Bloor Homes and Throner Homes from a third party landowner and developed following the same design principles and maintaining the same standards. The last house was sold in 2018.

Collaboration between stakeholders

Tadley Acres scheme was characterized by quite an unusual land ownership circumstances. As mentioned before, most of the land was owned by the Vagg family, however, they decided to form a Joint Venture with the Duchy of Cornwall, partly to avoid the risk of planners favouring the Duchy's land instead of theirs (Stakeholders, 2018). In return for the Duchy holding off their other land to the south and promoting the Field Farm site together with the Vagg family, the Duchy was given a significant design control and ability to shape the scheme, which "made for a very healthy relationship" (Stakeholders, 2018).

Nevertheless, the Vagg family was still very closely involved throughout the scheme, and this meant that there was yet another party, with their own set of views and agendas, that had to be accommodated within the development process. Also, arguably this meant that the Duchy had in fact less control compared to their other sites such as Poundbury, where they were the majority landowner:

"The Duchy had to very slightly compromise on some of the key aspect of Robert's and Andy Grant's design code and our principles." (Stakeholders, 2018).

In the early phases, the development was driven mostly by the landowners and ADAM Architecture, however, this was slightly complicated by a particularly difficult period in the housing market:

"So we always knew that finding a developer to take this scheme on would be a challenge, with the provisions laid down in the design code, which involved the use of local materials. We knew that our build costs would have been higher than normal." (Stakeholders, 2018).

And while the Duchy, with their broad portfolio and various revenue streams, was in the position to wait that out, the Vagg family was eager to get started. Consequently, the Bloor Homes were the only bidder for the site, which put them in a much stronger position to negotiate the terms:

"They knew what sold and they knew how to go about development. And their knowledge of the market place contradicted some of the provisions that were in the design code and the masterplan. […] In the backwards and forwards that was going on with Bloor Homes everything that we had gotten in the design code was being challenged." (Stakeholders, 2018).

As a result, the design codes were written out of the legal agreement for the sale of the first parcel of land:

"Now, it's a leap of faith, do you form a relationship with a housebuilder on that basis of a belief that by doing so you might in subsequent discussions be able to mend the line and get back some of the things that you wanted. And that was the best view that I could take at the time, so I recommended that we should go ahead with the sale." (Stakeholders, 2018).

This was a particularly contentious point for ADAM Architecture, particularly that they were not made aware of this change beforehand (Stakeholders, 2018). The adherence to the design codes during the first phase of the development was very much up for debate and while the landowners and their architects made their best efforts to convince the developers, it was ultimately up to them to decide what would be best:

"And while we didn't have real power, legal power, we were able through I would say charm and encouragement to persuade Bloors to do things a little bit better than they might have budgeted for." (Stakeholders, 2018).

Nevertheless, it seems there were continuous disagreements between Bloor and ADAM Architecture in these early stages of the project and the architects were quite disappointed with the first phase, to the point that they would later go around and take photographs of phase 1 in order to illustrate what not to do (Stakeholders, 2018).

That being said, it seems that as time progressed the collaboration with developers was going increasingly better, which was also confirmed by the architects who worked on later phases of the development:

"[There was] a very dynamic tension between the Vagg family, the Duchy and the developer, and, I have to say, became over time an incredibly strong relationship. […] The houses sold well, and I can remember [Bloor Homes' representative] saying to me 'you know, I think, they're buying this because it is a good design.' And he really believed in it and he became a pioneer withing Bloors as a housebuilder. And to give him eternal credit, there are other schemes that Bloors did, nothing to do with the Duchy, where they applied the same principles and built out schemes at a premium.

And they were beautifully built." (Stakeholders, 2018);

"I think Bloor Homes were very understanding of the whole philosophy of what the Duchy were trying to achieve. […]they were quite accommodating and letting us have a fairly free hand in terms of the design of the elevations, which is unusual for modern developments. Because normally it all comes down to build cost really." (Stakeholders, 2018).

Bloor Homes also appreciated the architects' design expertise, particularly when it came down to the standard house types developed by Bloor Homes:

"Odd enough their architect, Melvin King, he and I got together […] and we pointed to Bloors that some of their house types were ridiculously complicated and we could probably simplify them and make them cheaper to build." (Stakeholders, 2018);

"And I also think from phase one to phase two we really understood the effects of the costs. So, by understanding the effects of the costs, the ability of our resource to build it. Robert was working with us to fundamentally change the design detail to make them more buildable. And therefore somewhat cheaper." (Stakeholders, 2018);

"And Bloors was asking us 'let's design this exactly as you want because you know more about this than we do, and we're all learning.' So actually that scheme gets better and better and better as you walk through it, in my view." (Stakeholders, 2018).

As a result, the design codes were adapted and successfully incorporated in the later phases and the collaboration progressed smoothly through regular meetings between the Duchy, the Vagg family, ADAM architecture, the developers and the planners.

There was a quite strict quality control in place performed by ADAM Architecture, but also an appreciation from all parties for the practicalities of building construction and the necessity of commercial viability:

"Bloor Homes or Tetlow King used to send me the planning drawings or construction drawings and then I used to comment on them and make sure they complied with the design code Or if they didn't, make suggestions or sketch out little details how to get the detailing right, commenting on the materials and things." (Stakeholders, 2018);

"So, we were sort of driven into a regular protocol process with Robert Adam and the Duchy to ensure that we were compliant with that design brief. But actually as the process unfolded over the continuing phases, there was an understanding from all parties that whilst you have architectural idealism, you have to have commercial realism." (Stakeholders, 2018).

In the later phases of the development, a small local housebuilder, Thorner Homes, joined the project and their relationship with Bloor Homes and other stakeholders was also working quite well:

"Myself and Roderick Thorner got on very well. […] And it was a very amicable partnership. But I think that comes down to the people as much as the business agreement." (Stakeholders, 2018);

"Thorner Homes were much smaller local developer, but they were still very commercial in terms of what they were doing and always aware of what they thought they could sell. They were fairly receptive to doing this bespoke approach." (Stakeholders, 2018).

Shaftesbury Housing association, who built the affordable part of the scheme, was also praised by the representative of the Duchy:

"To be fair I worked with them elsewhere […] and they really understood what we're all about. And they produced a value for the land. We had to produce the roads and other infrastructure, but they basically were a positive contribution to the scheme, in every sense." (Stakeholders, 2018).

However, the Duchy was slightly disappointed about not being able to spread the affordable housing provision within the development:

"The battle, or the discussion, that we didn't win was about integration within the scheme. Now there were two reasons for that, possibly three. Primarily, Bloor Homes didn't really want the affordable housing within their bit, cause they were fearful of that. Secondly, the planners didn't particularly want [that] either. And thirdly, Shaftsbury said they had to have the affordable housing in a block which geographically made sense, otherwise they weren't really able to manage it successfully." (Stakeholders, 2018).

Also, later on in the scheme there were some tensions between the landowners and ADAM Architecture. As the scheme grew, the planners granted permission for further development on the land to the south, which was not included in the original masterplan:

"Big mistake is that due to lack of vision nobody thought about doing a masterplan for the whole area, cause nobody had the confidence to spend the money to do it. You would have made a good scheme even better if you'd known that." (Stakeholders, 2018).

David Vagg decided not to continue with ADAM Architecture and approached Thrive Architects instead to do the masterplan based on the principles and designs already established during earlier phases, which understandably caused some tensions:

"They kind of played silly buggers with me on this one. Because this was done without any consultation with us by the Duchy. And I got really quite cross. And I said no, I'm sorry, you mustn't […] and we kind of backtracked." (Stakeholders, 2018).

The collaboration with the Mendip District Council was quite straightforward and they did seem keen on having a "legacy development on [their] doorstep" (Stakeholders, 2018):

"I think the relationship [with the Mendip council] was extremely good, intelligent and productive throughout. We had to bite our tongues occasionally, I'm sure they had to bite their tongues. But broadly speaking we engineered, as we always try to do, a really good relationship with planners." (Stakeholders, 2018).

The council was involved through regular meetings in the negotiations around the affordable housing, employment, community provisions as well as the design of the scheme, though it did not seem that the planning authority had a significant input into how the scheme turned out (Stakeholders, 2018) and in fact their oversight for the northern part of the scheme seemed lacking at times:

"As it happens […] the case officer whom I doubt you would take a shine to drew a line on with a ruler too far to the south and has given us at least two acres extra with which to play" (Stakeholders, 1994).

These issues could have been partly caused by staff rotation in the planning offices as case officers changed at least twice during the duration of the project.

The collaboration with Somerset County Council, which focused on highways and education,

had some issues, most notably the matter of a primary school. Very late in the project, the county council changed their mind and decided they did not have a need for a new primary school, which was disappointing for the landowners and their architects:

"[Initially] they were adamant that they wanted a school. We wanted a school, cause actually we love to design buildings that are not domestic, and which serve the community […] In fact, we spent quite a lot money towards the initial design of the school […] and masterplanning [it] into the middle of the development. […] There was nobody more disappointed about there not being a school than the Duchy." (Stakeholders, 2018).

This change of heart might have been related to a change in government policy, which meant that funding was being allocated based on number of pupils, and therefore other schools within the catchment area opposed the building of a new facility at Tadley Acres, which would potentially be very attractive to the parents and thus affect their funding.

To sum up the collaboration at Tadley Acres was driven by the landowners and their architects. In the first phase, due to difficult market situation, they relinquished some of the control to Bloor Homes, but later on they established a strong working relation with developers and work proceeded very much in a form of a partnership (see Figure 35). Also, the collaboration was further complicated by an arrangement between the majority landowners, the Vagg family, and the Duchy of Cornwall, and the lack of singular vision potentially allowed the developers to take a lead on some of the issues, particularly that the partnership between Bloor Homes and Thorner Homes was extremely successful and robust.

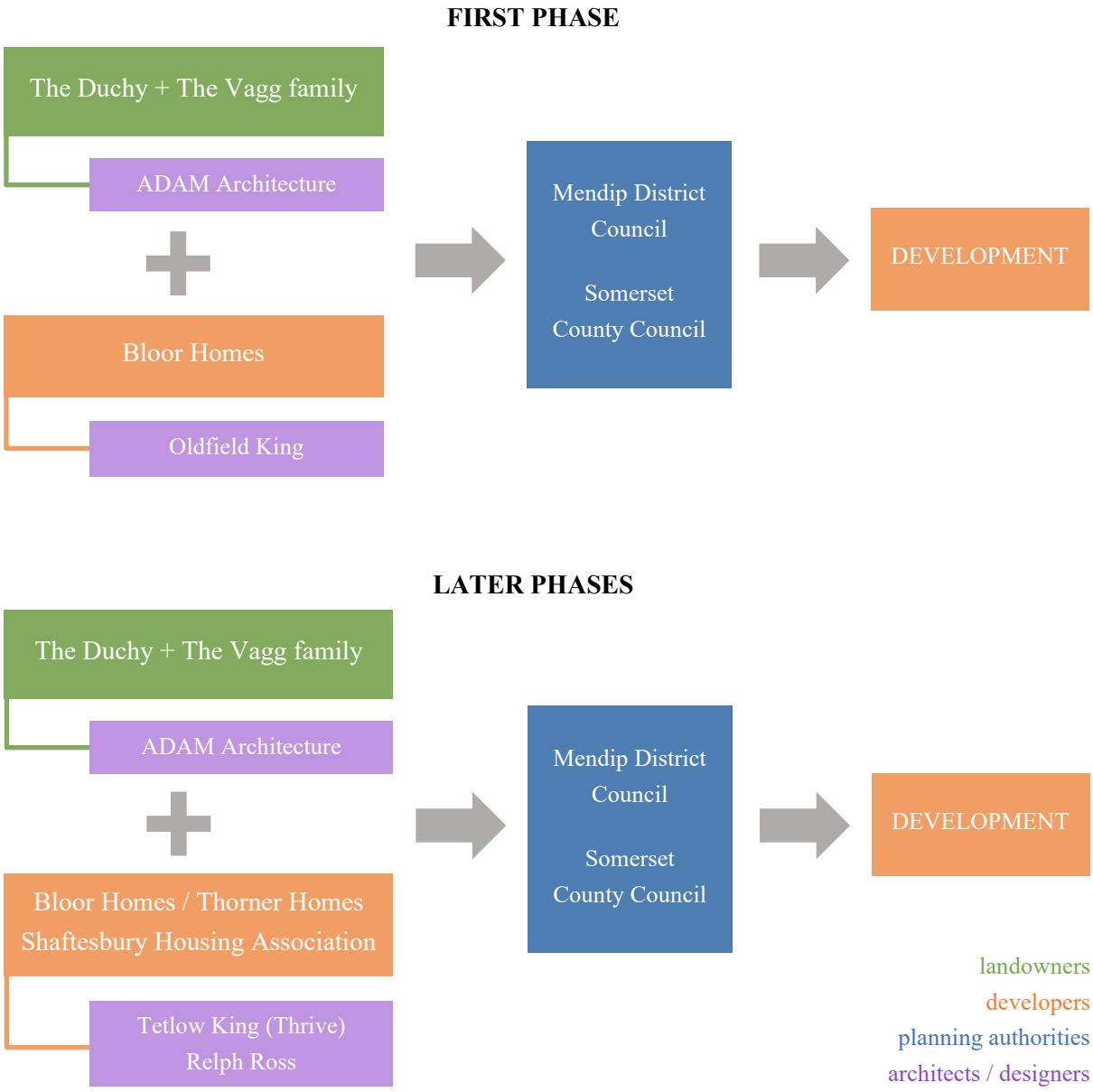


Figure 35: Stakeholders' map at Tadley Acres.

* * *

5.2.4. Comparison between case studies

The analysis of the development process at Tadley Acres, Newhall and Burwell illustrated that the relations between stakeholders are much more complex than it was originally suggested in the conceptual framework (Figure 36).

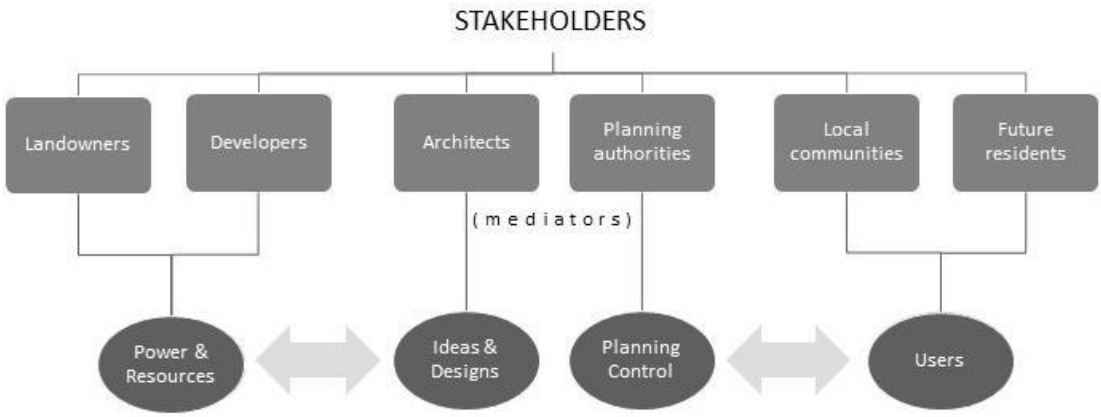


Figure 36: Stakeholders' relations as suggested in the conceptual framework.

In reality these relations depended on a number of factors such as structuring of a land deal, attitude of the planning authority or characteristics of the site. Consequently, the collaboration between stakeholders and the development process looked very differently at each development (see stakeholders' maps – page 126, 134 and 144) and had its own set of difficulties and challenges.

Despite the involvement of such a powerful landowner as the Duchy of Cornwall, at the beginning the landowners' position at Tadley Acres was weakened by the lack of a singular vision and tensions between the Duchy, the Vagg family and ADAM Architecture. Also, the lack of vision from the planning authority and lack of confidence from the landowners to masterplan the whole area from the outset had led to a slightly more piecemeal approach and more protracted planning process as the planning authority had to be convinced to allow further development as the scheme progressed.

Similar situation occurred in Burwell, where the plan for the whole site was never agreed on with the planning authorities and in fact, it was only prepared in 2003 after two phases of the development were already built. Therefore, with every phase, the landowner and the developer had to win over the support of the planning authority, and parish council in particular, whose attitude has changed over time (partly due to a new development planned on a nearby site).

Conversely, landowners' position at Newhall was probably the strongest out of all, partly due to their clear and long-term vision for the entire development, which included a comprehensive masterplan for 3000 homes (even though the council was only looking to allocate 440 at the time) and partly due to the involvement of the planning officers from the Harlow District Council, who then personally fought for the inclusion of the entire site in the local plan (even though strategic sites

were not commonly accepted at the time) (Stakeholders, 2018). The mutual trust between the planning authority and the landowners, resulting from landowners' hands-on approach and continuous commitment to innovative design and high build quality, significantly sped up the planning process as evidenced by the average time it took to obtain a planning permission for each of the phases (at Newhall the average decision time was cut in half compared to the other two schemes) and the number of decisions made within the statutory period (45% at Newhall compared to 27% at Tadley Acres and 25% in Burwell (Table 3 and Figure 37)).

Table 3: Decision time for planning consents at Burwell, Newhall and Tadley Acres.

	Average decision time [days]	**Decisions made within the statutory period [%]**
Burwell	131	25%
Newhall	76	45%
Tadley Acres	189	27%

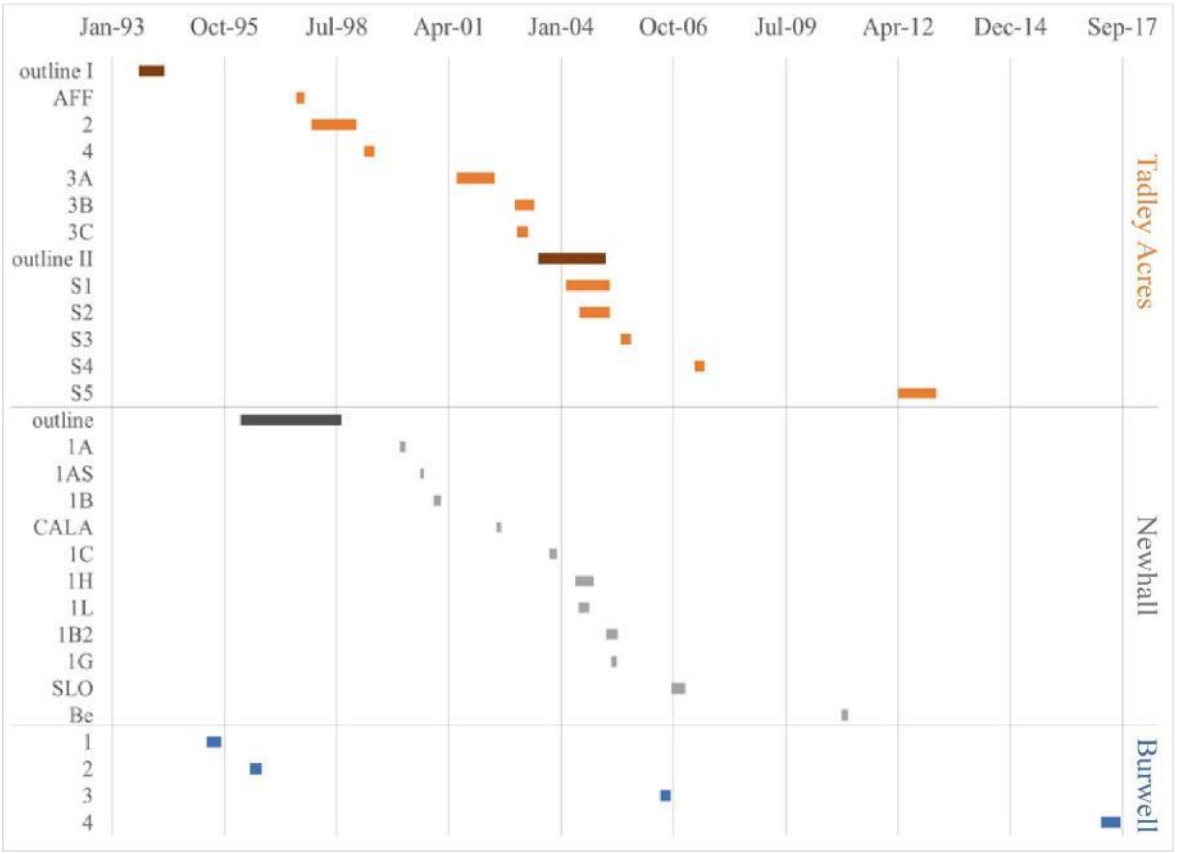


Figure 37: Planning applications at Tadley Acres, Newhall and Burwell.

However, this is not to say that the development at Newhall proceeded much more quickly as it had its own set of difficulties related to bespoke designs and the sheer number of stakeholders involved, which made the management of the project much more challenging. Consequently, the

average delivery rate at Newhall was only slightly higher than at Tadley Acres (see Table 4).

Table 4: Build rate at Burwell, Newhall and Tadley Acres.[44]

	No. of housing units built	Duration	Average delivery rate
Burwell	53	23 years	2.3 per year
Newhall	577	17 years	33.9 per year
Tadley Acres	726	23 years	31.6 per year

As the landowners at Newhall were dealing with different housebuilders and architects on each phase, they were starting from scratch and did not have the benefit of building on their working relationships from phase to phase. Also, the bespoke designs at Newhall resulted in higher build costs, which had negative impact on the land value, possibly leading to the number of affordable housing being negotiated down in order to make the scheme viable, which was accepted by the council as they appreciated the design quality of the scheme and were willing to give the landowners a little bit more leeway (Stakeholders, 2018).

Consequently, this approach required much more effort and oversight, which was certainly draining on the landowners and influenced the level of their involvement in Phase II.

On the other hand, at Tadley Acres landowners were able to lower down the costs by working closely with the housebuilders and improving on their designs and methods:

"It was a massive learning curve for us all, it massively expanded our knowledge of house building and what's available and what's proportionate and disproportionate to the marketplace. […] And it was a very good experience working with Robert Adam particularly. Because between us I think we both grew understanding of each other's desires, of good design and commerciality. […] So I think the marriage between architectural idealism and commercial realism worked and we managed to utilise the best of both on something that ultimately became very successful." (Stakeholders, 2018).

The collaboration progressed more smoothly as they were able to build on their experiences from phase to phase; and good working relationship between stakeholders developed over time:

"So, once we got the housebuilder believing in the process, actually then we really believed in it too. I don't know quite who was leading who in this, but we began together to believe that this was possible [even] in a very difficult location." (Stakeholders, 2018).

The delivery model at Tadley Acres also demonstrated the importance of collaboration between all stakeholders, particularly the landowners and the developers:

"It was really where I've learnt the importance of getting the developers involved right at the beginning so that they contribute their knowledge and acumen and skills and their drawing offices and architectural practices to the project. […] It's that knowledge that helped me to discover what I believe to be the Holy Grail, which is the consortium or partnership model of delivery, where

[44] The delivery rates do not reflect the speed with which houses were being built by the developers but rather the length of the entire development process.

landowners work with housebuilders all the way through and which we now use almost everywhere today" (Stakeholders, 2018).

The subject of continuity was another issue that came up time and again. At Tadley Acres, that continuity was ensured through the ongoing involvement of the same stakeholders: the Duchy and the Vagg family, Bloor Homes and Throner Homes, as well as the same architects working on the project through the years. However, arguably there was slightly less continuity in terms of the design process as the masterplan was prepared by ADAM Architecture – landowners' architects; while most of the detailed designs were prepared by Melvin King / Thrive Architects – developers' architects. Therefore, in order to ensure that the design principles do not get lost in the process, there was quite a strict quality control performed by ADAM Architecture (especially in the early phases). This was not a particularly efficient solution as the designs were being constantly negotiated in order to reconcile landowners' and developers' priorities, with architects caught in between:

"The architect in the end … their client is their master, so we do what our master asks us to do. We can only encourage them to go in the right direction." (Stakeholders, 2018).

Though it should be pointed out that architects at Tadley Acres generally worked well together, for instance on improving Bloors' standard house types. Also, the line between developers' architects and landowners' architects got more blurry with time, e.g. ADAM Architecture's employee who used to do quality control for Tadley Acres went on to work for Thrive Architects, thus Bloor Homes.

At Newhall the continuity of the scheme was ensured by landowners' and Roger Evans' supervision of the development as well as the comprehensive planning approach from the district council (though staff turnover among planning authorities was an issue for both Tadley Acres and Newhall project). And despite many different architects and developers working on the scheme, arguably there was more continuity in the design process too as architect-housebuilder teams prepared joint design bids for each phase, and therefore, worked closely together from start to finish.

In Burwell, certain level of continuity was ensured by ongoing involvement of the Hastoe Housing Association, however, there was no long-term vision for the development from either party. Also, it is possible that the landowner's decision to consider selling the land to a different housing association exacerbated the tensions with the Parish Council, which further illustrates the importance of continuity in stakeholders' involvement and relations.

5.3. HOUSING QUALITY

This chapter focuses on the outcomes of the development process described above. The built environment that has been created was analysed and different aspects of housing quality were investigated and evaluated based on stakeholders' perceptions of the schemes.

* * *

5.3.1. Development outcomes

Layout and density

In Burwell, particular attention was paid to how the scheme sits within the surrounding countryside, partly because, it being a RES, the development would not normally be allowed on that site had not it been for affordable housing. The density of the scheme is relatively low – 25.4 dwellings per hectare (dph) (Table 5). There is no communal open space provided, though having in mind the size of the development (53 houses in total) and the rural setting of the scheme, this is understandable. Also, the low density allows for generous front and back gardens, particularly in phase 1 and 2, which would not be possible for an open market scheme (high land values mean that developers try to squeeze in as many houses as possible).

A significant amount of consideration also went into designing the layout of the houses so that they do not obstruct the view of the church tower when approaching the village from the Newmarket town (see Figure 38) (Stakeholders, 2018).



Figure 38: Design drawings for phase 4. Image: Parsons + Whittley (2017c).

Tadley Acres scheme is characterized by quite evident split between northern and southern parts of the scheme. This is due to the fact that the masterplan was developed in stages as the decision was made to continue with the development beyond the scope that was originally envisioned (see section 5.2.3). There are significant differences in density (but also other aspects of housing quality discussed below), and therefore, there is a distinction made between Tadley Acres North (dwellings located north from the school site) and Tadley Acres South (dwellings located south from the school site).[45]

Tadley Acres North has a more suburban feel than Tadley Acres South with its lower density and plenty of cul-de-sacs (particularly true for Phase 1). The layout is characterized by winding roads and open space areas resembling village greens, which was inspired by layouts of traditional settlements (Figure 39 and Figure 40) (Stakeholders, 2018). While there is limited vehicle permeability, there is plenty of pedestrian paths connecting cul-de-sacs. Parking is provided mostly in curtilage.



Figure 39: Winding roads.

[45] This geographical split between Tadley Acres North and Tadley Acres South does not correspond with the planning history – phases from 1 to 4 (first outline planning permission), phases from S1 to S4 (second outline planning permission) and phase S5. However, residents (as well as many stakeholders) did not make the distinction between northern and southern part based on planning history, but rather location and visual character; and empty school site was treated as a geographical boundary. Therefore, the proposed distinction between Tadley Acres North and Tadley Acres South follows the same principle.



Figure 40: Open space at Tadley Acres North.

The affordable housing at the northern part of the scheme is restricted to one corner of the site. The reason for this was that at the time housebuilders were not required to deliver affordable homes as part of the development and the Duchy volunteered to do that (as discussed in section 5.2.3). However, 'pepper potting' was not a common practice and neither Bloor Homes nor Shaftsbury Housing Association wanted affordable homes mixed with the rest of the development due to argued lower commercial value of adjacent properties and maintenance issues respectively (Stakeholders, 2018).

By the time it came to developing southern part of the site, there was a general desire, both on part of architects as well as the government, to move away from suburban development towards higher density, mixed use and attractive streets with continuity of frontage. This was reflected in the changes in planning policy, which significantly affected the design of Tadley Acres South, particularly in terms of density and parking. The most influential policies here were 'Planning Policy Guidance 3: Housing' (PPG3), published in 2000, and 'Planning Policy Guidance 13: Transport' (PPG13), also published in 2000. PPG3 encouraged higher densities and lower parking standards and included such language as:

- *"[…] the Government expects [parking standards] to be significantly lower than at present";*
- *"Local planning authorities should adopt policies which […] focus on the quality of the places and living environments being created and give priority to the needs of pedestrians rather than the movement and parking of vehicles […]";*
- *"Car parking standards for housing have become increasingly demanding and have been applied too rigidly, often as minimum standards. Developers should not be required to provide more car parking than they or potential occupiers might want, nor to provide off-street parking when there is no need, particularly in urban areas where*

public transport is available or where there is a demand for car-free housing. […] They should not be expressed as minimum standards.";

- *"Local authorities should revise their parking standards to allow for significantly lower levels of off-street parking provision […]";*
- *"Car parking standards that result, on average, in development with more than 1.5 off-street car parking spaces per dwelling are unlikely to reflect the Government's emphasis on securing sustainable residential environments. Policies which would result in higher levels of off-street parking, especially in urban areas, should not be adopted.";*
- *"Local authorities should encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net)";*
- *"For most authorities the average density should be not less than 30 dwellings per hectare overall".*

PPG13 took it a step further by arguing that the availability of car parking has a major impact on the mode of transport that people choose, even more so than accessibility of public transport.

The above policies were an attempt to discourage car use and promote more pedestrianised and 'sustainable' neighbourhoods, but in reality focusing on providing less parking rather than improving public transport provisions only caused more problems, some of which are noticeable at Tadley Acres. At the southern part of the estate, which was laid out in 2002-2003 and therefore heavily influenced by the above mentioned policies, there is very little off-street parking and consequently the streets are filled with parked cars, so much so that there were instances reported when a fire truck or refuse vehicle could not drive through the estate (Stakeholders, 2018; Tadley Acres residents, 2018). Also, setting minimum net densities had inadvertent result of developers pushing densities up at some areas of the site (e.g. flats) in order to be able to provide bigger gardens for more 'desirable' homes (Stakeholders, 2018). Interestingly, the overall density at Tadley Acres is still quite low – 25 dph, which is the lowest out of the three schemes (Table 5). This number is heavily influenced by the ample amount of open spaces (Figure 40 and Figure 41), particularly the school site which was still standing empty. However, even without the school site, the overall density at Tadley Acres is significantly lower than at Newhall – 28.5 dph compared to 44.3 dph (Table 6).

Table 5: Overall density at Tadley Acres, Newhall and Burwell.[46]

	Burwell	**Newhall**	**Tadley Acres**
area [ha]	2.09	12.14	25.41
no. of dwellings	53	538	636
density [dph]	**25.4**	**44.3**	**25.0**

[46] Phase S5 at Tadley Acres was excluded from the analysis as it was built on the land owned by a different landowner, and therefore without any input from the Duchy or the Vagg family, and included mostly detached properties, which would disproportionally affect the results.

Table 6: Overall density at Tadley Acres North and South (excluding the school site).[47]

	Tadley Acres North	Tadley Acres South	Tadley Acres overall
area [ha]	12.72	8.15	20.88
no. of dwellings	278	318	596
density [dph]	**21.9**	**39.0**	**28.5**



Figure 41: Open space at Tadley Acres South.

Tadley Acres South also did away with cul-de-sacs, therefore providing more vehicle permeability, but the principles of winding roads, pedestrian permeability and open spaces remained the same. There is a clear street hierarchy – distinctive key buildings with more elaborate elevations are located on main streets while plainer buildings on secondary streets – which increases legibility of the scheme. The layout also integrates landscaping and provides glimpses of the surrounding countryside (Figure 42), while parking was hidden away in courtyards with houses within the parking courts so that they are naturally policed.

[47] *Ibid.*



Figure 42: Glimpses of countryside.

The masterplan at Newhall took inspiration from Frederick Gibberd's principles for the original design of Harlow New Town, which included high densities with shared open space in between. The landowners were determined to move away from standard development principles (i.e. having a large distributor road with no direct frontage, cul-de-sacs off the main road and standard house types with private gardens) as they had previously adopted such approach at Church Langley with disappointing results (see section 5.2.2). Instead, they wanted to provide contemporary and innovative design by employing a number of different architects.

The masterplan with its permeable street pattern was designed by Roger Evans Associates and, together with the design code, defined the street network, provision of public open space, the design of public realm, materials palette and the massing of buildings. This framework was meant to fuse together different architectural styles and create a cohesive development, which by Roger Evans' own admission "only worked to an extent, but not completely" as they underestimated architects' desire to make a statement with their distinctive designs (Stakeholders, 2018). There are visible 'joints' between phases, but a certain level of cohesiveness was clearly achieved by following the same building lines, similar massing and consistent choice of materials.

The aspiration was to provide very fine grain architecture, but due to economy and difficulties related to splitting a development into small parcels, the landowners decided to develop the land in larger plots, which had a shape of a cheese or a wedge of cake so that different designs converge around key spots such as public squares (Stakeholders, 2018).

The masterplan was also flexible enough to allow for a bespoke design of each parcel of land,

which was crucial in achieving higher densities – 44.3 dwellings per hectare, which is by far the highest out of the three schemes (Table 5). For instance, the layout of Newhall Be had been changed in order to incorporate back-to-back typology and make room for more houses (Stakeholders, 2018).

However, Newhall did not manage to avoid similar pitfalls that Tadley Acres fell into as the masterplan did not quite anticipate the high levels of car ownership. This is exaggerated by the fact that people do not use the assigned parking spaces as intended, e.g., parking in front of property instead of using parking space in the back or using a front garage for additional storage. Consequently, parking is an issue, particularly at weekends when people are home and have visitors. In addition, cars parked on both sides of The Chase do not leave enough space for a bus to drive through, which is supposed to be introduced as the development grows. Some of the parking solutions are very similar to Tadley Acres, e.g., mews courts with garages underneath the living accommodation (see Figure 43).



Figure 43: Mews courts at Newhall with garages underneath the living accommodation.

Infrastructure and transport links

Infrastructure is one of the main and most significant costs for new housing developments and roads are particularly expensive to build, which is why housebuilders usually try to minimise the amount of road required in a scheme. One advantage of having cul-de-sacs (as at Tadley Acres North or Burwell) is that they require less road to be built and therefore are particularly cost-efficient. In contrast, parking courts, which are used extensively at Tadley Acres South and at Newhall, multiply the amount of road needed compared to back-to-back typology.

The street design for Newhall and Tadley Acres incorporates many of the principles outlined in the Manual for Streets (official government guidance on the design of residential streets first

published in 2007), which include shared space with no segregation between road users, no demarcation lines, use of various materials for road surfaces and the use of planting and varying road width as traffic calming measures (instead of speed bumps). This is despite the fact that both schemes predate the publication of the Manual for Streets, which shows how ahead of its time the design was (Newhall was actually one of the case studies included in the Manual for Streets).

This sensitive street design created attractive streetscapes and made both estates feel much more pedestrian-friendly despite the levels of car ownership and issues with parking. This is particularly evident in comparison with wide asphalt roads in Burwell, which despite its much smaller size and rural character looks more car- than pedestrian-oriented.

Unfortunately, there were some issues with getting the roads adopted at Newhall (Essex County Council being reluctant to adopt roads with nonstandard surfaces as they are more costly to maintain), and consequently the street design for Phase II follows a more conventional approach. Residents were also complaining about the visibility issues at crossroads – this is an intentional design feature intended to slow down the traffic, however, many people perceived it as a safety risk (Newhall residents, 2018).

In terms of transport links, Tadley Acres leaves a lot to be desired. Despite Shepton Mallet's relative proximity to Bath and Bristol, Tadley Acres suffers from poor transport links – the closest railway station is Castle Carry over 6 miles away and A37 is often congested. The congestion around Shepton Mallet is also an issue as some of the road improvements originally planned fell through when the scheme was reduced, and it was no longer possible to fund a new E-W road (instead some relief was provided by a roundabout at the intersection of Cannard's Grave Rd and A37). However, the main advantage of the Tadley Acres' location is its proximity to the town centre, which is merely a 10-minute walk away across the park (High Street is less than a mile away from the northern edge of the development).

Newhall, on the other hand benefits from close proximity to M11, which provides good road and rail links to London, Cambridge and Stansted Airport. The closest train station – Harlow Mill – is only 1.7 miles away. However, the estate is not as well connected to Harlow itself – it is slightly isolated with Church Langley being the closest neighbourhood located across the playing field – and the bus service is poor as well (though it was planned to be expanded). Newhall's good transport links out of town and relatively poor integration with the town itself (at least at the time of doing this study) makes people more reliant on cars and pauses some danger of Newhall becoming a dormitory estate.

Burwell is a small town and even though the estate is located on the south-east edge, most of the town services and facilities are still within walking distance. There is a bus service to Newmarket and Cambridge and the bus stop is located right on the edge of the estate. The closest train station is Newmarket located 5 miles away.

Fast broadband infrastructure was also an important consideration at both Tadley Acres and

Newhall due to its importance related to the rising popularity of alternative modes of employment such as flexible working, homeworking and self-employment.

The design for Newhall also incorporated a balancing pond on the eastern edge of the development as well as sustainable urban drainage systems (SUDS), which manages surface water drainage and prevent flooding while protecting local wildlife and providing attractive landscaping. The surface water at Tadley Acres is managed by a balancing pond as well.

Local facilities

There are no local facilities at Burwell scheme and none are intended as it is typical for a RES site (not to mention that no local facilities would be commercially viable at the development of this size). However, the scheme benefits from a very good location, which is not always the case with RESs, and local facilities in the village, such as the post office, doctor's surgery, nursery, primary school and Co-op supermarket, are only a short walk away (10-20 minutes on foot).

The main local facility that was meant to be built at Tadley Acres was the school, which was supposed to occupy the central place in the masterplan. Unfortunately, and to huge disappointment of the landowners, the Somerset County Council eventually decided not to move forward with the school (see section 5.2.3) and the site was left as a large open space in the middle of the development. Other local facilities fell through too – the community hall intended to be built in a historic chapel (moved from another location) was never delivered, nor was the shelter around the obelisk (the residents objected to it on the basis that it would become a "late night gathering place for drunken youths" (Tadley Acres residents, 2003). Despite continuous promises to homebuyers about the prospective community facilities, the only facility that was ever delivered was a shop, which turned out to be commercially unviable and ended up as a beauty salon (Tadley Acres residents, 2018; Stakeholders, 2018). Fortunately, the scheme is located close to the town centre and the nearby local facilities such as supermarkets, cafés, restaurants and High Street shops (though it should be pointed out that while these facilities are only a short walk away from the northern edge of the development, they might be less accessible for people living on the southern edge where the closest store – Tesco's – is located 30 minutes away). Also, proximity to the town centre has a slight detrimental effect on commerciality of facilities provided within the estate, which would have to compete with nearby supermarkets and businesses.

The masterplan at Newhall envisioned a convenience store, a restaurant / café and a community centre, however, for a long time the convenience store was the only one realised. There was no demand for a restaurant and a community centre that was supposed to be in the converted barns was delayed due to economic difficulties. There has been a nursery functioning at Newhall since January 2017 and in September 2018 the Newhall Primary Academy eventually opened on Phase II (a café also opened in the ZigZag building).

To sum up, all three schemes are characterized by a general lack of social and civic

infrastructure, though this is not that much of an issue in Burwell due to the small size of the development and its proximity to nearby facilities in the village. Tadley Acres also benefits from proximity to the town centre, which mitigates some of the problems, however, with the development of that size the lack of local facilities definitely has a detrimental effect on liveliness of the neighbourhood and sense of community. While Newhall suffers from similar problems, the development is still ongoing and there seems to be a genuine effort to remedy the situation (e.g. a school planned as part of Phase II).

Employment

In terms of employment both Burwell and Shepton Mallet offer limited possibilities due to the size of the area and population. Larger employment centres near Burwell include Newmarket, Ely and Cambridge; and near Shepton Mallet – Wells, Frome, Bristol and Bath. As a much bigger town, Harlow offers more opportunities and Newhall also benefits from great transport links to London and Cambridge (as discussed above).

Economic profiles for all three locations are similar with mostly full-time workers. There are slightly more self-employed and retired people in Burwell and people have significantly higher level of education (probably related to proximity to Cambridge). Harlow suffers from slightly higher unemployment and economic inactivity (see Figure 44 and Figure 45).

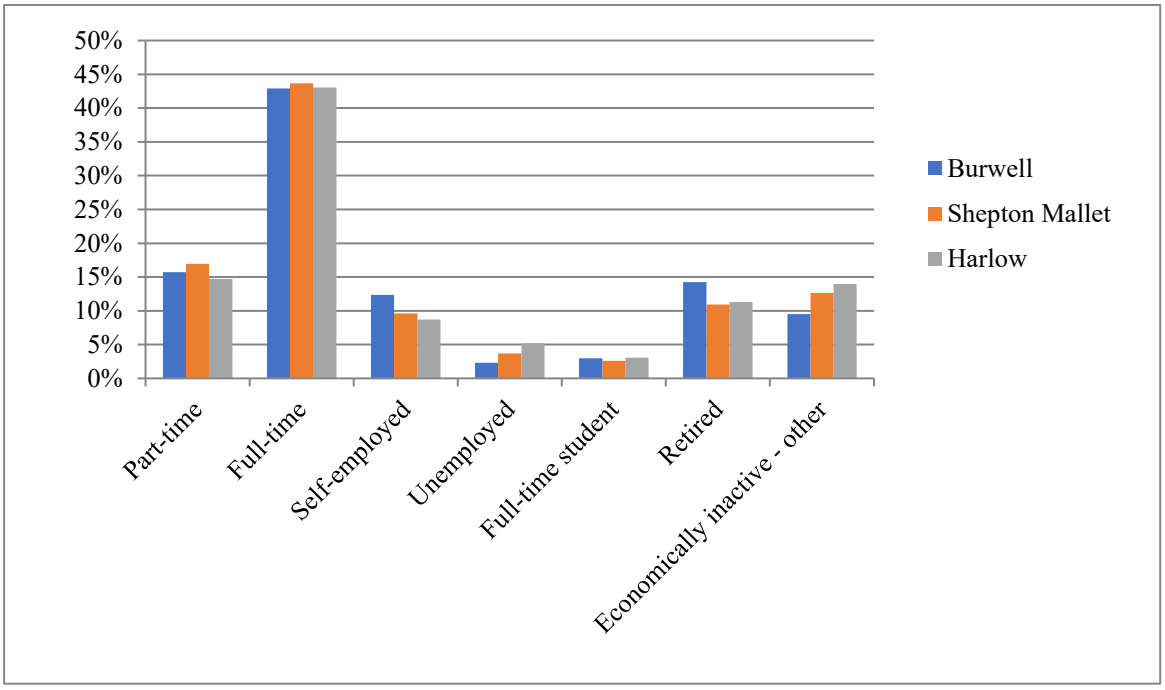


Figure 44: Employment modes in Burwell, Shepton Mallet and Harlow (*2011 Census*).

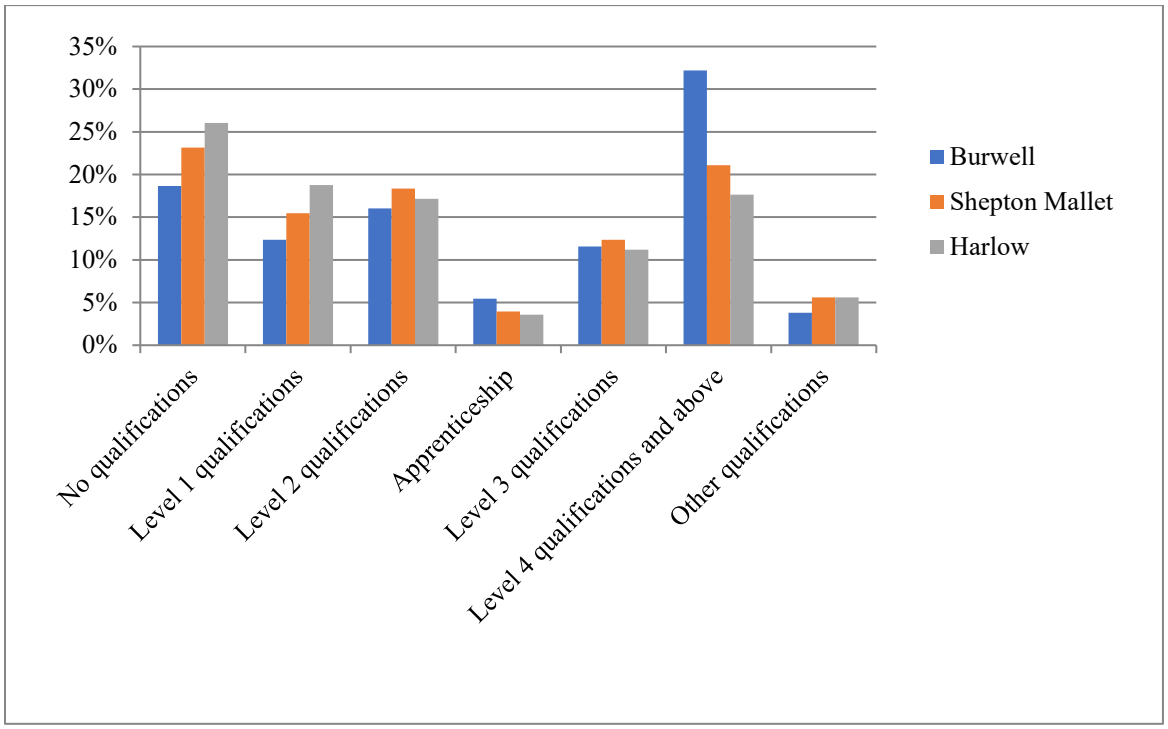


Figure 45: Level of education in Burwell, Shepton Mallet and Harlow (*2011 Census*).

In Burwell there is also a higher number of people in professional and managerial positions than in other two locations. In Shepton Mallet there is a slightly higher number of people in elementary and manual-work positions and in Harlow there is a relatively good balance between all (see Figure 46).

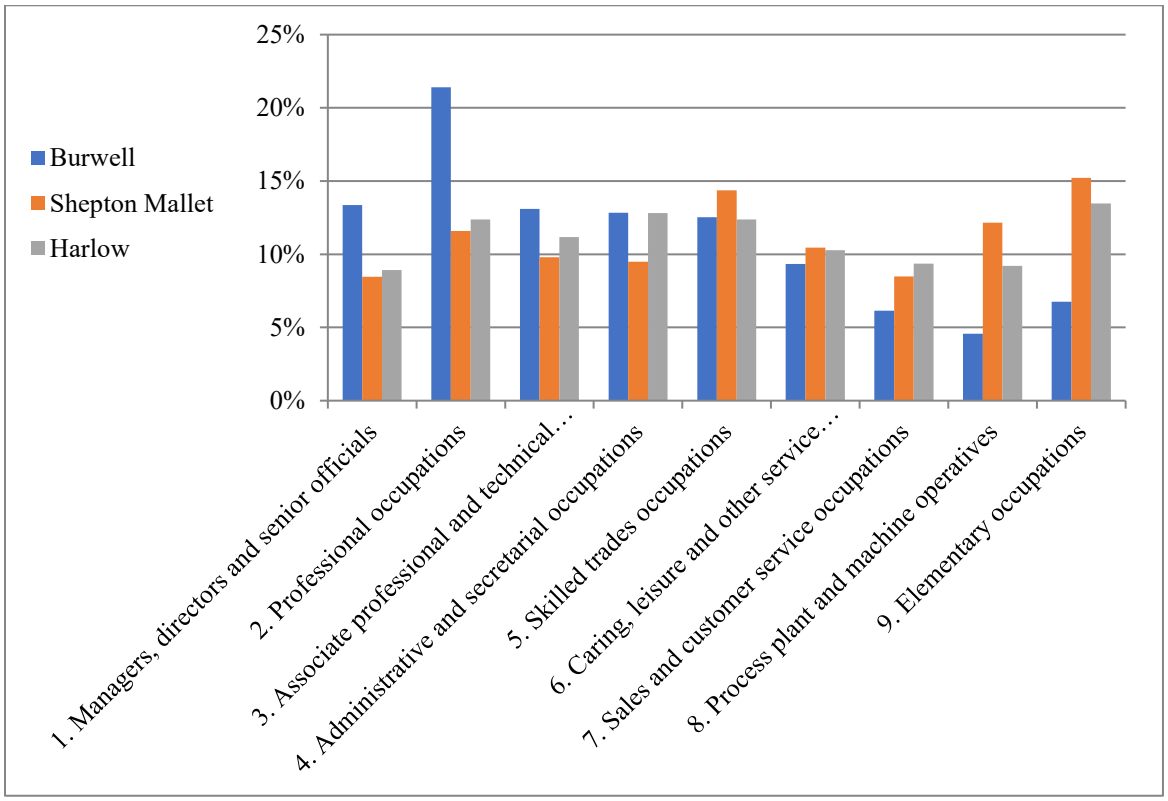


Figure 46: Occupation in Burwell, Shepton Mallet and Harlow (*2011 Census*).

Within the schemes itself, both Newhall and Tadley Acres were required by the planning authorities to deliver an employment element. At Tadley Acres, there was meant to be an employment area within the scheme but there was little demand for it and it never came forward (Stakeholders, 2018). Instead, the employment component was delivered through live/work units, most of which were located above garages, in the courtyards or back of the houses. Those units proved to be somewhat unsuccessful in the long-term – people did not like the separate access (some of the work units were not directly connected to the living space) and they were sometimes used as separate accommodation (Stakeholders, 2018). One of the reasons might be that there was no hub building or community facility on the estate to provide additional support for small business, which can be an essential element for making live/work units successful.

At Newhall stakeholders realised the threat of the development becoming a dormitory estate (partly due to excellent transport links) and live/work units were one of the steps taken to prevent that. Thanks to support from the Harlow District Council, business part of those properties could switch between residential and business use class without having to apply for a planning permission (Stakeholders, 2018). This more flexible approach seemed to be quite successful and there are plenty of small businesses operating at Newhall. And while there is no hub building, with the opening of the café and soon-to-be-delivered community centre, it seems the viability of live/work units is only going to increase.

Newhall also benefits from proximity to Harlow Enterprise Zone (one of 45 locations designated by the UK Government to provide incentives for investment), which is right across the street.[48]

Character and appearance

Despite quite striking difference in architectural style, both Newhall and Tadley Acres illustrate a similar design approach often rooted in the 'placemaking' principles. The design at Newhall and Tadley Acres sought to emulate the way traditional towns and villages developed, though in case of Newhall more urban settings such as Bath, Venice and Oxford seemed to have been the source of inspiration. While in traditional settlements typical styles and colours would develop naturally through the use of local materials, creating a visual pattern characteristic for a given place, at Newhall and Tadley Acres the visual character was carefully controlled through design codes and colour palettes, which ensured that a coherent vision was created, even when using nonlocally-sourced materials.

The layout of Tadley Acres (discussed above), with its winding roads and patches of green, also adds a village-like character to the scheme and emulates traditional settlements, which gradually

[48] There is also a simplified planning process at Harlow Enterprise Zone in order to encourage investment and developers do not need to apply for planning permission as long as they adhere to the specified criteria and design guides (Stakeholders, 2018).

developed over time and were influenced by topography, weather conditions and other local circumstances (Figure 47).



Figure 47: Tadley Acres.

Traditional towns and villages were also characterized by the use of local materials, as it was too expensive to transport them from afar, and in that spirit, the architects wanted to use local materials whenever possible e.g. natural stone from a local Doulting Stone Quarry, brick, natural clay or stone roof tiles (Figure 48, Figure 49).



Figure 48: Different materials at Tadley Acres North.



Figure 49: Different materials at Tadley South.

The architects put an extra effort in making sure the place feels distinctive and yet specific to Shepton Mallet. The architectural style is distinctly traditional with pitched roofs, pastel beige facades, occasional use of natural stone and brick, and an added element of classical detailing (Figure 50 and Figure 52). The design was inspired by the local vernacular architecture as well as details and materials from the surrounding villages and the town itself (see **Appendix C** for comparison between Tadley Acres and Shepton Mallet architecture). The added layer of classical design and detailing references the local architecture and elevates the design (Figure 51).



Figure 50: Tadley Acres South.



Figure 51: Examples of classical detailing in Shepton Mallet.

In terms of facades, designers at Tadley Acres adopted a clever approach of 'uplifting' the key buildings – producing a more elaborate design and detailing for buildings that are particularly visible when you move around the estate – and keeping the rest of the houses plainer, particularly those tucked away in courtyards and mews (Figure 52). This gives the place a more genuine character, not only because the houses don't all look the same as it is often the case with new builds, but also because it creates a more legible pattern of streets and attractive streetscapes throughout the development.



Figure 52: One of the more elaborate buildings, next to a plainer one.

Such an approach also has a commercial advantage as spending more money on uplifting some key buildings actually 'rubs off' on the houses around it and therefore adds value to properties across the development (Stakeholders, 2018). Similar trick was used when applying natural stone to facades i.e. there is plenty of properties that have one elevation made of natural stone while the rest is covered with render (Figure 50, Figure 53, Figure 54).



Figure 53: A property with one stone wall (Tadley Acres North).



Figure 54 A property with render on ground floor and stone façade on upper floors (Tadley Acres South).

As a whole, Tadley Acres is not an entirely coherent estate. This is due to the circumstance discussed before i.e., disagreements between architects and developers in the early stages of the project, changes in the design team and the impact of changing planning policy. Consequently, there is an evident difference in character between the northern and southern part of the scheme. As already mentioned, Tadley Acres North, and Phase 1 in particular, feels more suburban with wider streets,

cul-de-sacs, much lower density, bigger gardens and less classical detailing. At Tadley Acres South, on the other hand, streets are narrower, buildings are tucked closer together, there is a number of apartment buildings, classical design is more apparent and some of the open spaces feel more like urban squares than village greens (Figure 55, Figure 56, Figure 57, Figure 58).



Figure 55: Tadley Acres North – Phase 1.



Figure 56: Tadley Acres North – Phase 3A.



Figure 57: Tadley Acres South – Phase S1.



Figure 58: Tadley Acres South – Phase S2.

Just as at Tadley Acres, at Newhall the context was an incredibly important aspect of the design. The customary urban design guidance for developments in this area was the Essex Design Guide, which is an incredibly comprehensive document but focuses more on vernacular approach (see Figure 59). The landowners at Newhall, on the other hand, felt that they did not have to rely on vernacular architecture or pastiche and could do something more contemporary and innovative, held together by the masterplan and a colour palette.



1. *Incorrect. Prominent positioning of garages at bend in road*
2. *Correct. Sideways facing garage.*
3. *Correct. Double garages placed back to back to form barn-like structure*
4. *Correct. Timber garage door inset within opening. Front door dominates.*
5. *Correct. Garage in back garden, visitor space under carriage arch.*

Figure 59: An example from the Essex Design Guide illustrating positioning of garages (Essex County Council, 2020).

The choice of an architectural style might have been partly influenced by Harlow being a New Town (particularly that the local authorities in more traditional settings might have been less sympathetic towards such a contemporary design), but in most part it came from landowners' personal preference and their aspiration to give the architectural design profession creative freedom that would allow them to develop innovative housing for the 21st century and beyond (Stakeholders, 2018).

The result is a strikingly contemporary development with distinctive features characterizing each phase and each architect's interpretation of the design brief and the design guidelines. Those guidelines included a materials palette, which was an integral element of the masterplan and all architects and housebuilders had to follow. It specified the type of slate (had to be real Welsh slate), clay rooftiles, weatherboarding, render colours, two approved bricks, etc., and itself was based on a detailed study conducted by a colour expert and long-time Oxford Brookes lecturer Tom Porter. Tom Porter, whose work is inspired by the French architectural colour theorist Jean-Philippe Lenclos (Lenclos and Lenclos, 2004; Porter, Mikellides and Μικελλίδης, 2018), produced four colour palettes inspired by local materials and colours of soil, minerals and plants – one for facades, roofs, paintwork and floorscape (see Figure 60, Figure 61, Figure 62 and Figure 63).

[INFORMATION HAS BEEN REMOVED BY THE AUTHOR OF THIS THESIS FOR COPYRIGHT REASONS]

Figure 60: A colour palette from a study conducted by Jean-Philippe Lenclos in the mid-1960s (Natural Colour System, 2019).



Figure 61: Colour palette for Newhall. Image courtesy of Newhall Projects Ltd.

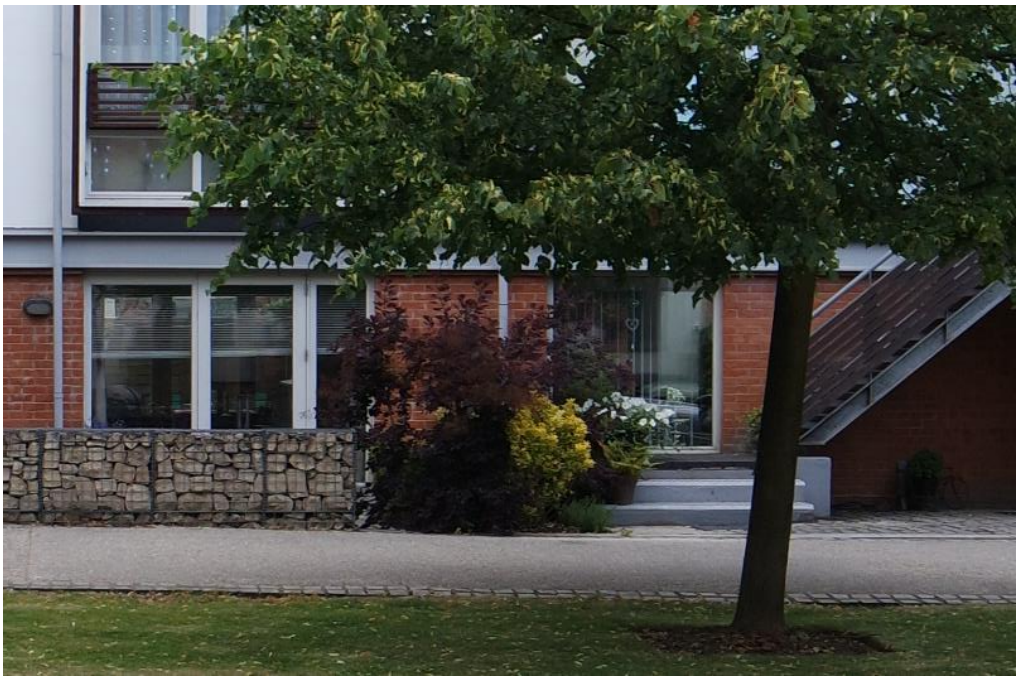


Figure 62: The use of different materials at Newhall.



Figure 63: The use of different materials at Newhall.

The colour and materials palettes not only harmonise with the colours of the surrounding area, but also create a common thread throughout the estate. The use of specific materials and colours was key in creating designs that were complementary to each other, especially that there were some concerns related to the cohesiveness of the estate (Stakeholders, 2018). The diversity throughout the scheme can be a bit uncomfortable at times, particularly at the joints between different phases, which create a "patchwork" effect (though some merge together quite successfully through the use of similar materials or massing and rhythm of fenestrations, see Figure 64 and Figure 65).



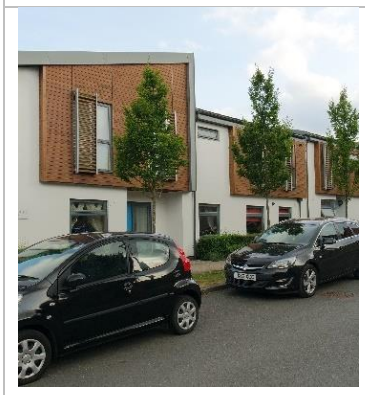
Figure 64: An uncomfortable diversity between phases.

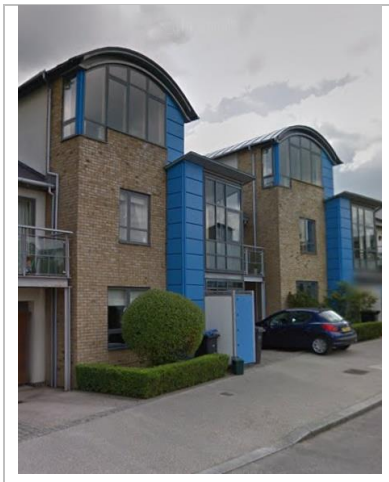


Figure 65: A coherent effect achieved through materials, massing and rhythm.

Each phase manifests architects' own ideas and approach to housing (see Table 7 for an overview of architectural designs at Newhall), however, the designs often take inspiration from the local architecture (see **Appendix D** for comparison between Newhall and local architecture).

Table 7: Overview of architectural designs at Newhall.

 Robert Hutson Architects (& Roger Evans Associates) 96 mixed-tenure homes and apartments more traditional design than the rest of the development, includes a number of relatively standard detached and terraced homes (as well as a more contemporary apartment building by Roger Evans Associates)	 'Abode', Proctor and Matthews Architects 86 mixed-tenure homes and apartments rich façade treatments with multiple materials; flexible layout; live/work units	 Richard Murphy Architects using as few materials as possible; interest created through the architectural form e.g., sloping roofs; largely single aspect houses
 'Newhall 1C', studio REAL 17 affordable homes (3 mobility units, 6 one and two-bedroom flats, 8 two-bedroom terraces); 50 dph courtyard typology with a shared garden; each dwelling has a double aspect with a balcony or terrace looking onto the garden	 ECD Architects 35 apartments and a shop an apartment building combining render, copper cladding and yellow brick on the ground floor	 'Zig Zag' building, ORMS 10 apartments, a café and restaurant, 3 flexible live/work units timber-clad exterior that includes shutters for each window, which disappear into the building's façade when closed; rich blue render underneath

		
‘Cala Domus’, PCKO 74 mixed-tenure homes and apartments; 39 dph Includes a landmark copper-clad tower inspired by agricultural and industrial buildings, such as metal-clad windmills; colourful facades combining blue and white render, brick, glazing and timber	‘Newhall Be’, Alison Brooks Architects 84 mixed-tenure homes and apartments; 52 dph inspired by the Essex barn, Mies van der Rohe’s patio house and a Romanian sculptor Constantin Brâncuși; back-to-back typology to increases density	‘SLO’, Proctor and Matthews Architects 78 low-cost, prefabricated homes (26 apartments and 52 houses) inspired by Eric Lyon’s Span developments of the 1960s and 1970s; modular design, constructed off-site
 Self-build plots		

The whole development is loosely inspired by the principles of the Harlow’s architect Frederick Gibberd and as such it attempts to integrate the architecture with the landscape. Many architects included this approach in their designs as well, which is particularly visible in Richard Murphy Architects’ sloping roofs and timber cladding, or at Newhall Be, where consistent geometry, articulated roof forms and local references (such as the Grange Barn in Essex) give the design a calm and sculptural feel.

In the spirit of Harlow being a sculpture town, there are also two sculptures on the eastern edge of Phase I – Methuselah by Nick Turvey, 2010 and Sophrosyne by Ekkehard Althenburgher, 2010.

In Burwell, the main concern was to respond to the local vernacular and remain respectful of the rural setting and surrounding countryside:

"Because we build on green land, it mustn't be a sore thumb. It's got to sit as if, when you drive past our scheme […], you wouldn't know that it's not always been there." (Stakeholders, 2018).

This was achieved through lower density, sensitive landscaping and careful choice of materials (see Figure 66 and Figure 67). For instance, the brick used in one of the phases was chosen due to its similarity to bricks once manufactured in the village factory that closed years ago (Stakeholders, 2018), while the small apartment building (the only one on the site) was designed to resemble a traditional rural barn (Figure 68).



Figure 66: Hedges and planting in Burwell.



Figure 67: Landscaping in Burwell.



Figure 68: 'Barn building' in Burwell.

Construction quality and management

Tadley Acres was generally built to a high standard, which is the result of a successful collaboration between landowners' and developers' design teams. However, there were some mistakes made, the most apparent being the render that streaks out on some properties. The issue of the render, which is a problematic material that often does not weather well, was highly debated by the landowners, developers and design team; different options were considered and different methods adopted at different stages of the development, e.g. machine applied render, hand applied render (Stakeholders, 2018). There definitely was an effort to get it right, nevertheless the end-result turned out to be visually disappointing (see Figure 69). According to the residents, the housebuilder took little responsibility for the leaching render as "aesthetic appearance is not part of technical performance" and claimed that "the render was fine since it was structurally intact" (Tadley Acres residents, 2018; Watts and Stock, 2018).



Figure 69: Leaching render.

Tadley Acres is managed by a management company, though their responsibilities are quite narrow as streets and open spaces were adopted by the local authorities (Stakeholders, 2018). There are also two residents' associations in place (there's a separate residents' association for phase S5, which was built by Bloors on the land owned by a different landowner). The Duchy was particularly keen to set up the residents' association and get residents to manage the estate themselves, which was partly an attempt to get people to buy into the vision for the development and instil a sense of community and pride. However, there was a certain 'lack of appetite' and it took a while to get it off the ground (Stakeholders, 2018). Their main focus at the moment seems to be preserving the green spaces on the estate, which have been at risk of being developed and a planning application for additional 7 dwellings on the green space adjacent to Sherring Road was granted in February 2019.

The maintenance of landscaping proved a bit problematic due to people making changes to their front gardens or porches. This is despite having restrictive covenants in place, which were meant to ensure that people do not make any significant changes to the appearance of the houses and thus, protect the integrity of the design. Landscaping played a particularly important role in the overall

design of Tadley Acres and therefore those changes had a detrimental effect on the visual attractiveness of the estate.

At Newhall, the use of nonstandard materials posed some build issues, e.g. colourful cobblestones, which had to be cut manually and required hiring labour force from abroad, turned out to be a difficult material for the highways authority to maintain. Consequently, getting roads adopted became increasingly difficult at Newhall (Stakeholders, 2018). There was an array of other technical difficulties as well, which were often the result of bespoke design or nonstandard construction solutions, e.g. leaks, weathering of the timber cladding (Figure 70) or lack of weathering on the copper tower (Figure 71) (Stakeholders, 2018). They were the source of regular complaints, though admittedly, they do not seem as noticeable as the running render at Tadley Acres.



Figure 70: Unesthetic weathering on timber cladding and a brick wall.



Figure 71: The copper tower was intended to weather and eventually turn natural green.

In terms of management, there is a management charge paid to Newhall Projects, who was managing the estate on behalf of what would be the Newhall residence association. The charge has to be paid by all residents including housing associations who pay a reduced fee (flats may have a separate management company but they still have to pay the 'ground rent' just as every other household). Estate management includes maintaining the open space, community facilities as well as some front gardens, which landowners were keen on in order to maintain the visual appearance of the estate (Stakeholders, 2018).

The management was hoped to be handed over to the residents' association, which landowners also believed to be better equipped (compared to the landowners or local authorities) to enforce some of the covenants such as parking regulations. Similarly to Tadley Acres, the aspirations was that this would help residents to have a stake in the area and buy into the development and its values, however, the process was still ongoing in 2018 (Stakeholders, 2018).

In Burwell there was much awareness on the part of the housing association that the design has to serve tenants' needs, be practical and easy to manage in the long run. In that respect, one particular aspect of the design was to make houses economic to run, which was considered an important element of housing affordability.

Hastoe has a history of delivering passive houses and energy efficiency has been the cornerstone

of their approach to housing since the affordable rent was introduced. Hastoe tried to offset the higher rental costs that many tenants faced by building homes to energy standards much higher than required by building regulations. The latest phase of the Burwell development was built to the AECB's Silver Standard of energy efficiency, which was Hastoe's default policy at the time (Stakeholders, 2018). Hastoe also has strong evidence of financial benefits that energy efficiency brings to their tenants based on their other housing developments – their 3-bed. passive house in Wimbish, also designed by Parsons + Whittley, costs only £120 annually to run, compared to the average £1,163 energy bill for a standard 3-bed. house (Sykes, 2019).

Housing mix

The housing mix provided on the three estates reflected the local context and, in case of Newhall and Tadley Acres, illustrated the differences between the two housing markets. At Tadley Acres housing mix is evenly distributed between detached, semi-detached and terraced properties with a slightly lower percentage of flats. At Newhall, on the other hand, the housing mix is dominated by flats and terraced properties, which together constitute almost 80% of all houses, suggesting a more urban character of the development (Figure 72).

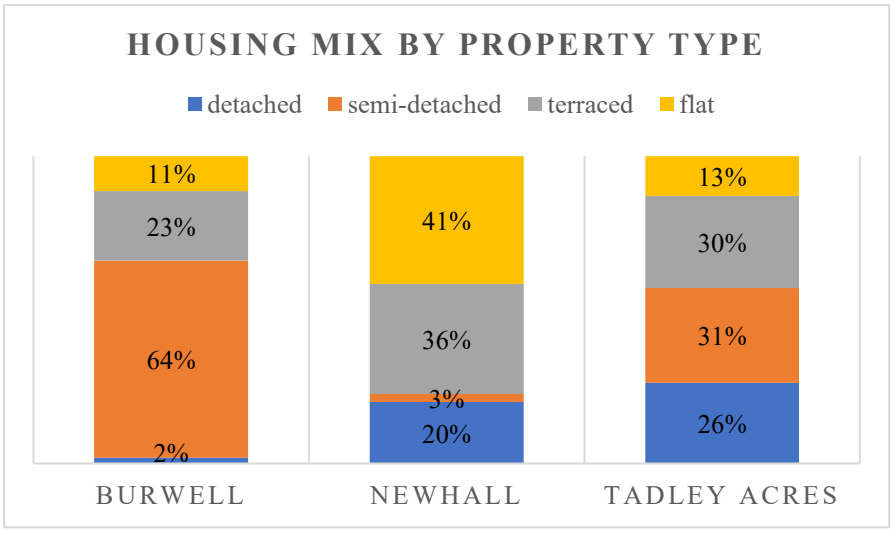


Figure 72: Housing mix by property type.[49]

In Burwell the housing mix was based on an independent housing need survey so that it responds to the local needs and consequently is dominated by 2-bed. semi-detached properties (Stakeholders, 2018). There is also a significantly higher number of 1-bed. properties than on other two estates

[49] This analysis is based on documentation (i.e., site layouts, floor plans, etc.) submitted as part of planning applications for each development phase, as well as other alternative sources when necessary (designers' website, field visits, maps), and as such might include some minor inaccuracies. Also, Phase S5 at Tadley Acres was excluded from the analysis as it was built on the land owned by a different landowner, and therefore without any input from the Duchy or the Vagg family, and included mostly detached properties, which would disproportionally affect the results.

reflecting the growing needs of young people and the elderly who often struggle with difficult housing circumstances (Figure 73).

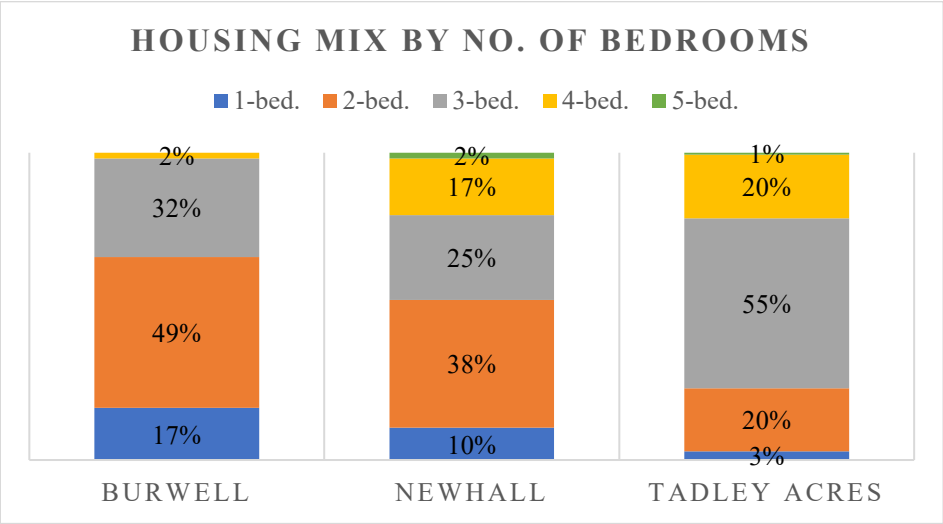


Figure 73: Housing mix by no. of bedrooms.[50]

2-bed. properties are also most prevalent at Newhall, while at Tadley Acres over half of the housing stock constitutes 3-bed. properties. Also, there are significant differences between northern and southern part of Tadley Acres, which reflects the changes in policy on housing density and parking discussed above. Tadley Acres North is dominated by larger i.e., 3/4-bed., primarily detached properties – only around 7% of properties at Tadley Acres North has less than 3 bedrooms (Figure 74). This would suggest a relatively poor housing mix for today's standards at the northern part of the estate, however, visually only the first phase of the development could be classified as "homogenous". The southern part of Tadley Acres has a better mix of properties with 3-bed. semi-detached being the most common.

[50] Again, Phase S5 at Tadley Acres was excluded.

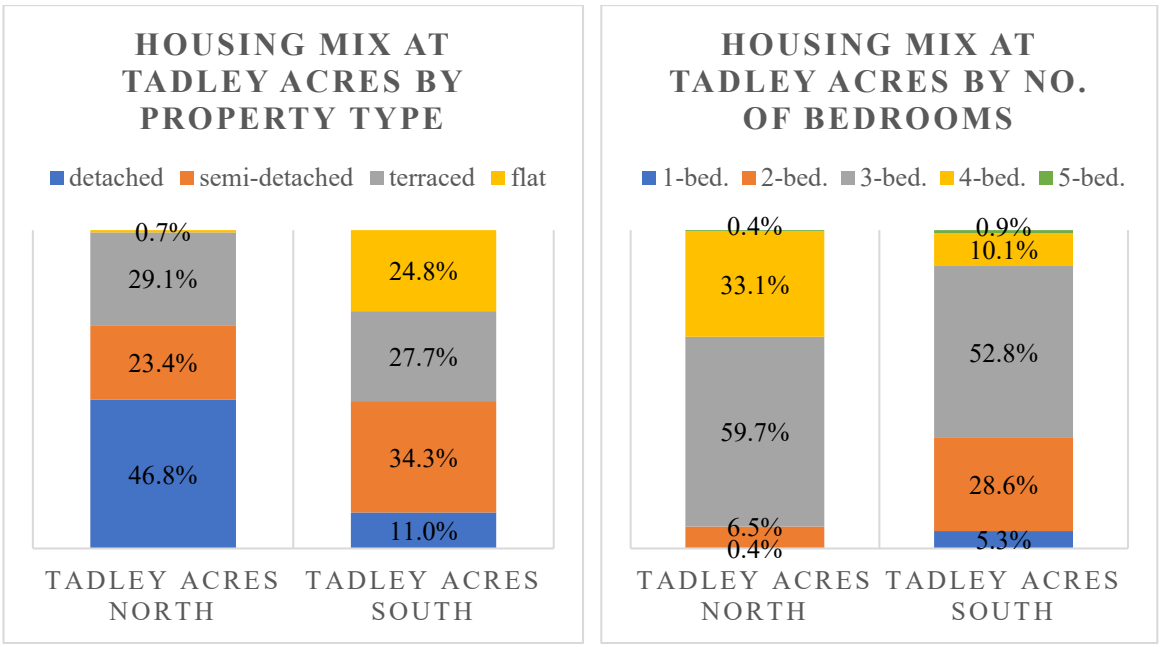


Figure 74: Housing mix at Tadley Acres North and South.

As already mentioned, both Tadley Acres and Newhall provide live/work units – about 2.5% and 3% respectively. There are also four self-build plots at Newhall which conform with the contemporary design of the estate (buyers' architect had to be approved by the landowners and the design would have to comply with the masterplan just as other developers did (Stakeholders, 2018)).

Size & typology

At Newhall, the stakeholders took a bespoke approach to the design of the houses trusting it would bring the additional value not captured by a number of bedrooms (though the housing mix discussed above was left up to developers to determine based on their assessment of local market). The design was driven by the aspiration to cater for the current needs of homebuyers and acknowledge the changes in family structures, households' composition and working patterns. This manifested itself through provisions for home offices, multi-adult families and particular consideration for adaptability and flexibility of space (e.g., designing houses that could be extended, if not by building an extension then at least by utilising additional roof space). In addition, larger space standards were introduced through requirements for developers specified in the design briefs.

Similar values are embedded into the design of Newhall Be, where houses have a faceted non-orthogonal plan, a dedicated home-office space facing the street and mansard roofs, which provide extra space to extend into and gain an extra room (see Figure 75). The architects' attention was focused not just on the square footage or number of bedrooms but the volume of the space as well. High ceilings and floor-to-ceiling windows make the rooms feel spacious and bright, and generate the proportions and rhythm of the façades, which has an added effect on the public realm (Stakeholders, 2018). In fact, based on properties that the researcher had the opportunity to visit

inside personally,[51] the principles of light and space are applied across the estate, even in more conventional designs.

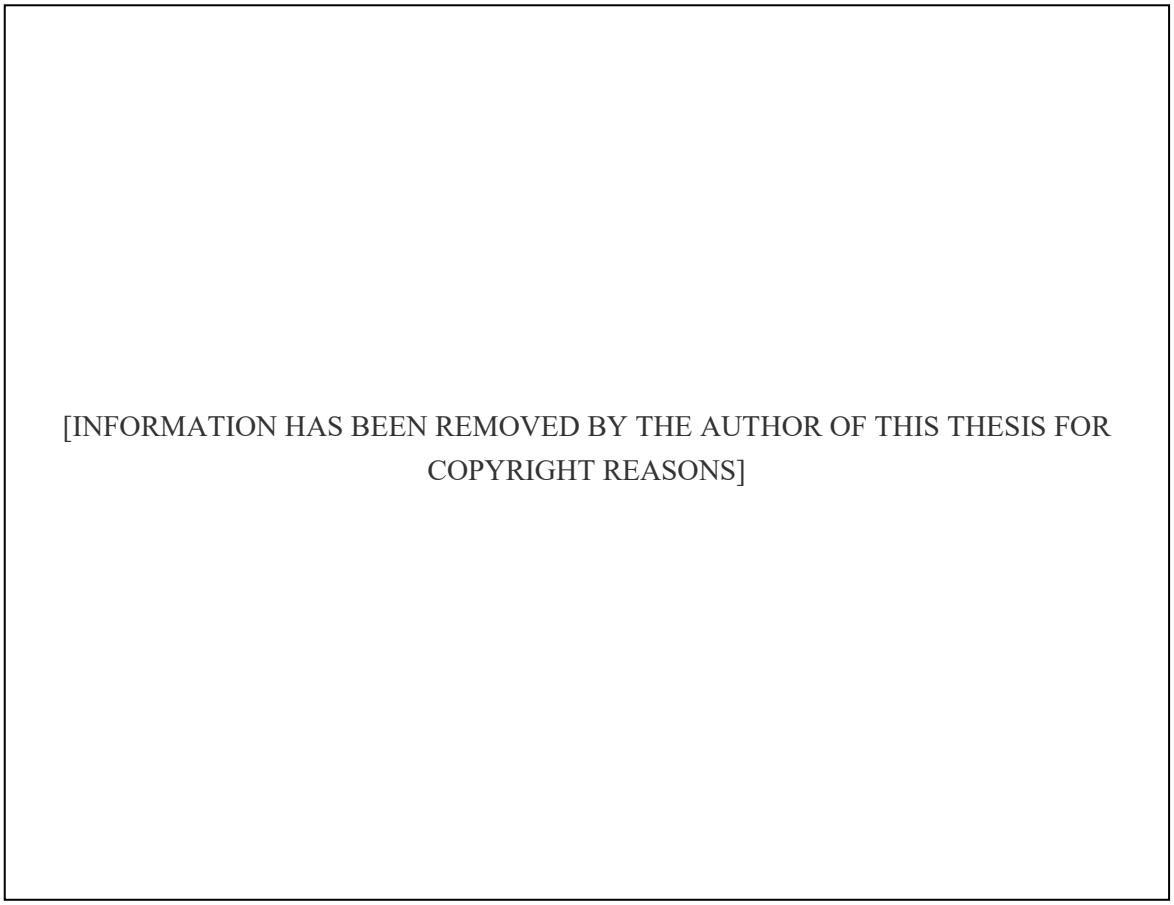


Figure 75: Back-to-back terraced houses at Newhall Be, with a patio instead of a garden. Image: Alison Brooks Architects (2012).

Bespoke design and flexibility of space were also crucial in achieving high densities and overcoming the common issues usually associated with high-density developments i.e., limited space, privacy and overlooking. For instance, the back-to-back typology developed by Alison Brooks Architects, which was inspired by Mies van der Rohe's treatment of outdoor space as an extension of indoor space at Farnsworth House, allowed to fit more houses on the site. Richard Murphy Architects' design prevented overlooking by making houses single aspect so that the wall of a neighbouring house overlooking the garden was actually a blind wall (Figure 76).

[51] These included flats at Soper Square (Roger Evans Associates), a house at Pitchway (Richard Murphy Architects), a house at Tatton Street (Proctor and Matthews Architects, 'Abode'), a house at Great Auger Street (Proctor and Matthews Architects, 'SLO') and a corner-plot house at Maypole Street (Alison Brooks Architects, 'Newhall Be').



Figure 76: Single aspect garden houses designed by Richard Murphy Architects – the blind back wall of each house forms one of the walls of its neighbour's garden.

Though, it should also be pointed out that there were some sacrifices, and while there was every effort made to provide private gardens or at least patios or balconies, high densities meant that the private outdoor space could be quite limited at some properties (see Figure 75 and Figure 77).

[INFORMATION HAS BEEN REMOVED BY THE AUTHOR OF THIS THESIS FOR COPYRIGHT REASONS]

Figure 77: A courtyard typology developed by studio REAL for affordable housing (properties with a private balcony or terrace positioned around a shared garden). Images: Roger Evans Associates (2003).

Another interesting house type are live/work units, which are a particularly characteristic feature of the Chase and resemble Georgian or pre-industrial-revolution house typology that has workspace on the ground floor (e.g. a shop) and residential space above. Similarly, the Proctor and Matthews

design includes two access points to allow for a separate business and residential door and higher ceiling heights on the ground floors (see Figure 78). The living space is provided on the first floor and ground floor can be used for home-based businesses or as independent accommodation, e.g. a flat for a grandparent or an adult child, allowing for multi-generational living (as already mentioned, live/work units provided across the estate have a special use category, which means they can be used either as live/work or fully residential properties without applying for planning permission).

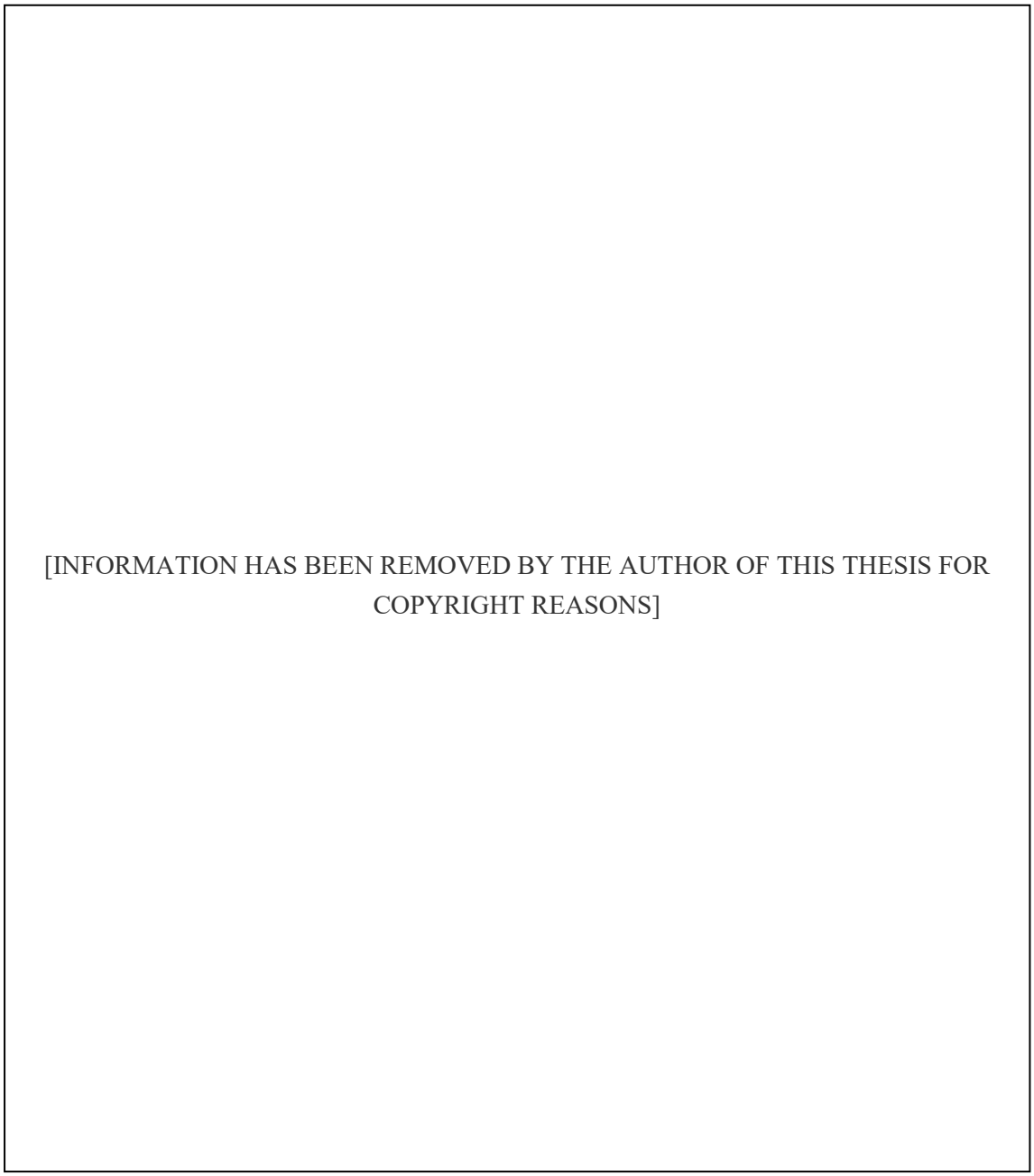


Figure 78: Live/work units at the Chase designed by Proctor and Matthews. Images: Proctor and Matthews (2004).

As illustrated by the above examples, architects at Newhall often tried to break away from traditional typology of English houses, however, there were some very standard house types as well, particularly on the first phase of the development (to the landowners' disappointment, see Figure 79).

[INFORMATION HAS BEEN REMOVED BY THE AUTHOR OF THIS THESIS FOR COPYRIGHT REASONS]

Figure 79: House types examples from Phase 1A. Images: Barratt Eastern Counties (2000).

At Tadley Acres, the landowners' and developers' design teams produced different house types for the development (based on their design aspirations, experience in house building and knowledge of the local market), which were then given different elevation treatments. Different design of the frontages added value and visual appeal to what otherwise was relatively standard English house typology (see Figure 80, Figure 81, Figure 82 and Figure 83).



Figure 80: Different elevation treatments of Prestleigh house type.

[INFORMATION HAS BEEN REMOVED BY THE AUTHOR OF THIS THESIS FOR COPYRIGHT REASONS]

Figure 81: 3-bed. house types on Phase 1 of Tadley Acres. Images: Bloor Homes (courtesy of ADAM Architecture).

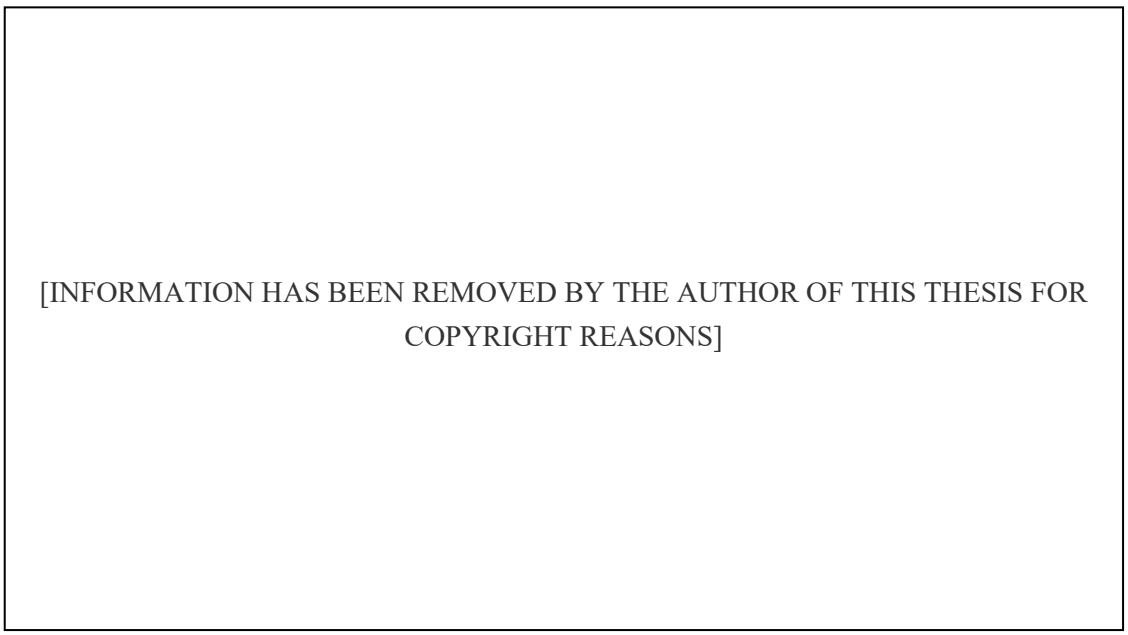


Figure 82: Examples of a 3-bed house type on Phase S3. Images: Tetlow King (courtesy of ADAM Architecture).

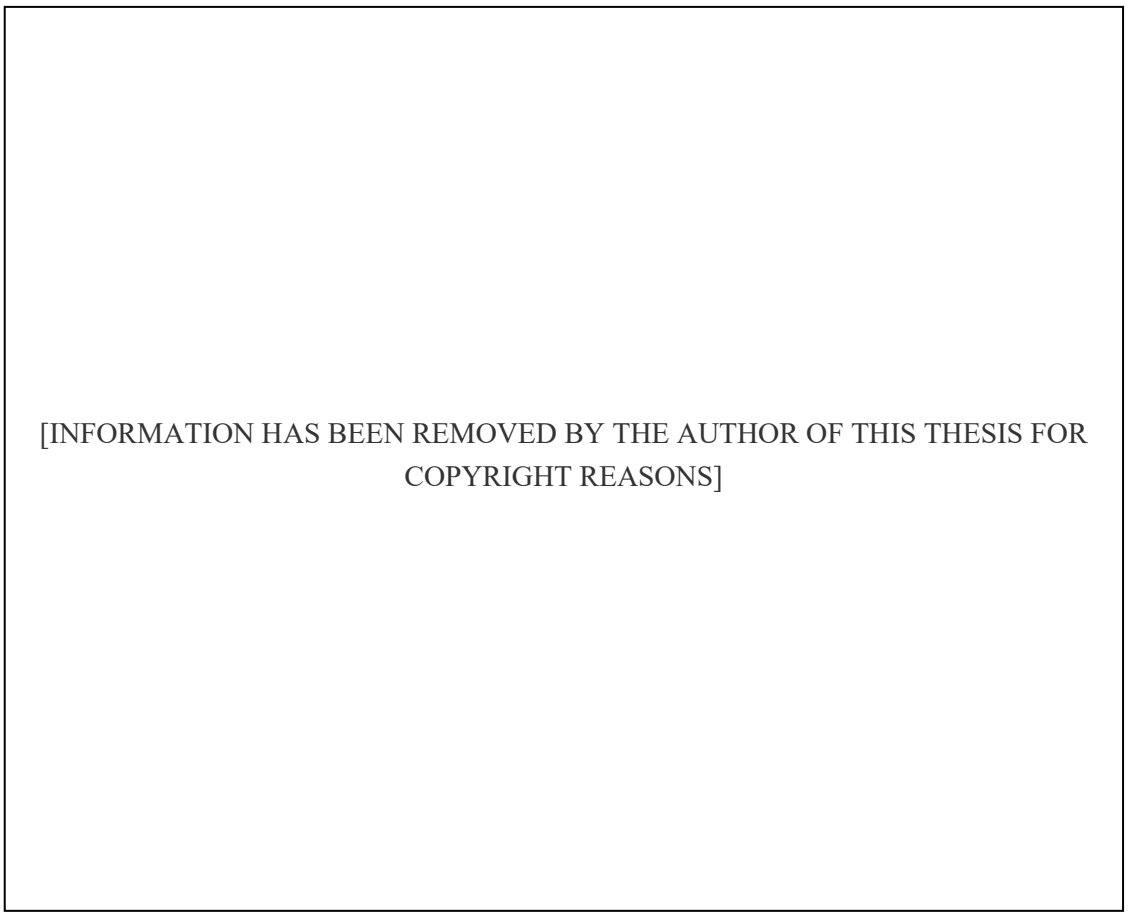


Figure 83: An example of a 3-bed house type on Phase S1 (top) and S4 (bottom). Images: Tetlow King (courtesy of ADAM Architecture).

As Figure 81, Figure 82 and Figure 83 show, the standard house types changed somewhat as the development progressed and new typologies were introduced, some with a bespoke design, e.g. apartment buildings, mews houses built above garages and live/work units (Figure 84).



Figure 84: Flats on Phase S2.

Similarly, as at Newhall, live/work units at Tadley Acres were inspired by traditional workshop typology, though differed from Newhall in the way that they were often provided on upper levels rather than ground floors (e.g., above garages). This parallels local vernacular architecture, particularly the work spaces above cottage sculleries reached by an outside staircases, which were purpose-built for C & J Clark workers making shoes at their homes (Davis, 1996). The Tadley Acres live/work units also had separate entrances and in some cases were not connected to the main accommodation, which was presumably supposed to prevent the residents from using it as an extra bedroom, but was particularly disapproved by the homeowners (Tadley Acres residents, 2018). This, together with the lack of flexibility in terms of planning (requiring a planning application to use it for residential purposes, which in itself was unlikely due to the local authorities' aspiration to encourage employment and new businesses across the estate), might have contributed to the limited popularity of live/work at Tadley Acres (Stakeholders, 2018). Similarly to Newhall Be, some house types at Tadley Acres also have a dedicated study.

The fact that the layouts of the houses at Tadley Acres were more heavily driven by the market meant that more emphasis was placed on the number of bedrooms, which was highest at Tadley Acres for all property types except terraced houses (Figure 85). This did not necessarily translate to a larger square footage and therefore resulted in the limited amount of storage space in some house types, often leading to garages being used for storage instead of parking and contributing to the parking issues across the estate (Socha, 2018). Though it should be pointed out that there were house types which were quite generous in size, particularly the larger 4-bed. properties.

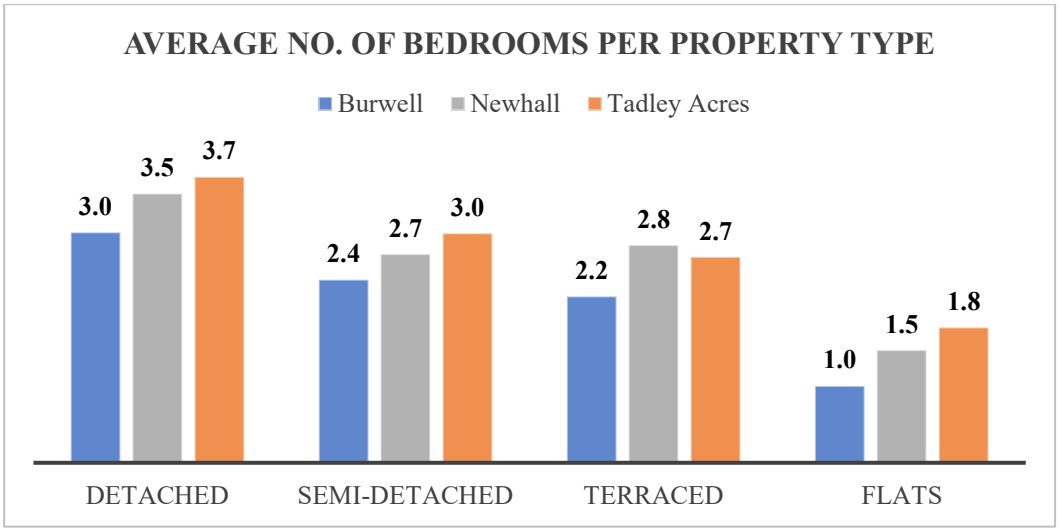


Figure 85: Average number of bedrooms per property type at Tadley Acres, Newhall and Burwell.

In Burwell, house layouts were fairly standard as well and in fact quite similar to those proposed at Tadley Acres, though with slightly more generous space standards (Figure 86). This was due to stricter regulations, to which housing associations have to conform, and was even more visible on later stages of the development, which is reflective of the changing policies and the increasing space standards, e.g. *Standards and Quality in Development* (1998), *Housing Quality Indicators* (1999), *Design and Quality Standards* (2007), or the development of Lifetime Homes standards by Joseph Rowntree Foundation (Park, 2017). The influence of Lifetime Homes, which aimed to make houses more adaptable and accessible, is particularly visible in Phase 3 and Phase 4.

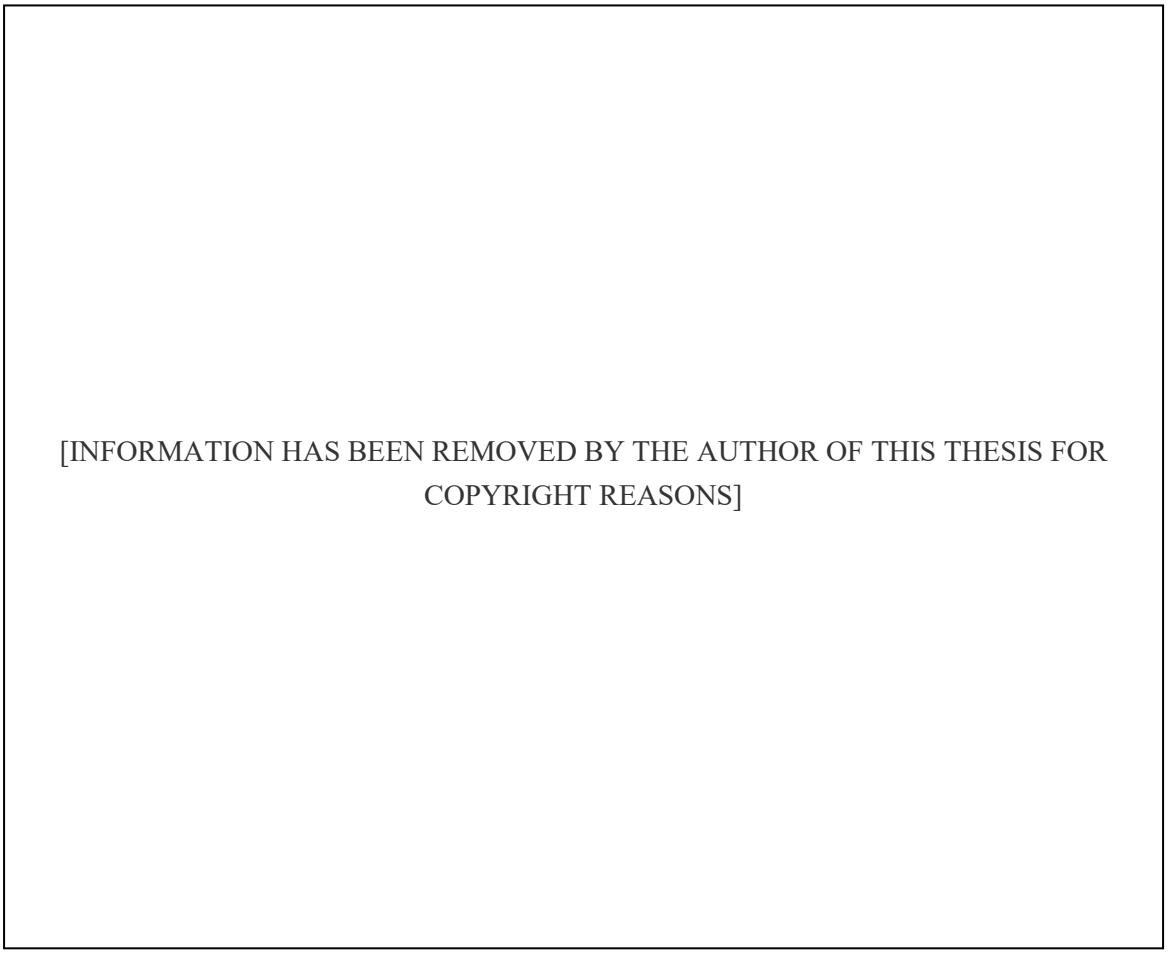


Figure 86: Examples of a 2-bed. and a 3-bed. house types on Phase 4 in Burwell. Image: Parsons + Whittley (2017a; 2017b).

In order to ensure a good housing mix, there was a number of 1-bed. properties provided on the estate and aimed at younger tenants, six as flats in a 'barn' building (Figure 87) and three semi-detached properties, as well as three bungalows advocated by the landowner and meant to cater to the needs of older tenants.



Figure 87: A 'barn' building with six flats (Phase 3).

Affordability

The development in Burwell was built as a RES and consequently only included affordable rent and shared ownership (S/O) housing on the first three phases. However, due to changes in grant funding for affordable housing, Phase 4 included three open market properties in order to cross-subsidise the rest of the scheme and ensure viability. Affordable housing was prioritised based on local connection of the applicants.

At Newhall, the stakeholders negotiated down the number of affordable housing (and were very upfront about that) in order to make up for added building costs and allow for sufficient profits for landowners and developers. There was a legal agreement in place specifying the profits that landowners would expect for selling their land which, together with added construction costs and viability assessment being the basis for s106 negotiations, left little room for affordable housing provisions. Consequently, the affordable housing was set at 23% on Phase I and only 15% on Phase II (not investigated as part of this research as it was still under construction), which was the source of some criticism (Your Harlow, 2019). Also, the actual amount of affordable housing built to date on Phase I was still below 18%, though additional units were planned on the remaining plots 1L1-1L3. This compares to 30% specified as a base line in the 2006 Local Plan (*Adopted Replacement Harlow Local Plan*, 2006), though as always this was subject to viability assessment. A new Local Plan adopted in 2020 (*Harlow Local Development Plan*, 2020) also suggests that 30% should be delivered.[52] The council did try to push back on the number of affordable housing, but at the same

[52] It should be kept in mind that comparing the amount of affordable housing in Phase I against current policies might not create a full picture as the planning process for both developments started back in the 1990's, however, it does give some indication.

time they were willing to give the landowners "a bit of slack" in this area due to their commitment to higher design standards (Stakeholders, 2018).

Following new urban principles (Duany and Plater-Zyberk, 2008, p. 66), affordable housing at both Newhall and Tadley Acres was pepper-potted and designed so that they would not stand out from the open market houses (though they are not always exactly indistinguishable, particularly when more concentrated, as in case of apartment blocks at Tadley Acres). A notable exception is an area at Tadley Acres North around Julian Close and Home Fields where affordable units are concentrated (Phase AFF). Those forty affordable units constituted a little over 10% of housing units built for first four phases and were delivered by the landowners and developers despite the fact that there was no requirement at the time. The overall amount of affordable housing at Tadley Acres was at around 16%, compared to 30% base line policy in the Local Plan (*Mendip District Local Plan 2006-2029*, 2014).

Commercial value

It is difficult to discuss the commercial value of the scheme in Burwell, it being an affordable RES scheme, though there certainly were financial benefits for the landowner (around £8,000 per plot for the latest phase, before tax and any legal fees (Stakeholders, 2018)). While it is significantly more than agricultural land value, it does not compare with the land value for commercial development, which is the reason why most landowners are unwilling to put their land up for RESs, i.e. they are waiting in hope that open market housing will be allowed on their site eventually (Stakeholders, 2018). Consequently, the stakeholders involved in Burwell scheme consistently spoke highly and with appreciation about the landowner's decision to sell his land for RES development (Stakeholders, 2018).

When it comes to Newhall and Tadley Acres, the landowners were committed to investing in better materials, architectural detailing and design, believing that it would bring the house prices up and lead to higher profits in the long term. In order to judge the commercial viability of such an approach, a house price analysis was conducted (see **Appendix E** for the full analysis).

Based on the analysis of house prices at Tadley Acres and Newhall, both schemes achieved premiums compared to the local market. At Tadley Acres, there was a premium on initial sales on all property types, ranging from 6% for detached and up to 16% for terraced properties, which were the best-selling property type (especially at Tadley Acres South).[53] The higher-density southern part of the estate was generally more financially successful (except detached properties), and while that might be partly due to higher average number of bedrooms, it seems safe to conclude that Tadley Acres South was more popular with the homebuyers also due to its award-winning design. This

[53] This is compared to the local market as a whole as there was not enough new build sales in Shepton Mallet to constitute a reliable benchmark.

would support the stakeholders' philosophy that investing in public realm results in uplift in house prices in the later phases as the development becomes increasingly popular.

However, premiums at Tadley Acres might be partly linked to squeezing in more bedrooms into similar-size properties. Looking at price per bedroom, Tadley Acres was less financially successful and flats were the only type of property that achieved premiums. The average prices per square foot were overall higher than in Shepton Mallet, mostly due to terraced properties across entire estate and semi-detached properties at Tadley Acres South. This means that the homebuyers paid less for each bedroom at Tadley Acres than they would elsewhere in Shepton Mallet, though they did pay slightly more for each square foot.

Newhall achieved higher premiums on initial sale than Tadley Acres (except for detached houses). Terraced properties and flats, which together constituted over 70% of registered sales, were the most successful and achieved 41% and 24% premium respectively (compared to other new-builds in Harlow). However, detached and semi-detached properties at Newhall had lower average number of bedrooms than other properties in Harlow, which might suggest that premiums calculated for those property types are slightly underestimated. Correspondingly, the premiums for terraced properties and flats might be slightly overestimated as they have higher average number of bedrooms than other properties in Harlow.

The high premiums on terraced properties at Newhall might be partly related to the large average bedroom size, suggesting that house prices are not purely determined by the number of bedrooms and there is a correlation between higher square footage and higher premiums. Therefore, it could be inferred that prioritizing square footage over number of bedrooms, or at least striking a better balance between the two, might be financially beneficial for landowners and developers. The impact of square footage on sales prices is also illustrated by the fact that detached properties at the southern part of Tadley Acres, which had similar number of bedrooms but smaller square footage, achieved significantly lower premiums than detached properties at the northern part (though there might be other factors at play as well, e.g. detached properties at the southern part of the estate might have been unpopular due to higher overall density of the development, the resulting smaller gardens and reduced privacy).

In terms of price per square foot, flats were the only property type at Newhall achieving premiums, which could be party caused by the significantly larger size of terraced and semi-detached properties at Newhall compared to Harlow. Also, price per square foot might not be the most reliable metric of a scheme's commercial success as it can under-represent the actual value created by larger properties (Knight Frank, 2020). When looking at the average prices per bedroom, Newhall achieved premiums on each property type.

Detached properties were generally the least popular at Newhall and Tadley Acres (at least the southern part), which might suggest that homebuyers who were looking to buy a detached property did not consider high-density developments such as Newhall and Tadley Acres a desirable location.

Similarly, another reason could be that homebuyers who were looking to buy a property in Harlow or Shepton Mallet (both of which can be considered low-value areas compared to other similar locations e.g., Wells, Bath, Ely, Cambridge) were only interested in more affordable options, e.g. terraced properties, which seemed to be a good compromise between affordability and having a garden.

In terms of long-term value of both schemes, the premiums from initial sale discussed above did not translate itself into financial benefits for the homebuyers. Properties at Tadley Acres and Newhall lost in value over time compared to the local market (or to be more precise – increased in value less than other local properties). The average uplift at Tadley Acres was 25% compared to 33% in Shepton Mallet and 20% at Newhall compared to 26% in Harlow. Based on resale values, more than 70% of those homeowners at Tadley Acres and almost 60% at Newhall would have made a better investment buying a property somewhere else in town (on average). This is particularly problematic in relation to the long-term value and legacy of both schemes, especially that there is evidence illustrating that other legacy schemes were able to achieve comparable premiums on both new-build and resale values (Knight Frank, 2020).

Overall, both Newhall and Tadley Acres achieved premiums compared to the local market, however, based on prices per bedroom or square foot their financial success is rather questionable. The relatively low premiums suggest that the additional investment in higher-standard product might have failed to deliver high enough profits to offset the additional build costs at both estates. This was confirmed by one of the developers at Newhall, who admitted that they achieved lower profits than they usually would have on a similar development– between 10% and 15% compared to the usual 20% (Stakeholders, 2018).

There might be several reasons for that. Firstly, both schemes seemed to generate higher premiums early on, but following the recession in 2008 the property values were knocked down, which due to *"self-fulfilling nature of mortgage valuations"* might be very challenging to recover from (Knight Frank, 2020). It was also suggested by one of the developers that contemporary look of the estate might have contributed to the lower sales values at Newhall as it was only appreciated by the very specific and narrow segment of homebuyers (Stakeholders, 2018). It is also possible that the leaching render at Tadley Acres affected the more recent sales. Finally, deriving more value from added quality can be particularly challenging in low-value areas such as Shepton Mallet or Harlow, which usually attract homebuyers for whom the price of a property is a crucial issue and who might not be willing (or able) to pay extra for higher housing quality.

This analysis also suggests that Newhall might have been slightly more commercially successful than Tadley Acres, though the house prices alone might not paint an accurate picture in terms of profits. There is anecdotal evidence suggesting that the approach adopted at Tadley Acres, with more elaborate key buildings surrounded by plainer houses, was much more cost-effective than Newhall's commitment to innovation and bespoke design (Stakeholders, 2018).

* * *

5.3.2. Stakeholders' perspectives on housing quality

As part of this research, a questionnaire with the residents on the three estates was conducted in order to explore their opinions about their properties and the estates described above, as well as the factors that affect their choices when choosing a property. Both are discussed in this section and compared with other stakeholders' perspectives. Further information on the methodology, response rates and some issues that were encountered during administering the questionnaire and the analysis of data can be found in section 4.5.3.

Residents' opinions on their properties and estates

On a scale from 1 to 5, the homebuyers at Tadley Acres and Burwell judged the quality of their estate slightly above 3.6 and their general satisfaction with the property slightly above 3.9. Homebuyers' perceptions of the Newhall estate were slightly better with general satisfaction above 4 and quality of the estate at 3.86 (see Table 8).

Table 8: Household survey results – residents' satisfaction with the estate and their property.

	Burwell	**Tadley Acres**	**Newhall**
Quality of the estate	3.64	3.62	3.86
Satisfaction with the property	3.91	3.92	4.06

As mentioned before, at Tadley Acres there were significant differences in the design and densities between northern and southern parts of the estate and many stakeholders believed that the scheme got better and better as the development progressed (Stakeholders, 2018). However, this was not reflected in residents' opinions. Residents at Tadley Acres North judged the quality of the estate slightly higher (3.7, compared to 3.5 at Tadley Acres South), but were less satisfied with the properties themselves (3.9, compared to 4.0 at Tadley Acres South). This can be partly attributed to parking issues and housing density and also illustrates the differences in stakeholders' perceptions on housing quality (Tadley Acres residents, 2018).

At Newhall, which was also characterized by very distinctive phases, the quality of the estate was judged between 3.5 (1B2) and 4.2 (phase 1B1) and residents' satisfaction with their property ranged from 3.9 to 4.3 (phases 1H, 1B1 and Newhall Be were most appreciated). This also shows that, compared to Tadley Acres, opinions at Newhall varied more significantly depending on the phase of the development.

One of the most negative aspects of all three estates, according to residents, was public transport and transport links (see Figure 88), and residents often quoted issues with poor bus service and being dependent on cars (Tadley Acres residents, 2018; Newhall residents, 2018; Burwell residents, 2017). Over 71% of respondents in Burwell travelled to work by car, while at Tadley Acres and Newhall

the figures were slightly lower – at 64% and 61% respectively (see Table 9). Average travel times ranged from 25 minutes in Burwell to 44 minutes at Newhall (the longer travel times at Newhall were no doubt influenced by people commuting to London). Interestingly, despite home offices and live/work units, homeworking did not become very popular at Newhall with only 2.0% of respondents (who were currently in employment) working from home (compared to 5.1% at Tadley Acres).

Table 9: Mode of transportation and travel times for work-home commute.

	Burwell	**Tadley Acres**	**Newhall**
Respondents travelling to work by car (retired and unemployed excluded)	71.4%	64.4%	60.9%
Average travel time (regardless of mode of transportation, homeworking excluded)	25 min.	32 min.	44 min.
Respondents working from home (retired and unemployed excluded)	0%	5.1%	2.0%

Public transport was also the only aspect of the estate that was judged below 3 by over a third of respondents at all three schemes (Figure 89). The main issue at Tadley Acres was also estate management, which can be attributed to the leaching render and poor maintenance of the affordable housing on Phase AFF.

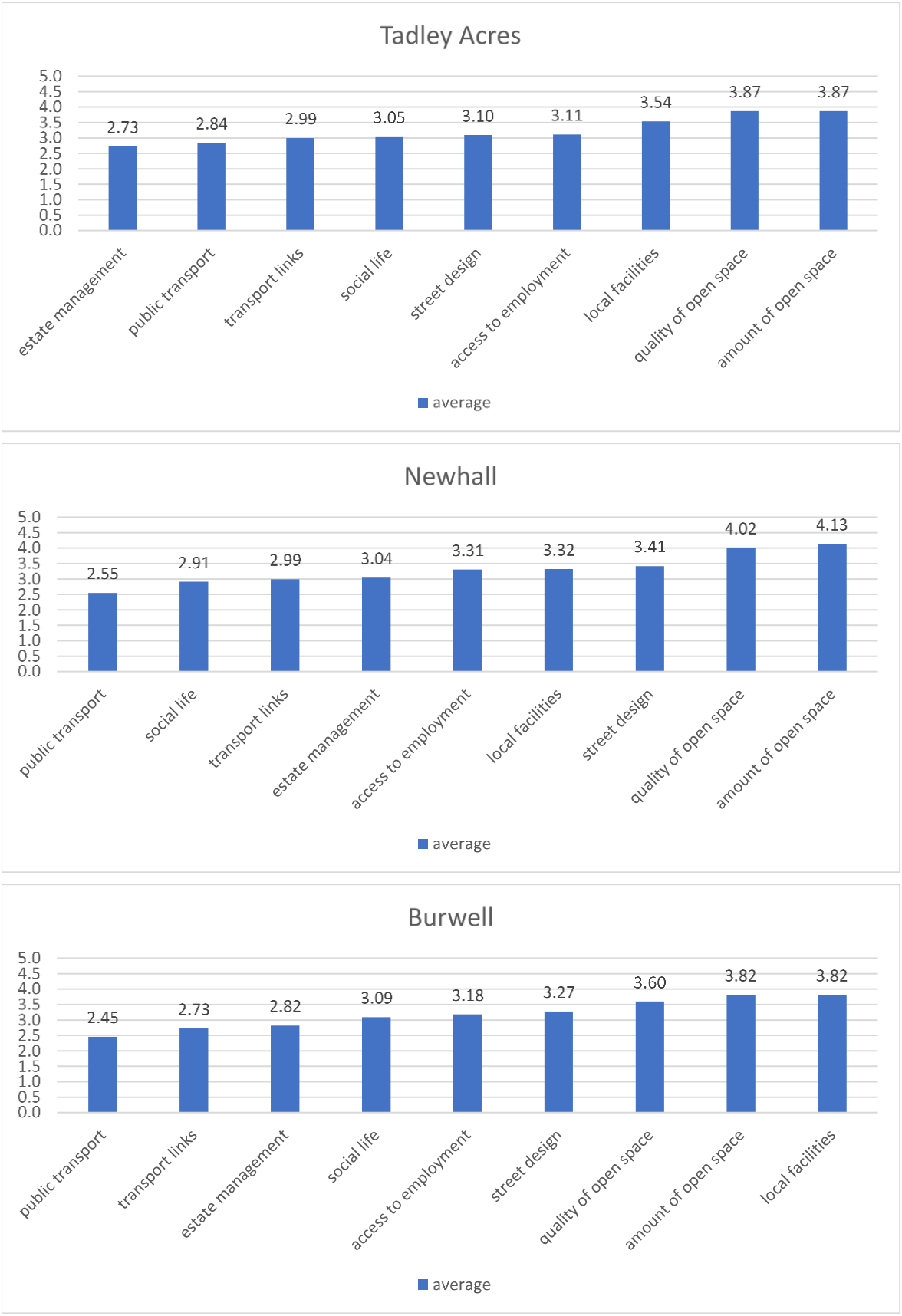


Figure 88: Household survey results – average quality of Tadley Acres, Newhall and Burwell estates (on a scale 1 to 5).

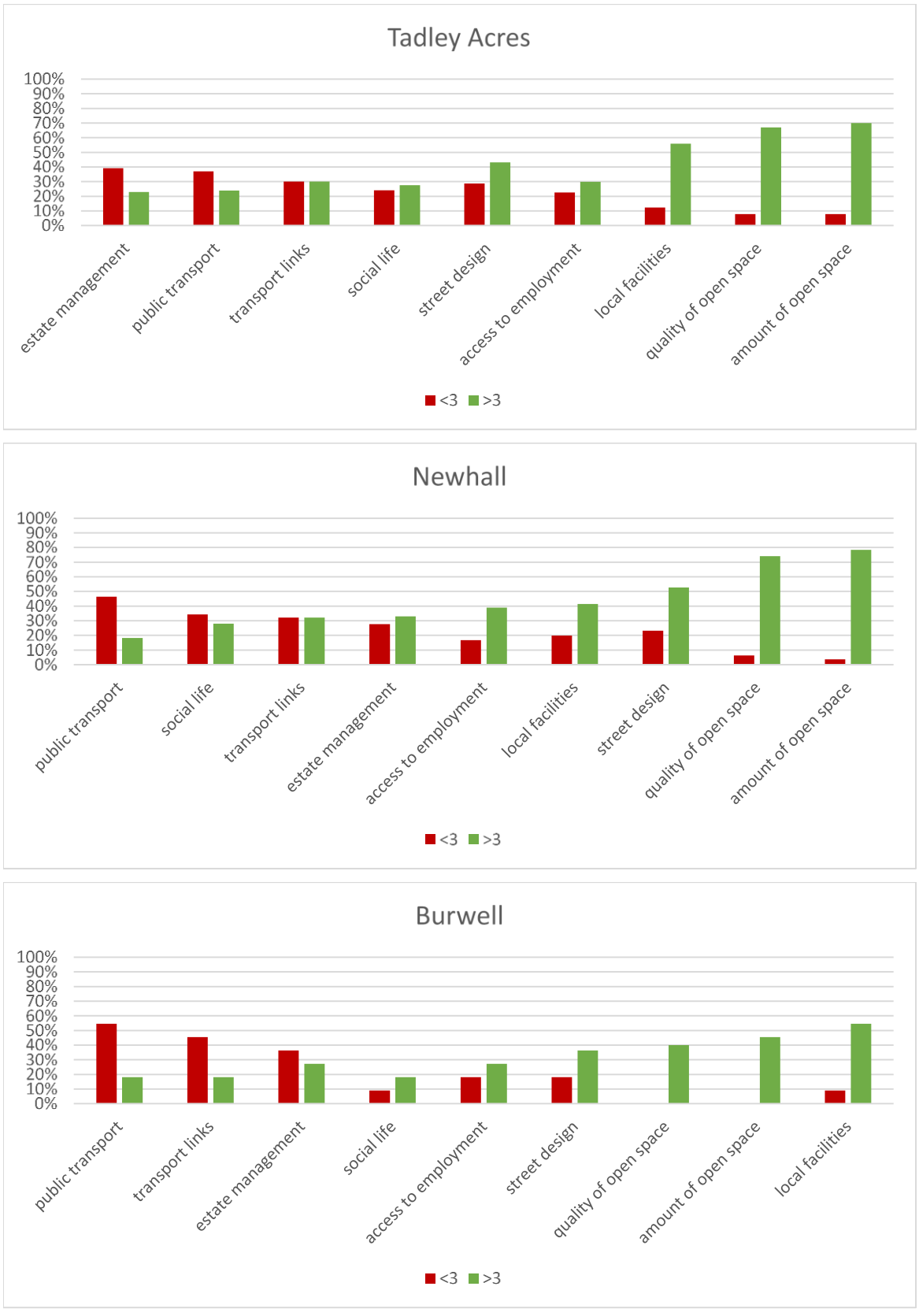


Figure 89: Household survey results – average quality of Tadley Acres, Newhall and Burwell estates (percentage of scores below and above 3).

Issues related to high density were also often mentioned particularly by residents living at Tadley Acres i.e. too much street parking, lack of privacy, overlooking (Tadley Acres residents, 2018). Interestingly, neither Tadley Acres nor Newhall was considered by the residents as extremely dense environment – on a scale from 1 (low density neighbourhood) to 5 (high density neighbourhood), the respondents judged it as 3.7 and 3.5 respectively, compared to 2.7 in Burwell (Figure 90). The perceived densities at Tadley Acres and Newhall were relatively similar despite the fact that Newhall is actually a lot more densely built – over 44 dph compared to 25 dph at Tadley Acres (see Table 5). The significant differences in densities are partly the result of the amount of flats at Newhall and an empty school site at Tadley Acres, which might be the reason why people struggled to give accurate estimates and why the estates are perceived as equally dense. In terms of car traffic, the estates were also considered calmer than expected based on anecdotal data – on a scale from 1 (very calm) to 5 (very busy), the respondents judged it as 3.5, 3.4 and 2.7 respectively.

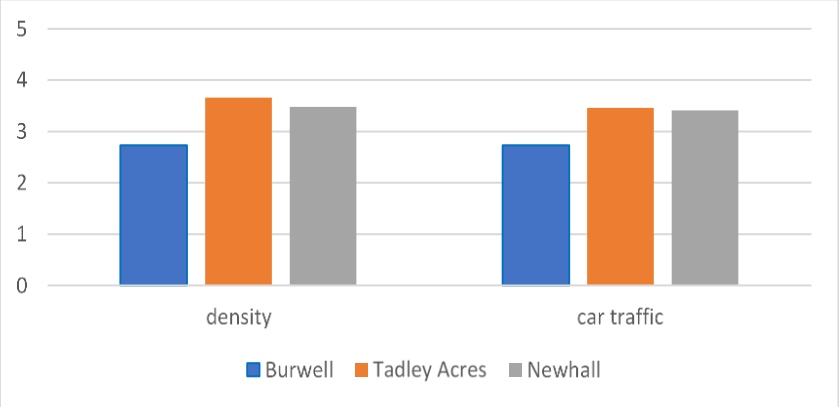


Figure 90: Household survey results – density and car traffic.

On the other hand, residents at all three estates were pleased with the amount and quality of public open space and often mentioned countryside setting of Tadley Acres and Burwell as a particularly positive factor. In Burwell, the residents were also pleased with local facilities, which should be attributed to services provided in the village itself and the short distances. Correspondingly, social life at Newhall, which is located relatively far from the town centre, was judged negatively. The low scoring for social life does not seem to be related to the respondents' local ties or social connections – Table 10 shows that at Newhall there were more respondents who had ties with the local community than at Tadley Acres, yet they were more dissatisfied with social life on the estate. The high percentage of respondents with local ties in Burwell is the direct result of the local connection requirement in the affordable housing allocation (applicants with local connection take priority).

Table 10: Household survey results – local ties at Burwell, Tadley Acres and Newhall estates (average values).

	Burwell	Tadley Acres	Newhall
How well do you know your neighbours? (1 to 5)	3.6	3.0	3.1
Respondents with ties to the local community	70%	34%	42%
Lived in the local area previously (same county)	90%	64%	63%
Lived in the local area previously (same village / town)	80%	32%	48%

In terms of properties itself (rather than the estate as a whole), the build quality was often mentioned as the most disliked aspect of properties at all three estates (in Burwell most complaints related to plumbing, at Newhall to buildings' exterior, and at Tadley Acres residents took issue with both external materials and internal finishes and fixtures). 64% of respondents in Burwell reported construction issues, compared to 46% at Tadley Acres and 44% at Newhall, the most common being damp, leaking pipes and leaking roofs. As shown on Figure 91, the construction quality received the lowest score among Tadley Acres residents (3.16) and second lowest among Newhall (3.40) and Burwell residents (3.36).

Residents at Tadley Acres and Newhall were also slightly disappointed with the amount of storage space, which scored 3.27 and 3.30 respectively, but at the same time they were satisfied with the overall size of their properties, which achieved highest average scores. Newhall scored slightly higher, which can be partly attributed to larger size of bedrooms,[54] but also a thoughtful layout, high ceilings and large windows, which were often mentioned by the residents as a particularly attractive aspect of their properties (Socha, 2018).

In Burwell, size (judged as 2.91) was the most disliked aspect of a property and residents were also disappointed with the amount of storage space (3.55). The low scores for property size in Burwell correspond with average number of bedrooms and household size among the respondents (see Table 11). The average household size was similar at all three estates (under 3 people), but the average number of bedrooms was significantly lower in Burwell (2.2 compared to 3.3 at Tadley Acres and 3.1 at Newhall). As a result, the average number of bedrooms per person in Burwell was only 0.83, while at the other two estates the residents had over one bedroom per person, explaining the lower scoring for property size in Burwell. This illustrates that high scores for property size at Tadley Acres and Newhall are at least partly related to the decreasing household size and under-occupation in open market housing (Bernheimer, 2014; RIBA, 2009; CABE, 2009).[55]

[54] The average square footage per bedroom was 468 at Newhall compared to 419 at Tadley Acres. This value does not represent the average bedroom size – it is the average size of properties divided by the average number of bedrooms.

[55] On the considered estates, the average space per person for market housing was 51 m^2 compared to only 24 m^2 for affordable housing (though it is important to remember that most respondents did not know the square footage of their property).

Table 11: Household survey results – average number of bedrooms per person.

	No. of bedrooms	Household size	Bedroom per person
Burwell	2.2	2.6	0.83
Tadley Acres	3.3	2.6	1.27
Newhall	3.1	2.8	1.12

Similarly, Figure 92 shows that at Tadley Acres the quality of construction got the highest percentage of negative scores (36% of respondents judged it below 3), at Newhall this was true for storage space (26% of respondents judged it below 3), and in Burwell for size and storage space (both were judged below 3 by 27.3% of respondents).

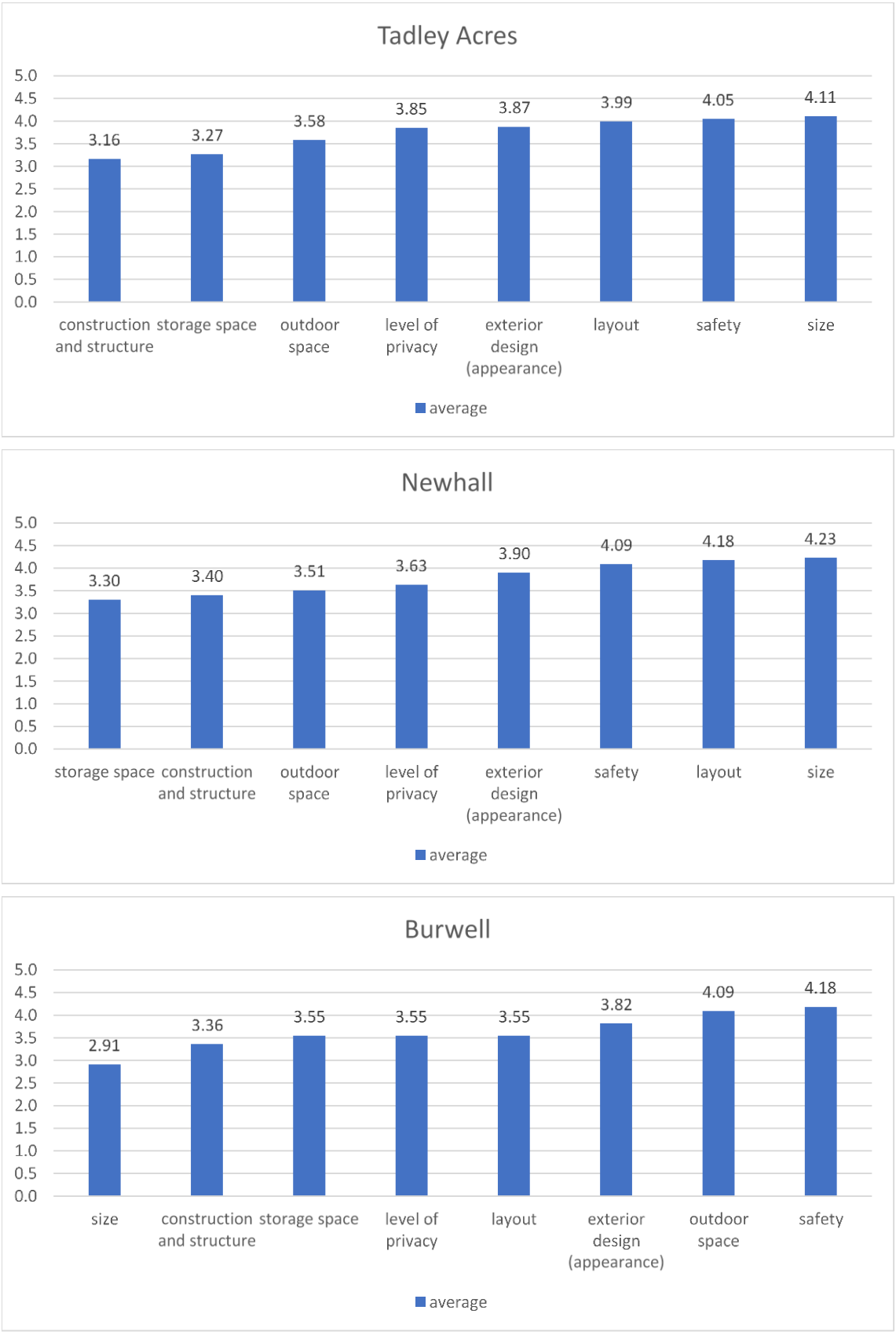


Figure 91: Household survey results – average home satisfaction at Tadley Acres, Newhall and Burwell (on a scale 1 to 5).



Figure 92: Household survey results – home satisfaction at Tadley Acres, Newhall and Burwell (percentage of scores below and above 3).

Also worth pointing out is the fact that not a single respondent in Burwell judged the external appearance of their property below 3, compared to 12% of respondents at Newhall and 12% at Tadley Acres (Figure 92). Based on the follow-up interviews, at Newhall the negative opinions can be partly attributed to the differences in the design for each phase, and at Tadley Acres to the leaching render, which significantly affected the visual appearance.

One might also presume that these discrepancies are related to different tenure profiles at the three estates e.g. residents in affordable housing are simply less discerning about the appearance of their property and therefore do not have strong opinions on the subject. However, the questionnaire data suggests a different correlation. At Tadley Acres, 30% of people in affordable housing or PRS judged the appearance of their property negatively, while this was true for only 6% of homeowners. At Newhall, 17% of people in affordable housing or PRS judged the appearance of their property negatively, compared to 7% of homeowners. This would suggest that homeowners, having chosen to buy a particular property and thus live there for extended period of time, are generally happier with its appearance cause otherwise they would not have bought it in the first place (respondents at Newhall often listed the original modern design as a particularly positive feature, while residents at Tadley Acres appreciated that the houses do not look the same). At the same time, it is reasonable to assume that the choice of housing for residents in affordable housing and PRS is more influenced by circumstances and they might be more willing to live in properties that they do not find aesthetically attractive due to short-term character of their accommodation. This is also supported by the questionnaire data – among respondents who expected to move within the next 2 years, as much as 46% judged the appearance of their property negatively at Tadley Acres and 21% at Newhall.[56]

Furthermore, the average satisfaction with the appearance of the properties was similar at all three estates and in fact slightly higher at Tadley Acres and Newhall (3.8 in Burwell and 3.9 at Tadley Acres and Newhall). Having all that in mind, it seems that the more standard design in Burwell was universally accepted by residents, while at Tadley Acres and Newhall people had more diversified opinions (some might have had issues with the more unique design, though overall it was judged positively).

Surprisingly, the architectural style at Tadley Acres and in Burwell was not necessarily perceived as traditional (Table 12). On scale from 1 to 5 (1 being traditional, 5 being modern), the architectural style at Tadley Acres and in Burwell was on average judged to be more modern than traditional – 3.4 at Tadley Acres and 3.8 in Burwell (the contemporary Newhall design was judged as 4.6). The Newhall estate was also believed to fit better with the local context (4.1, compared to 3.6 at Tadley Acres and 3.4 in Burwell). Both Tadley Acres and Newhall were considered visually diverse. In Burwell, on the other hand, lack of diversity was the main criticism related to appearance

[56] This does not suggest causality i.e., this is not to say that the respondents are expecting to move because they are not happy with the appearance (or any other aspect) of their property.

– 45.5% of respondents considered the estate monotonous. This might have been one of the reasons for a relatively low score for visual attractiveness – 3.2 in Burwell, compared to 3.7 at Tadley Acres and 4.1 at Newhall.

Table 12: Household survey results – architectural style, local context, diversity and visual attractiveness at Tadley Acres, Newhall and Burwell.

	Tadley Acres	Newhall	Burwell
architectural style	3.4	4.6	3.8
local context	3.6	4.1	3.4
diversity	3.9	4.2	2.4
visual attractiveness	3.7	4.1	3.2

1 to 5 scale
architectural style: 1 – traditional, 5 – modern
local context: 1 – does not fit at all, 5 – fits very well
diversity: 1 – visually monotonous, 5 – visually diverse
visual attractiveness: 1 – visually unattractive, 5 – visually attractive

Residents' preferences when choosing a property

As part of the questionnaire (Socha, 2018) the residents were also asked to judge (on a scale from 1 to 5) how important to them are certain factors when choosing a new home. Based on their responses, the price was the most important factor and the only one to score above 4.5 (Figure 93). It was followed by build quality, property size and safety. Other factors that also scored above 4.0 were safety, privacy, location, property layout and general appearance. The least important factors were local ties and employment opportunities, employment opportunities being the only one that scored below 3.0. The fact that most factors scored above 4.0 also illustrates that they all contribute to people's decision-making when choosing a new home.

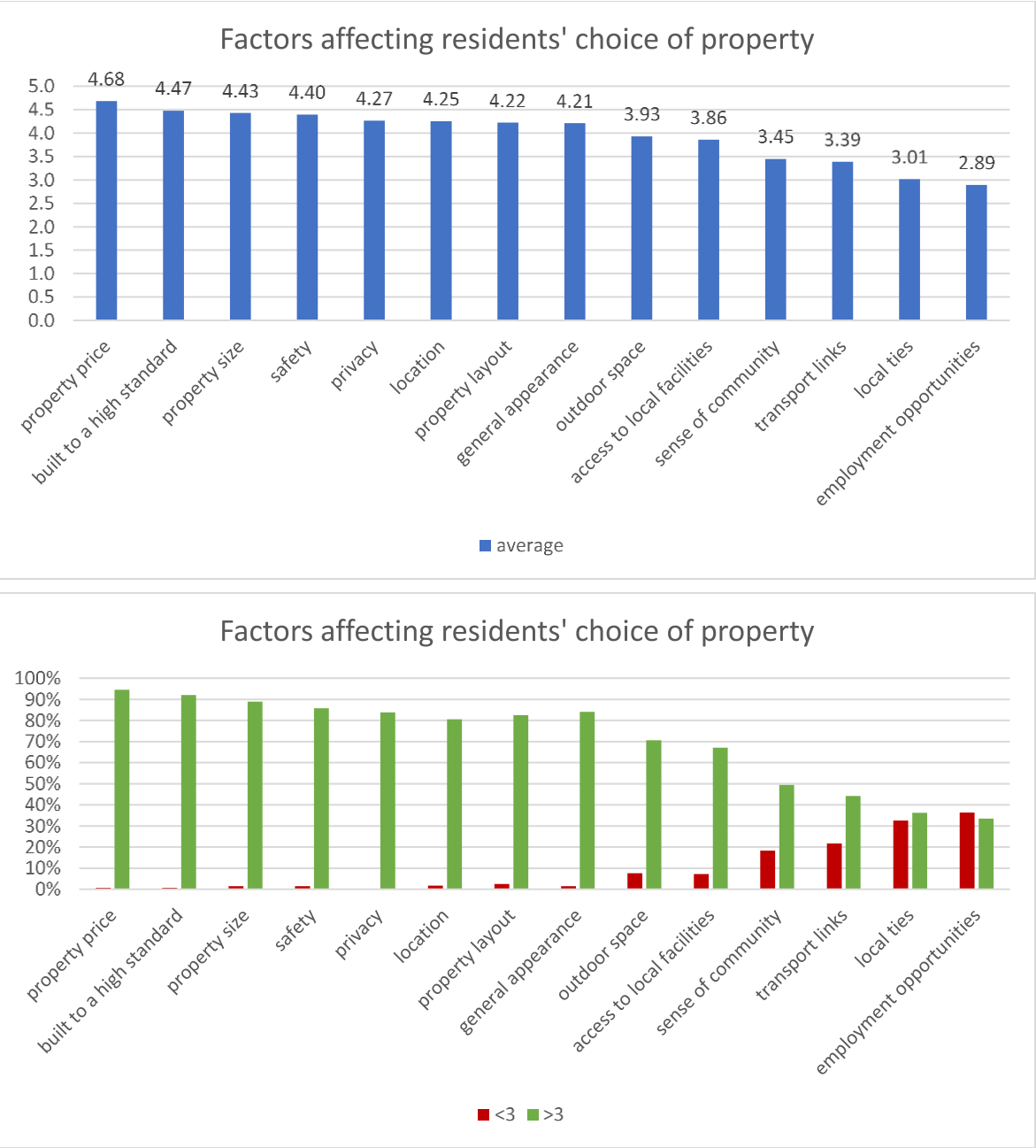


Figure 93: Survey results – How important are the following factors when choosing a property? (On a scale from 1 to 5).

Furthermore, only about 2.5% of homeowners who participated in the survey were under 35, which supports the argument that affordability is particularly problematic for young people wishing to get on the property ladder (Bernheimer, 2014). In fact, the only group of respondents, for whom price was not the most important factor, were people looking to downsize (safety was the most important for that group, the price came second) and people looking to move to a bigger house (logically, size was the most important for this group, and again price came second).

These results only partly correspond with other studies on homebuyers' preferences. Based on the existing literature (reviewed in section 3.2.1), it appeared that the most important elements of housing quality from the homebuyers' perspective were number of bedrooms, property type, safety,

having a private garden, access to local facilities, general appearance, character of the neighbourhood and price. However, the data collected from the household survey and the interviews conducted with residents suggests that, while price, build quality, size and safety do rank highest, appearance, outdoor space and access to local facilities did not seem to be as important as some studies would suggest (though it is important to keep in mind that the this is based on limited data from three particular estates and therefore it might not paint a reliable picture of homebuyers' preferences in general).

The lesser importance of local facilities and the fact that employment was ranked as the least relevant factor might have been related to high level of car dependency on the considered estates (despite walkable and pedestrian-friendly designs). Access to local jobs can be of little concern also due to flexible modes of employment (Bernheimer, 2014), however, the collected data suggests that homeworking was rather marginal.

Appearance also seemed less important than studies suggest and there was no clear preference for a particular architectural style, i.e. despite strikingly different architectural styles, the visual appearance was scored similarly at Tadley Acres and Newhall (though again, it is not possible to draw definite conclusions based on the data from these specific housing estates as it does seem natural that people who chose to live at Tadley Acres would prefer traditional architecture and people at Newhall would prefer contemporary style). Research also suggests that homebuyers have a certain minimum requirement for visual attractiveness of a property below which they would not make a purchase (Angle and Malam, 1998). However, this is impossible to evaluate since all three schemes should be considered well above most people's bare minimum.

Despite a popular belief, location was not the most relevant factor either (though it did score above 4.0). Also, as mentioned in 3.2.1 location can be variously interpreted, i.e. there are many possible reasons why people might want to live in a particular area (could be related to proximity to local facilities or local ties), and this was confirmed in the interviews with residents (Tadley Acres residents, 2018; Newhall residents, 2018; Burwell residents, 2017).

Other studies also indicated that property size is one of the biggest concerns when buying a new home (Leishman *et al.*, 2004; Angle and Malam, 1998; RIBA, 2009; CABE, 2005b) and the data gathered for this research suggested the same. At the same time, only about 45% of respondents knew the square footage of their property, which confirmed the general emphasis on the number of bedrooms over the actual size of the property, also on the part of homebuyers. This also might be the reason for residents' dissatisfaction with the amount of storage space (even when they were satisfied with the overall size of their property).

A survey conducted for CABE back in 2002 already illustrated the growing importance of energy efficiency (CABE, 2002) and similar conclusions can be drawn from the interviews conducted with residents, who seem to consider it an important aspect of build quality, particularly due to the direct link between energy efficiency and affordability as well as environmental concerns

(Tadley Acres residents, 2018; Newhall residents, 2018; Burwell residents, 2017).

High density was also often mentioned by the participants as problematic for them, though this did not seem to be related to the preference for detached properties, but rather to concerns about parking, lack of privacy and overlooking.

In section 3.2.1 it was also suggested that perhaps different groups of prospective homebuyers might have different priorities depending on their age, family situation, background and income, and it might be difficult to make any generalised statements about homebuyers as a whole. However, the collected data showed (Socha, 2018) that the residents' priorities were rather universal and in most cases unrelated to respondent's circumstances – price, build quality, size, safety and privacy consistently ranked high and there were only minimal differences depending on gender, age, country of origin or type of tenure. There were only slight differences depending on marital status and income. Property size was less important for single and widowed people (ranked fifth and seventh respectively), as well as people on lower incomes (ranked sixth among people with annual income lower than £20,000 and fifth among people with annual income between £20,000 and £40,000). Appearance on the other hand was more important for people on higher incomes – ranked second among people with annual income above £80,000 (though price was still the highest ranking factor for that group).

Other stakeholders' priorities

As already mentioned in chapter 3, the notion of housing quality is also extremely subjective and various stakeholders might have very different perspectives and understandings of what constitutes "good" housing quality. Therefore, they might prioritize different aspects of housing quality, which was investigated through semi-structured interviews.

Interestingly, architects (and urban designers) did not focus on the architectural style and rather universally agreed that the well-defined public realm and street design, is more important as it helps create a sense of place, which corresponds with the results of a different study commissioned by Create Streets (Smith, 2016).[57] Architects emphasized the importance of creating attractive streets through well-maintained landscaping, traffic calming measures, hiding parking away, creating legible street hierarchy, responding to local context and using durable materials. They also often focused on community aspect of creating attractive places, i.e., providing local facilities and employment, introducing mixed uses and good social mix (e.g. through a good mix of tenure and property types).

When it comes to properties themselves, the single most important aspect for architects was size and many expressed disappointment with the low space standards in the UK. The emphasis on

[57] However, some architects did have a strong stylistic preference, particularly Tadley Acres architects, who championed traditional architecture.

number of bedrooms was also the common source of frustration and often quoted as the reason why more important features such as volume, high ceiling, storage space, flexibility and adaptability are so hard to achieve. Many architects also advocated for including home office or some sort of work space as part of the designs arguing that historically homes provided enough space for many different uses and were much more sustainable as a result. In case of size of affordable housing, which is regulated by stricter space standards, some architects admitted that the general tendency is to keep as close to that limit as possible (to the nearest square meter) in order to make them more economical (Stakeholders, 2018).

Another important aspect of the design that architects generally agreed on was the energy efficiency. Similarly, to homebuyers, architects stressed its impact on environment as well as affordability. However, generally affordability was not a relevant concern for architects. Quite the opposite – many emphasized the "client" dynamic with developers and the fact that commercial value of properties is an important measure of a project's success. Consequently, build costs were one of the important considerations as well.

For developers, naturally, profits were the main concern and consequently, they paid particular attention to build costs and saleability. Many emphasized that their decision-making is very customer-focused and satisfaction of the customer is what ultimately defines the quality for them.

Developers believed that appearance is not a deciding factor in homebuyers' choices, which based on the household survey seemed to be correct. That is not to say that the external appearance of the development was not a concern for developers and in fact, they often paid attention to whether the development fits well with local context. This was partly due to the fact that the planning consent often hinged on the support of local community, particularly when building on green land.

Opinions on whether there is a premium on traditionally looking properties were divided with some developers saying that traditionally looking developments are more popular, some saying that it's an entirely personal preference, and some that people simply do not pay much attention to that and are driven by other factors. The most important of these factors was believed to be the price and size, which again corresponds with the survey results. It was also pointed out that homebuyers are slowly becoming a little bit more discerning when it comes to overall space, seeing value in larger bedrooms and open plan rather than just number on bedrooms.

Developers were also concerned with build quality and maintenance, which combined with the commercial character of their involvement usually meant they were rather wary of using non-standard materials or construction methods. All interviewed developers preferred to stick to standard house types, which did seem to create some tension between developers and architects, however, some architects saw the logic behind that approach:

"Housebuilders' standard house plans have been engineered so they are very cheap to build and they sell well. So, we add no value to that. Where we add value is in the public realm." (Stakeholders, 2018).

In Burwell, where the developer was a housing association, there was an additional concern for energy efficiency due to its impact on affordability, but they were equally concerned with costs and viability of the scheme, which is often difficult to achieve with limited funding.

Developers also believed that providing local facilities and services such as shops, schools and public transport has a significant impact on saleability, but the household survey suggested that it was not that relevant for the residents (Socha, 2018).

Planning officers were mostly concerned with build quality (particularly in relation to quality of materials, maintenance and durability), community provisions, infrastructure and employment. They shared the architects' belief that providing local facilities and mixed uses helps create thriving, self-sufficient and attractive neighbourhoods.

Planning officers were also concerned with densities, the size of the development and the amount of green spaces, particularly that all three estates were built on green land. However, their approaches and policies on density changed significantly throughout the years (see section 5.2.3). In terms of estate layout, planning officers advocated for "pepper-potting" approach to the distribution of affordable housing, which is rather universally accepted as standard by all stakeholders (though homebuyers still can be a little bit snobbish about this, i.e. some do not want affordable housing next to their property).

Planning officers paid extra attention to affordability both in terms of energy efficiency and the amount of affordable housing (though in this respect their negotiations with developers and landowners sometimes could not be considered successful). They also stressed the importance of size and layout of properties, particularly in terms of adaptability, catering for diverse needs (e.g. homeworking, multigenerational living) and the relation between lack of storage space and parking issues (people using garages as storage).

There were contradicting opinions on the appearance of properties as some stakeholders quoted examples of planners defining a very specific aesthetics and a distinct style in some locations (through design codes and planning guidance); while others (including some planning officers) expressed opinion that regulation is too prescriptive and consequently all houses end up looking the same. Nevertheless, in the three developments investigated in this research planning officers did not contribute much in terms of aesthetics as this aspect of the development was mostly driven by the landowners.

When it comes to landowners' priorities, there were some significant differences depending on the size of the landowner. Larger landowners were more concerned with the design and aesthetics and their personal preferences are clearly visible – traditional architecture and placemaking principles at Tadley Acres, contemporary and innovative design at Newhall. Landowners also echoed architects' opinions on the role of masterplan, landscaping and use of materials in creating a coherent vision for the development and a sense of place.

Smaller landowners seemed to be less concerned with the appearance of the houses and more

with the direct impact on the local community (e.g. good social mix, sensitive treatment of site's boundaries, size and type of properties catering to the needs of the local community), as well as the comfort of future residents (e.g. build quality, energy efficiency, thermal comfort, size of gardens).

Even though, landowners' motives were not purely idealistic and profitability was an important factor, there was an idealistic element to landowners' priorities. They placed emphasis on social outcomes; innovation; giving more freedom to architectural profession; building housing fit for contemporary needs and for many years to come; and creating sustainable communities, with low crime rates, where people are healthy and happy (Stakeholders, 2018). In that spirit, landowners were willing to invest (though perhaps to varying degree of success) in higher quality materials, architectural design, community facilities and employment (all of which increase build costs and thus reduces land value) in order to stay true to their own values and beliefs and realise their vision for the development. Build quality was also a common concern among all landowners.

Comparison between stakeholders' perspectives

Stakeholders' perspectives on housing quality discussed above, illustrate that while each group tended to focus on different aspects of housing, there was some overlap between their preferences and priorities (see Figure 94 through to Figure 99).



Figure 94: Residents' priorities (marked with orange).



Figure 95: Architects' priorities (marked with orange).



Figure 96: Developers' priorities (marked with orange).



Figure 97: Planning officers' priorities (marked with orange).



Figure 98: Larger landowners' priorities (marked with orange).



Figure 99: Smaller landowners' priorities (marked with orange).

Factors that were most important for the residents were price, build quality, property size and safety. Affordability seemed to be especially problematic for people under 35. Also, residents often expressed dissatisfaction with high density developments and such issues as limited parking, lack of privacy and overlooking. Appearance did not rank particularly high among residents' priorities and architectural style seemed to be a matter of a personal preference – people living at Newhall preferred contemporary architecture and people living at Tadley Acres preferred traditional architecture. Also, residents' perception of traditional and contemporary architecture was quite different than architects' as none of the schemes, not even Tadley Acres, was considered traditional. This could suggest that people perceive new-build estates as "contemporary" irrespectively of architectural style. The residents paid more attention to visual diversity – they appreciated houses not looking the same and considered Newhall and Tadley Acres more visually attractive than the more monotonous development in Burwell (see Table 12 on page 204).

There were not many differences in residents' priorities depending on their social and economic circumstances, apart from size being less important for single and widowed people as well as people on lower incomes; while people on higher incomes paid more attention to the appearance of a property. Also, and against a popular opinion shared by most stakeholders, residents did not consider local facilities a particularly important element of housing developments.

Architects' priorities could be grouped into two categories: physical (estate layout, character, visual appearance, property size, property layout, energy performance) and social (local facilities, employment). Some architects had a personal preference for a particular architectural style, but they considered it more of a stylistic choice and they did not think that it directly affected housing quality. In addition, architects emphasized the importance of commercial success, the professional relation between them and developers and the fact that, as their clients, developers usually dictate the terms.

In section 3.2.2, it was suggested that architects' preferences often go against what most people like and want, however, this was not true for the schemes considered in this research. Architects' priorities to some extend overlapped with residents' preferences and even the contemporary design at Newhall was popular with the residents (this should be at least partly attributed to particularly sensitive design achieved through masterplan, design codes and a careful selection of design teams).

Developers were mostly concerned with saleability, and therefore, tended to prioritize those aspects which they believed were attractive or important to homebuyers. These included build quality, local facilities and property size. Similarly, property prices, build costs and housing mix constituted important concerns as they directly affected saleability. Developers also believed that appearance was not an important factor in homebuyers' decision-making, but they took into consideration its role in gaining local support and obtaining planning permission. Generally speaking, developers seemed to have a very good idea of homebuyers' preferences and the importance of local facilities was the only issue that did not correspond with residents' responses.

Planning officers had the least specified priorities. Apart from housing mix, which they left up to housebuilders, and appearance, which they left up to architects and landowners, planning officers were concerned with almost every aspects of housing developments, i.e. scale of the development, densities, amount and distribution of affordable housing, provision of local facilities and employment, amount of open space, build quality and maintenance, internal layout of properties. However, their approaches and policies on the above issues often changed significantly throughout the course of a project.

Landowners priorities seemed much more individualistic and personal compared to other stakeholders, who to some extent seemed to represent the general views of their profession. The differences between case studies seemed to be partly related to the size of the landowner. Larger landowners were much more involved in the design and development process and were the driving force behind the developments. Consequently, the schemes reflected their personal values and beliefs related to architectural style, aesthetics, urban design, lifestyle or even social justice. Smaller

landowners seemed to focus on more pragmatic aspects of housing developments related to the needs of local community (e.g. affordability, property size and layout, property type, outdoor space) rather than personal opinions or ideals. Larger landowners also openly admitted that commercial value was an important measure of a scheme's success.

There was one aspect of housing quality that seemed to be a universal concern among all landowners – build quality. This might stem from the concept of legacy itself – landowners aspired to build something durable that would withstand the test of time and constitute a positive contribution to our built environment for generations to come.

5.4. SUMMARY

The analysis of the three case studies illustrated the main characteristics and challenges of legacy projects as well as the differences depending on the size of the landowner.

It was demonstrated that the motive to leave behind a lasting legacy affects landowners' decision-making on instrumental, social, expressive and intrinsic level. Instrumental motives were a particularly powerful drive for all landowners irrespective of the size of their landholdings, however, larger landowners focused more on the long-term land value. There was some evidence suggesting that landowners are unlikely to get involved in housing developments and invest in higher housing quality, if they do not believe that would lead to higher land value over time.

On a social level, local landowners with a personal connection to the community appeared to be more concerned with their reputation in the local village or town, while larger landowners focused more on public opinion and their reputation at large. Landowners' expressive motives were more evident for landowners with active interest in architecture and urban design and were often affected by their personal values and experiences. Intrinsic motives such as sense of duty and emotional attachment to land were common among all landowners.

The case studies illustrated that landowners sometimes sacrificed their expressive aspirations in order to satisfy their social or instrumental needs, which suggests that lower level needs can undermine higher level needs and perhaps some sort of hierarchy does exist. However, there was also a number of instances when higher level motives took precedence over instrumental needs, and therefore, it was conceded that the relation between instrumental, social, expressive and intrinsic motives is much more intricate than the Maslow's theory (Maslow and Frager, 1987) would suggest.

The case studies also demonstrated that social and intrinsic motives play a particularly significant role in landowners' decision-making, due to their long-term relation with the local community and personal attachment to land (perhaps even more so in case of smaller landowners), which is quite a unique trait among the stakeholders involved in housing developments.

The history of the considered schemes showed that navigating the complexities of the planning system is not easy, and therefore, landowners' determination may not be enough to ensure the desired outcome. Any instances where the overall vision and continuity in the development process were lacking, the landowners' aspirations were likely to get diluted and housing quality to suffer. Without good working relations and input from all stakeholders, quality control was proving to be extremely difficult and resource-exhaustive.

Design codes and pattern books, together with a masterplan, were often implemented in order to protect the original vision for the development and control the quality of what was being built. These tools allowed to set design standards higher than those specified by building regulation and planning policy (e.g. energy or space standards), and were essential in ensuring that the design fits with the local character and is a natural extension of the existing local architecture.

Design codes were particularly critical at Newhall, where a number of different developers and architects were involved. With the masterplan and design codes approved early on by the planning authority, the planning applications for subsequent phases were granted permissions much more quickly (as long as they complied with the already established principles). This significantly sped up the planning process, which was appreciated by developers.

Sadly, in most cases getting housebuilders to comply with the design codes was an uphill battle and developers consistently tried to dilute the design principles in order to cut costs. In the early stages of Tadley Acres development, developers insisted on removing the design codes from the legal agreements; while at Newhall, even with design codes set by covenants, the landowners still struggled to get housebuilders to do what they signed up for.

Despite different scale and architectural style, the three investigated schemes shared many similarities. Particularly in case of Tadley Acres and Newhall, the underlying principles were very similar and rooted in the new urbanist approach, i.e. high densities, mixed uses, attractive streetscapes and landscaping, diverse façade treatment, legible street hierarchy, live/work units, etc. The schemes also faced similar challenges, most notably delivering local facilities, services and infrastructure. The main difference between Tadley Acres and Newhall, was the approach to architectural design, both in terms of aesthetics and internal layout of properties. At Tadley Acres, housebuilders and architects developed standard house types and applied varying traditional façade treatment, while at Newhall, many different architectural firms were invited to create bespoke and innovative contemporary designs.

The scheme in Burwell was without a doubt the most conservative of the three, particularly in terms of architectural design. Due to the small size, the community provisions such as local facilities and employment were never considered a viable part of the scheme and the development relied on the existing provisions in the village. The main focus was placed on appropriate housing mix and affordability, which is understandable for a RES scheme. An important aspect of that was making sure that houses are energy-efficient and economical to run. Interestingly, energy performance of buildings was a common concern among most stakeholders at Newhall and Tadley Acres as well.

Overall, all three schemes were popular with residents, though the residents were generally more satisfied with their properties than the estate as a whole. Newhall was judged slightly more favourably than the other two schemes, but the opinions varied from phase to phase. The main issues for residents were build quality, estate management, storage space, transport links and parking, as well as size of properties in Burwell. At Tadley Acres and Newhall, on the other hand, size was the highest marked aspect of properties, which can be attributed to the decreasing household size and under-occupation in open-market housing. Also, the leaching render at Tadley Acres was a common source of complaints.

Lack of local facilities was not an issue for the residents partly due to the proximity to the already existing provisions, but also possibly due to the residents' preferences for car-based living

(local facilities were not considered a particularly important element of housing developments). Appearance also did not rank particularly high among residents' priorities and architectural style seemed to be a matter of a personal preference. The residents paid more attention to visual diversity and they appreciated if the houses did not all look the same. Consequently, Tadley Acres and Newhall were considered more visually attractive than Burwell, which was perceived as more monotonous.

In terms of commercial success of Tadley Acres and Newhall, the data gathered in this research did not illustrate the added value of higher housing quality. However, it should be kept in mind that the investigated schemes all started in the early 1990's and were paving the way for similar developments. Since then the legacy approach has been refined and more contemporary schemes did prove to be commercially successful (Knight Frank, 2020). Nonetheless, the long-term value of legacy schemes needs to be further investigated.

The three case studies also illustrated that striking the right balance between commercial viability and other aspects of housing quality can be challenging, and therefore, it is necessary to choose which aspects to prioritize. This was the source of disagreements and tensions between stakeholders who all had their own idea of what constitutes "good" housing quality. Landowners priorities were much more individualistic and personal compared to other stakeholders, who to some extent seemed to represent the general views of their profession. Also, developers seemed to have a relatively good idea of homebuyers' preference, which focused on price, build quality, property size and safety.

Reconciling the differences in stakeholders' perspectives required compromise and careful negotiations. At Tadley Acres, there was an increased spirit of collaboration as the schemes progressed and the development was going more smoothly as stakeholders gradually learnt from each other and understood each other's perspectives. This was not the case at Newhall, where each phase involved a different housebuilder-architect team and the landowners were not able to build on the relation they have established with their housebuilders and architects. This was possibly the biggest disadvantage of the approach applied at Newhall as each time the landowners had to go through the same tedious process of convincing the developers to get on board with their vision.

Finally, the history of the considered case studies also demonstrated the unique role that long-term landowners can play in housing developments. They were instrumental in creating a very specific vision for the development (in terms of materials and architectural design), pushing for standards above planning or building regulations requirements (energy and space standards) and empowering architects to create innovative and bespoke designs. However, it should also be pointed out that the landowners' influence was much less evident in case of a smaller landowner, which can be related to lack of resources, less crystallized expressive motives or lack of expertise in the field of architecture, planning or building industry.

6

DISCUSSION

The main aim of this research was to investigate the role of legacy motive in housing developments in the UK, particularly in terms of its impact on housing quality. In order to evaluate the complex relation between legacy motive and housing quality, the existing literature pertaining to those two concepts was analysed (Chapter 2 and 3) and three housing schemes were investigated (Chapter 5). This chapter illustrates how the concepts and ideas presented in the literature review correspond with the data gathered from the case studies and establishes a link between legacy and housing quality by answering the questions put forward in the introduction (see section 1.2):

1. Is leaving a legacy a relevant motivation for stakeholders involved in legacy schemes?
2. Do stakeholders consider housing developments their legacy?
3. To what extent does legacy motive affect decision-making and how does it translate itself into specific aspirations?
4. What are the obstacles to achieving these aspirations and are legacy schemes able to overcome them?
5. Can legacy schemes be universally considered as “better”?

Based on the gathered evidence it is argued that legacy motive can lead to higher housing quality, and this argument can be broken into the following steps:

1. *Leaving a legacy is a universal human motive.*

   Based on various motivation theories presented in Chapter 2 leaving a lasting legacy can be considered a universal human motive.

   However, even if leaving a lasting legacy is a universal motive, this does not necessarily mean that stakeholder will conceptualize housing developments as their legacy.

2. *Landowners consider housing developments their legacy.*

   The case studies illustrated that landowners were the only stakeholder group that considered housing developments their legacy. For this reason, other stakeholders' motives were not analysed any further – since they did not perceive housing developments as their legacy, the legacy motive would not affect their behaviour and decision-making in regard to those schemes. Instead, they would pursue a different type of legacy, e.g. raising children.

   However, even if landowners conceptualize housing schemes as their legacy, that does not necessarily mean that they will decide to pursue it.

3. *The legacy motive affects landowners' decision-making and translates itself into specific aspirations related to housing quality.*

   Chapter 2 illustrated that there are many factors related to one's motives, identity and cognition, which can affect people's decision-making. The analysis of these factors demonstrated how legacy motive translated itself into specific aspirations related to housing quality, and therefore, provided evidence on how to encourage other landowners to invest in specific aspects of housing quality.

   However, even if landowners decide to build a lasting legacy in a form of a housing development, this does not mean their aspirations regarding housing quality will be realised.

4. *Legacy schemes are able to overcome at least some of the obstacles to higher housing quality and achieve some of their aspirations.*

   The case studies demonstrated that legacy schemes were able to overcome at least some of the obstacles to higher housing quality identified in Chapter 3. This chapter will further discuss to what extent the investigated schemes were able to deliver on their aspirations and what was the role of different stakeholders.

   However, even if legacy schemes are able to realise landowners' aspirations, that does not necessarily mean that the achieved development outcomes can be universally considered as "better".

5. *Legacy schemes have the potential to deliver "more".*

   As illustrated in Chapter 3, there are many aspects of housing quality and not all stakeholders share the landowners' idea of what constitutes good housing quality. In this chapter, it will be argued that, while it might not be appropriate to describe legacy schemes as universally "better", they do have the potential to deliver "more".

The above argument is also captured within the conceptual framework for this research (Figure 100). Questions 1, 2 and 3 are captured withing the top part of the framework related to human motivation and decision-making, while questions 4 and 5 are captured within the lower part of the framework pertaining to development process and development outcomes.

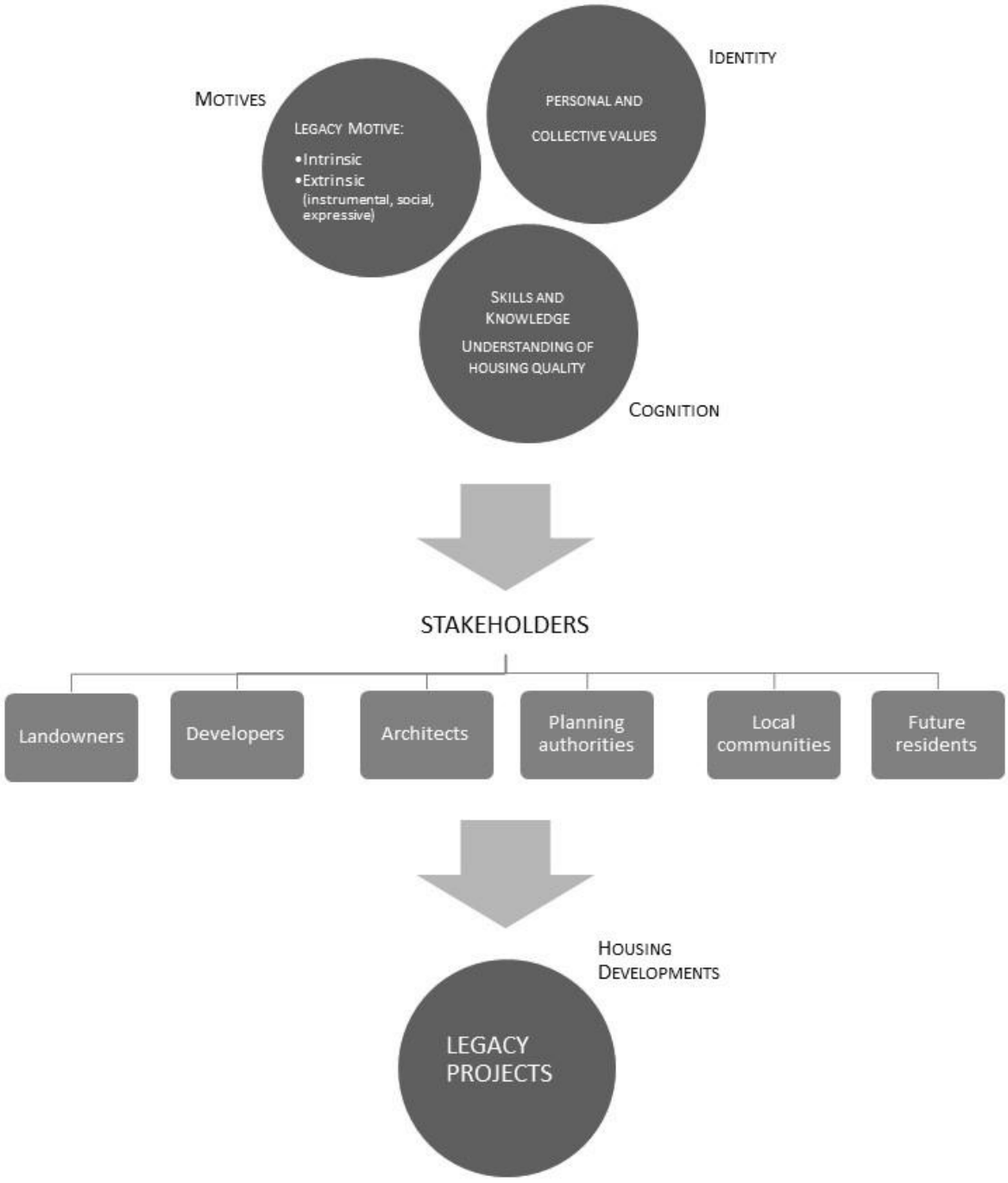


Figure 100: The conceptual framework for this research.

6.1. LEAVING A LEGACY AS A UNIVERSAL HUMAN MOTIVE

The literature review presented in Chapter 2 provided evidence for the prevalence of the concept of legacy in various academic fields, i.e. philosophy, psychology, economy and architecture. It illustrated that legacy is consistently considered a fundamental aspect of human existence among philosophers and psychologists. This was evident in writings of Heidegger and Derrida (Derrida, 1994; Richter, 2015; Heidegger and Hoeller, 2000) as well as various motivation theories.

TMT (Becker, 1997) and Maslow's pyramid of needs (Maslow and Frager, 1987) suggested that behaviour is driven by needs that are universal and innate to human nature, and it was proposed that leaving a lasting legacy is one of those needs. The TMT provided further evidence by advocating that people are universally driven to seek a symbolic immortality (Fox, Tost and Wade-Benzoni, 2010), which potentially could be achieved through legacy building.

Therefore, it was argued that leaving a legacy is indeed a universal human motive and its prevalence is particularly evident in the case of intergenerational decision-making that characterizes land ownership and land management. Interviews conducted as part of this research further supported this argument as interviewed stakeholders were almost universally concerned with what their legacy would be and often spoke about how they were trying to achieve it (Stakeholders, 2018).

6.2. CONCEPTUALIZATION OF HOUSING SCHEMES AS LEGACY

As illustrated in section 2.1, the concept of legacy is extremely broad and could be understood as anything handed down by our predecessors (*Oxford dictionary of English*, 2010) – from money and material possessions, through genetic material we pass on to our kids, knowledge and values we pass on to future generations, to any work or action that we will be remembered by. And while interviewees were universally concerned about their legacy, its conceptualization varied widely between different stakeholders and individuals. When asked about what their legacy was going to be or what they would like it to be, the interviewees tended to focus on things that were most important to them, whether that was financial security of their children, values and beliefs passed on to their children, relationships they had with other people, professional reputation, impact of their work (e.g. best practices, architectural designs) or environmental impact (often talked about in terms of negative legacy) (Stakeholders, 2018).

Interestingly, except for landowners, interviewees rarely conceptualized housing schemes as their legacy, even when they were directly involved in the delivery of those schemes. Most stakeholders either explicitly said that they do not perceive housing schemes as their legacy, or when asked what their legacy would be, immediately went to other topics such as children or environment, without ever mentioning housing developments (Stakeholders, 2018).

Surprisingly, this also applied to architects, which is in contradiction with the most straight-forward definition of architectural legacy – a credit to people who designed and built it (in the past expressed in the tradition of putting foundation stones on buildings' exteriors in order to document the names of an architect and/or a builder). Interviewed architects took enormous pride in their work, but generally saw these housing schemes either as landowners' or housebuilders' legacy. They often explained that they do what their clients want and that between design briefs, planning policy and regulation, they often do not get as much input as they would have liked (Stakeholders, 2018). This is illustrative of a much bigger issue – architects' lack of agency in the development process and the diminished role of the architectural profession in the delivery of mass housing.

Similarly, one of the reasons why landowners considered housing schemes their legacy was the long-term landownership, i.e. they often felt personally responsible for what happened on their land because they were the ones controlling the resource – they had control over the development process and the power to influence the outcome (Stakeholders, 2018). This was well illustrated by the Hastoe Housing Association – they were the only interviewed housebuilder who truly perceived housing schemes as their legacy, but they were very quick to emphasize that this is because they own the land and the houses in perpetuity (there is no Right to Buy on RES schemes), which provides further evidence for the role of long-term landownership in legacy schemes.

That being said, it is important to point out that the schemes investigated in this research

constitute a very specific type of housing developments – typical landowners' legacy schemes as originated by the Prince of Wales and the Poundbury development – and there are examples of housing projects that constitute other stakeholders' legacy (discussed in chapter 2.1).

In chapter 2.1 it was also suggested that due to historical development of land ownership and strong paternalistic attitudes of landowning classes (Robinson, 1988), the conceptualization of housing schemes as landowners' legacy might be relatively common in the UK, which would make legacy schemes widely applicable as a housing delivery model. Based on the work done by such institutions as the Prince's Foundation (2019), CLA (2017) and CPRE (2016), as well as frequent references to legacy schemes in policy papers and industry reports (Ministry of Housing Communities & Local Government, 2020b; Building Better Building Beautiful Commission, 2020; RICS, 2016; Knight Frank, 2020), it is clear that the popularity of legacy schemes is increasing.

However, the evidence regarding landowners' interest in legacy schemes gathered through the selected case studies is inconsistent. While it was evident on the investigated schemes, it is difficult to draw any definite conclusions based on the three housing developments. Also, the interviewed stakeholders had varied opinions on the matter. Some stakeholders, who worked with private landowners and landed estates on every day basis claimed that landowners are almost universally interested in housing delivery; while others were convinced that most landowners would much rather sell the land for a quick profit (Stakeholders, 2018). And while the subject of landowners' interest and motivations might be disputable, the reality is that as of today most landowners end up optioning their land to developers (Building Better Building Beautiful Commission, 2020, p. 81).

6.3. THE ROLE OF LEGACY MOTIVE IN HOUSING DEVELOPMENTS

Even if leaving a lasting legacy is a universal human motive and landowners conceptualize housing developments as their legacy, it does not necessarily mean they will decide to pursue it. Therefore, it is important to consider what is the actual impact of legacy motive on landowners' decision-making and how it translates itself into specific aspirations.

Based on Maslow's theory (1987) and a slightly modified classification of needs suggested by Ilbery (1983) and Gasson (1973), it was argued in chapter 2.2 that legacy motive can work on instrumental, social, expressive and intrinsic level. Maslow's hierarchy of needs would suggest that people whose financial situation is secured are no longer motivated by financial incentives. The investigated case studies provided some evidence for that – even though high land values constitute a considerable incentive for landowners to sell the land to the highest bidder for a quick and easy profits, that did not happen on the considered schemes. For instance, landowners at Newhall admitted that they would have made more money and saved a lot of time and effort, if they had sold the land outright. They also continuously chose prospective housebuilders and architects based on the proposed design and not the land bid.

Land value, though speculative in this case, is also the reason why landowners tend to hold on to agricultural land in the hope that it might get permission for an open market scheme one day, making it very difficult for housing associations to find a viable site for RES schemes (Walker, 2016; Stakeholders, 2018). The landowners can expect around £100,000 - £120,000 per acre if they sell their land for a RES scheme, which could constitute as little as 5% of the residual land value that could be achieved in case of an open market development (though it is significantly higher than an agricultural value – typically around £6,000 to £15,000 per acre (Strutt & Parker and Rural Housing Solutions, 2017; Letwin, 2018)). Despite these numbers, the landowner in Burwell decided to sell his land for a RES schemes, which again illustrates that financial gain was not his main concern.

However, the case studies also illustrated that to a certain extent instrumental motives always affected landowners' decision making (no matter their economic status), and the belief that building to higher standards would eventually increase land value was crucial in encouraging any investment in housing quality (Stakeholders, 2018). This suggests that landowners' decision-making process follows Simon's (1957) *satisficing* concept, according to which people tend to choose a sufficient solution that satisfies most needs simultaneously, rather than an optimal one.

On social level, landowners aspired to maintain positive relations with their family, friends, colleagues or the local community. For example, landowners at Newhall decided to sell the land in bigger plots for Phase II as other members of the family were getting impatient and wanted to speed up the process; while the Duchy sacrificed some of their aspirations in order to maintain good relations with the Vagg family. In Burwell, the landowner sold a strip of land to the neighbouring

residents at a nominal price so that they can introduce screen planting in their rear gardens, which was appreciated by the residents (Stakeholders, 2018). These landowners' concerns about their relationship with the local community again illustrated the importance of long-term landownership – these social motives do not come into play for most stakeholders whose presence in the area is either temporary (e.g., developers) or more anonymous (e.g., planning officers).

Reputation and public image are another important aspect of landowners' social motives, which is one of the reasons why long-term institutional landowners with a higher profile, such as the Duchy of Cornwall or Hastoe Housing Association, might be more concerned with the quality of what is being built. In this respect, it might be also useful to consider the role that industry awards and media exposure play in encouraging higher quality. Most stakeholders believed that industry awards were of little consequence, and it was rare for them to actively pursue that sort of recognition. Some stakeholders were also convinced that a "name and shame" tactic, i.e. giving awards for the worst designs, would bring better results (Stakeholders, 2018).

In fact, the idea that avoiding a negative legacy can be a much more powerful motive than pursuing a positive one (Wade-Benzoni, Sondak and Galinsky, 2010) was popular among all stakeholders. The most evident example is Newhall, where landowners' decisions were heavily influenced by the fact that they were disappointed with the previous scheme built on their land. Other landowners also admitted they were motivated largely by fear and often displayed the "we'd better not screw it up" attitude. Some stakeholders went as far as suggesting that the reason why most landowners get involved in housing schemes is precisely because they believe that without their intervention the quality of the development is going to be appalling, otherwise, they would have left it to the housebuilders and the planners (Stakeholders, 2018).

On expressive level, landowners' motives reflected their personal values and beliefs and were inherently related to their cognitive processes. According to Simon's (1957) concept of bounded rationality, our knowledge and understanding of reality is always limited, which means that even if stakeholders were strongly motivated to leave behind a lasting legacy, their decisions inevitably depended on their understanding of what constitutes "good" housing quality and how to achieve it.

Expressive motives were particularly relevant at Newhall – landowners specifically talked about the satisfaction resulting from influencing the approach to housing developments on other schemes (e.g., street design principles disseminated in the Manual for Streets). As discussed in section 2.1.3, the Duchy's model of delivery is even more publicized and instrumental in disseminating knowledge and good practices (Prince's Foundation for the Built Environment and University College of Estate Management, 2019; Prince's Foundation for Building Community, 2016), which makes legacy schemes another example of strong architectural and planning traditions related to housing delivery in the UK (e.g. industrial villages, garden city movement, low-rise council housing).

The analysis of stakeholders' perspectives on housing quality demonstrated that landowners' priorities can be very individualistic and stem from their personal and collective identity. For instance,

the role of personal identity was reflected in the Moen brothers' affinity for contemporary architecture, which was rooted in their background and upbringing; or in the Duchy's preference for traditional architecture, which was the reflection of the Prince's of Wales personal views on architecture. This supports the arguments put forward in Chapter 2 that the concept of legacy in inherently rooted in the process of identity development, as illustrated by the concept of generativity and the life story model.

It was also argued in Chapter 2 that people's decision making is influenced by their belonging to certain social groups such as a family or an institution, which was often the case for the landowners involved in the considered schemes. Landowners at Newhall and Burwell were influenced by their forefathers' values, while representatives of the Duchy and Hastoe Housing Association strongly identified themselves with the collective values of their institutions (e.g., traditional design and new urbanist approach to housing developments for the Duchy; affordability, energy efficiency and community engagement for Hastoe). Interestingly, even though landowners were influenced by their forefathers' values, they did not always follow similar bequeathing patterns. For instance, landowners at Newhall believed their grandfather would not like seeing the land developed, but this did not prevent them from building the estate, just made them more concerned with the quality of what was being built (Stakeholders, 2018). This provides evidence for the idea of agency involved in legacy building put forward by Heidegger and Derrida, i.e. the responsibility to choose what to accept as an inheritance and what to refuse (Derrida, 1994; Richter, 2015). It also suggests that retrospective bequests (Arrondel, Masson and Pestieau, 1997, p. 114) might not be particularly common among private landowners in the UK.

The salience of landowners' expressive motives was also related to the size of the landowner as larger landowners seemed much more interested and knowledgeable about the design process and best practices. Consequently, larger developments reflected landowners' personal preferences regarding architectural and urban design as well as their general attitudes towards life and socio-economic issues, particularly in respect to overall appearance and architectural style, character and sense of place, and creating thriving communities. Smaller landowners seemed to focus on more pragmatic aspects of housing developments related to the needs of local community (e.g., affordability, property size and layout, property type, outdoor space), rather than personal values and ideals. One aspect that seemed to be a universal concern for all landowners, and indeed all stakeholders, was build quality (Stakeholders, 2018).

The investigated case studies also confirmed the relevance of intrinsic motivation in landowners' decision-making, which reflects Gasson's and Ilbery findings on farmers' decision-making (Gasson, 1973; Ilbery, 1983). The most common intrinsic motives were a sense of duty towards the local community or family as well as emotional attachment to the land and a way of life. How these motives manifested themselves depended on the size of the landowner, suggesting that smaller landowners with farming background are more likely to be nostalgic about a rural way of life

and have protectionist views on countryside; while larger landowners (and landed estates in particular) might aspire to evoke the ideal of countryside living. It was also proposed in chapter 2.2 that landowners' protectionist views on countryside could lead to anti-development attitudes, however, that was certainly not the case at Tadley Acres, Newhall nor Burwell.

Some studies (Deci and Ryan, 2000) also suggest that intrinsic motives, though generally viewed as stronger, can be undermined by external rewards such as financial incentives, professional recognition or social relationships. While there is a good argument for that in case of other stakeholders, it does not seem to be true for landowners, possibly due to landowners' unique and personal attachment to land. Furthermore, Ryan and Deci (Ryan and Deci, 2000b; Ryan and Deci, 2000a) provided examples of self-determined extrinsic motivation (as opposed to externally imposed), which blur the distinction between intrinsic and extrinsic motives. For instance, it is hard to tell whether the Duchy insisted on providing affordable housing (even when this could potentially harm their relationship with the housebuilder and the Vagg family) because of their sense of duty or because of the concerns about their reputation, or both.

The three case studies also produced some evidence regarding *moral licensing*, i.e., a belief that ethical and moral conduct in the past gives you a *license* to act immorally (Monin and Miller, 2001; Sachdeva, Iliev and Medin, 2009). For instance, landowners at Newhall felt that because of their contributions to housing quality, it was justified to reduce the affordable housing provisions (though it is a stretch to consider this behaviour immoral). On the other hand, the Duchy's determination to provide affordable housing even when that was not required by the planning authority confirms that extreme power imbalance between groups can lead to a higher concern for those that are powerless and vulnerable, which was previously suggested by other studies (Chen, Lee-Chai and Bargh, 2001; Greenberg, 1978; Handgraaf *et al.*, 2008).

Table 13 summarises landowners' motives described above and various factors that they are affected by. It also illustrates how legacy motive translated itself into specific aspirations for the housing schemes and what type of legacy these aspirations constitute.

Based on Hunter and Rowles' (2005) classification, there are three distinct types of legacy – biological legacy, material legacy (including symbolic) and legacy of values – all of which, except for biological legacy, manifested themselves architecturally in the three schemes investigated as part of this research (see Table 13). Instrumental, social and intrinsic motives had led to aspirations related to the material legacy of the considered schemes – the physical urban fabric, together with the financial value of the properties. The fact that landowners' name is associated with a certain scheme constituted an important aspect of their legacy – a public manifestation of one's work or impact on the world (Hunter and Rowles, 2005). This form of legacy was more evident in case of larger landowners with higher profile such as the Duchy of Cornwall. The three housing schemes could also be considered a legacy of values as they are a testament to the landowners' values and beliefs, and therefore, satisfy landowners' expressive and intrinsic motives.

Table 13: Legacy motive and how it translated itself into specific aspirations (TA – Tadley Acres, N – Newhall, B – Burwell)

Legacy motive	Factors affecting decision-making	Type of legacy	Aspirations
Intrinsic level	Sense of duty (identity, moral licensing, power imbalance) Attachment to the land and a way of life (land ownership)	Material legacy and legacy of values	Affordable housing (TA) Protecting countryside (B) Reviving countryside living ideal (landed estates)
Expressive level	Values and beliefs (personal and collective identity) Understanding of what constitutes good housing quality and how to achieve it (cognitive processes)	Legacy of values	Innovative contemporary design (N) Traditional design (TA) Character, sense of place (TA / N) Promoting Prince Charles's views on architecture (TA) More freedom for architectural profession (N) Energy efficiency (B) Thriving community – local facilities, infrastructure (TA / N) Build quality (TA / N / B)
Social level	Relation with a local community (land ownership), family, friends Social group dynamics (identity) Reputation and public image (negative legacy)	Material and symbolic legacy	Appearance / kerb appeal (TA) Affordable housing (TA) Community engagement (B) Sensitive design – view of the church tower, screen planting (B)
Instrumental level	Financial incentives: funding, land value	Material legacy	Commercial success (TA / N) Long-term value (TA, N)

Following in other academics' footsteps (Neher, 1991), this research proposed that extrinsic motives work in a roughly hierarchical manner similarly to Maslow's pyramid of needs. Based on the evidence gathered from the case studies, some sort of hierarchical order does exist, and most private landowners would be preoccupied with their financial security. Similarly, larger landowners (in a more secure financial situation) might be more concerned with satisfying their social and expressive needs, e.g., landowners at Newhall and Tadley Acres were more involved in the design process.

However, as discussed above there was a significant overlap between landowners' instrumental, social and expressive motives, which tended to act alongside each other and accumulate over time, resembling Simon's (1957) *satisficing* concept. In the context of the considered schemes, this would mean that landowners made the specific decisions because they believed the outcome would satisfy their social, expressive or intrinsic needs, while at the same time still being financially profitable to them. There are many examples illustrating that legacy motive can be undermined by landowners' other needs, e.g., the landowners at all three estates compromised their aspirations at times in order to maintain good relations with family (Newhall) and other stakeholders (housebuilders and the Vagg

family at Tadley Acres and Parish Council in Burwell).

Therefore, in order to encourage landowners' involvement in housing developments, it is preferable to appeal to all levels of landowners' motives, for instance through financial incentives, strengthening ties with local communities, emphasizing the negative implications of low quality housing or ensuring that landowners have enough influence over the development process to express their personal values and beliefs.

The question of influence over the development process is particularly relevant as the evidence gathered in this research supports the concept of perceived behavioural control (Ajzen, 1991), i.e. lack of control over the outcome can weaken landowners' motivation. This is illustrated by the fact that, despite owning only a small piece of the site, the Duchy was the driving force behind Tadley Acres development. Lack of skills and knowledge can further contribute to this issue as it has a direct impact on landowners' confidence in their ability to realise what they set out to do (e.g., the Vagg family wanted to work with the Duchy mainly due to their knowledge and experience in housing delivery).

These examples illustrate that landowners' decision-making process inevitably depends on their cognitive processes. Interestingly, some stakeholders did not believe that lack of skills or knowledge is a problem, arguing that landowners can successfully rely on other people's expertise and there is plenty of resources available today (e.g., the work done by such organisation as the Prince's Foundation or CLA). This might be an example of "illusion of explanatory depth" (Sloman and Fernbach, 2017), particularly that the history of the considered schemes clearly showed the opposite. When the Moen family first got involved in a housing development at Church Langley, they got tied up in an unfavourable deal with a housebuilder and lost control over the scheme. When they got a second chance at Newhall, they were able to do better because of the knowledge and expertise they gained at Church Langley (Stakeholders, 2018). The landowners also readily admitted that they were still learning from each phase of the Newhall development (i.e., trying different legal arrangement with the housebuilders and refining their delivery model). Also, one of the reasons why the landowner in Burwell took more of a backseat was lack of experience and knowledge pertaining to housing development process (as well as his limited interest in architecture and urban design).

Similarly to other studies and theories (Hunter and Rowles, 2005; Marcoux, 2001; Hunter, 2007; Linquist, 2010; Erikson, 1980; Pyszczynski, Solomon and Greenberg, 2015; McAdams, 1996; Kotre, 1995), this research also provided evidence that the concepts of identity and legacy are inherently related. Personal and collective identity had a direct impact on landowners' social, expressive and intrinsic motives and strongly influenced what kind of legacy they choose to pursue.

Table 13 demonstrates that the relation between motives, identity and cognition is a complex one and they all have a significant impact on legacy schemes. The same motive can lead to different aspirations depending on one's identity or cognitive processes, but also different motives can lead to the same aspiration (which again demonstrates that it is preferable to appeal to as many motivation

levels as possible simultaneously). This is to say that even if landowners are strongly motivated to leave behind a lasting legacy, their decisions will inevitably depend on many other factors such as funding, their status and public image, their personal and professional relationships, their personal and collective values, their understanding of what constitutes good housing and how to achieve it, or their sense of duty.

Finally, landowners' decisions should be considered aspirational – the development process is equally complicated and there are many obstacles that could prevent these aspirations from being realised.

6.4. ASPIRATIONS VS. DEVELOPMENT OUTCOMES

Even if landowner' actions are driven by the legacy motive, that does not necessarily mean they will be able to achieve the desired development outcomes. This section looks into how successful the considered schemes were at realising the aspirations described above.

One of the main aspirations for the Moen brothers was related to architectural design – they set out to deliver a highly innovative scheme in a very contemporary style. While contemporary style has always been a part of the design brief for Newhall, landowners' expressive motives went beyond the architectural style itself – it was their belief that architectural profession has a crucial role to play in housing delivery that had driven their approach to the whole development. And while their delivery model created a number of difficulties, it is almost impossible to argue with the fact that they managed to accomplish the level of design rarely seen on new-build estates (which is illustrated by many architectural awards won by the scheme). Their more bespoke approach resulted in innovative high-density typologies with larger space standards, higher ceilings, increased adaptability and flexibility, and relatively few privacy and overlooking issues.

In Burwell, the design, which was driven by the housing association rather than the landowner, focused mostly on energy efficiency (which was considered an important element of affordability) and sensitivity to the rural context (lower density, large gardens, considerations for the view of the church tower). This was directly related to stakeholders' deep considerations for the local community stemming either from professional ethos (for the housing association) or personal connections (for the landowner). As a result, the houses were economic to run and the scheme as a whole was characterized by lower density, sensitive landscaping (considerate to the neighbouring plots), typology inspired by rural architecture and thoughtful layout (providing attractive views of the countryside and church tower).

Tadley Acres adopted the Duchy's standard approach to architectural design rooted in new urbanist (or even more specifically – TND) principles, which as explained in section 2.1.3 is common for many legacy schemes. Standard house types were used across the estate, but the facades were elevated through careful choice of materials and architectural detailing in order to create a clear street hierarchy and emulate the aesthetic of historic towns and cities – a common practice among new urban schemes (Duany and Plater-Zyberk, 2008). However, all the effort that went into architectural design at Tadley Acres was arguably lost because of the leaching render – it significantly affects the visual attractiveness and kerb appeal of the estate, and in some areas where the render is particularly damaged it is almost impossible to look past it. This shows how important build quality is and how sometimes things go wrong even despite the best intentions. All three schemes struggled to deliver on that aspect of housing quality, which was one of the biggest sources of disappointment among the residents (Burwell residents, 2017; Newhall residents, 2018; Tadley Acres residents, 2018; Socha, 2018).

The investigated schemes also aspired to create a sense of place informed by the local vernacular, historical typologies, local materials and rural context; and as a result, similarities with some regionalist approaches can be identified in all three cases (Pavlides, 2007). The approach at Newhall seemed to be a combination of ideological regionalism and experiential regionalism in a sense that it selectively incorporates some elements of local vernacular architecture as well as considerations for well-being, use of natural light, visual variety and social interaction (Pavlides, 2007). Approaches at Tadley Acres and Burwell seemed to be slightly more superficial and focused on reproducing vernacular aesthetic. To an extent, those approaches could be considered as examples of folkloric regionalism as they reproduced patterns that persisted in local vernacular architecture (Pavlides, 2007, p. 159). In fact, a common argument made by stakeholders working with the Duchy is that they imitate vernacular architecture because it provides practical and functional solutions, i.e. vernacular buildings have thatched roofs because they are more practical than flat roofs. In the words of Demetri Porphyrios, one of the architects at Poundbury, *"[t]his is an architecture that derives from the constructional logic of its natural materials,"* which allows to address complex problems *"with an ingenious simplicity"* (*Architecture in Arcadia*, 1993, p. 48). However, architecture at Tadley Acres seemed to be less rooted in the local vernacular and more in the universal appreciation for the traditional style, i.e. some of the neo-classical detailing feels rather out of place in Shepton Mallet. This approach emulates Krier's application of vernacular aesthetic, which was much more universal than regional (see section 2.1.3). Tadley Acres also overlooked folklorists' main focus – the internal layout – and instead focused on façade design (Pavlides, 2007).

This raises the question of the landowners' superficial view of housing quality and overemphasis on the visual appearance of the development (Aslet, 2017), which is a common criticisms of TND schemes (see section 2.1.3 and 3.2.2). According to Pallasmaa (2007), a sense of place cannot be achieved by simply adding on the surface of design, and without continuity of an authentic tradition, the use of historical motifs and regional materials leads to little more than "sentimental provincialism". Therefore, Pallasmaa emphasized the importance of an autonomous process, over a deliberate fabrication, in creating a sense of place and recognized the multitude of often contradictory influences that make good architecture:

[Unlike sentimental provincialism] vital products of art in our specialized culture are always born from an open confrontation between the universal and the unique, the individual and the collective, the traditional and the revolutionary (Pallasmaa, 2007, p. 133).

Following this logic, Newhall can be considered more successful in creating a unique, yet context-specific character than the other two schemes – it was characterized by a unique development process with different architect-housebuilder teams bidding for each plot, which itself largely affected the appearance of the development (*autonomous process*); a strikingly contemporary and innovative architectural design inspired by local vernacular, Frederick Gibberd and Scandinavian influences (*unique, individual* and *revolutionary*); as well as underlying new urbanist principles

widely accepted by landowners and the industry as a whole (*collective, universal* and *traditional*). This was reflected in residents' opinions as well – Tadley Acres, though overall judged positively, was considered more monotonous, less sensitive to local context and less visually attractive than Newhall. The design in Burwell, which was visually most alike to the standard volume housing, was judged the least favourably.

Newhall and Tadley Acres also struggled to achieve a certain level of cohesion across the estate as a whole, despite investing significant resources in producing thoughtful masterplans, design codes and colour palettes. At Newhall, this can be partly attributed to the sheer number of stakeholders as well as the level of creative freedom given to designers. Similarly, Tadley Acres failed to deliver a cohesive design across the estate partly due to disagreements between stakeholders in the early stages of the development and changes in the design team, but also as a result of a protracted planning process and changing planning policy, which had a significant detrimental effect on parking provisions and community facilities, i.e. the school.

The community aspect of the developments was certainly one of the aspirations that eluded the considered schemes, which were generally characterized by a lack of social and civic infrastructure (though with Phase 2 under way, local facilities were starting to take off at Newhall). This was despite significant efforts on the part of stakeholders, e.g. promoting a school and local businesses, starting up residents' associations and ensuring housing mix corresponds with the local need. Insufficient public transport and local facilities were a significant disadvantage for residents at Newhall (Tadley Acres and Burwell benefit from proximity to the town and village centre, which at least partly makes up for the lack of infrastructure). There was an employment element delivered at both Tadley Acres and Newhall in a form of live/work units (supported by a fast broadband infrastructure) but to a varying degree of success. However, it should also be pointed out that, against a popular opinion shared by most stakeholders, residents did not consider local facilities or employment a particularly important aspect when choosing a property (Socha, 2018).

However, Tadley Acres and Burwell were able to realise their aspirations related to affordability – Burwell delivered much needed energy-efficient affordable housing, and Tadley Acres delivered 60 additional affordable units. At Newhall, affordability was not one of the Moen brothers' priorities – they negotiated the number of affordable housing down in order to compensate for the added build cost and pursue their architectural aspirations without endangering viability of the scheme.

This brings us to an important measure of open market schemes' success, which is commercial value. Based on the house price analysis of Tadley Acres and Newhall, the commercial success of both schemes is rather questionable. The available data suggests that the additional investment in a higher-standard product might have failed to deliver high enough premiums to offset the additional build costs. There is a number of possible reasons for this including the location of the schemes in relatively low-value areas or the 2008 recession, which due to "self-fulfilling nature of mortgage valuations" (discussed in section 3.1.1) might be very challenging to recover from (Knight Frank,

2020).

In section 3.1.1 it was also illustrated that due to viability appraisals and mortgage valuations, house prices are mostly driven by market comparables, thus the number of bedrooms. Despite that, landowners at Newhall were able to resist the pressure to squeeze in as many bedrooms as possible and applied more generous space standards compared to Tadley Acres. Interestingly, this approach of prioritizing square footage over number of bedrooms might have been more financially beneficial (Newhall generally achieved higher premiums). However, it should be pointed out that Tadley Acres model of using standard house types and redesigning the facades was definitely much more cost-effective than the bespoke approach at Newhall so the actual profitability of both schemes is debatable.

Finally, a crucial aspect to consider is the long-term legacy of the considered schemes both in terms of physical urban fabric as well as commercial value. Protecting the vision and quality of the development after its completion was an important concern for landowners, which was reflected in restrictive covenants and efforts to establish residents' associations. Restrictive covenants, which residents sign up to when buying a house, were intended to ensure that that the quality of the development is preserved over time (by imposing parking controls and preventing residents from making unwanted changes to the exterior of their buildings, e.g. installing satellite dishes, making changes to the landscaping, putting in PCV windows). Also, residents' associations were hoped to instil a sense of civic pride and ownership over a development and ensure that estates are properly managed (Stakeholders, 2018). However, there was little interest in residents' association and enforcing restrictive covenants had been a rather tedious and time-consuming task for the landowners (Stakeholders, 2018). It is also questionable how effective those measures were, particularly that both Newhall and Tadley Acres lost in value over time compared to the local market.

Financial value of properties is a significant concern not only for landowners, but homebuyers as well, for many of whom buying a house is the biggest investment of their lives and the promise of a long-term value of a development is a powerful advantage (RICS, 2016). However, this aspiration was not realised, and the long-term value of the properties is probably one of the most problematic aspects of the considered schemes in terms of their legacy. According to the resale values more than 70% of homeowners at Tadley Acres, and almost 60% at Newhall, would have made a better investment buying a property somewhere else in town (see Appendix E). This can be partly attributed to a depreciating value of new builds (similarly to a new car's value), however, there is evidence illustrating that other legacy schemes were able to achieve comparable premiums on both new-build and resale values (Knight Frank, 2020). Another explanation for low resale values at Tadley Acres could be the leaching render, which had a massive detrimental effect on the overall image of the development and very likely affected more recent sales.

Table 14 summarises which landowners' aspirations were realised on the considered schemes. In doing so, it demonstrates the relation between development outcomes and legacy motive.

Table 14: Summary of legacy motive and how it translated itself into specific development outcomes (TA – Tadley Acres, N – Newhall, B – Burwell).

Legacy motive	Factors affecting decision-making	Type of legacy	Aspirations	Realised?
Intrinsic level	Sense of duty (identity, moral licensing, power imbalance) Attachment to the land and a way of life (land ownership)	Material legacy and legacy of values	Affordable housing (TA) Protecting countryside (B) Reviving countryside living ideal (landed estates)	☑ ☑ N/A
Expressive level	Values and beliefs (personal and collective identity) Understanding of what constitutes good housing quality and how to achieve it (cognitive processes)	Legacy of values	Innovative contemporary design (N) Traditional design (TA) Character, sense of place (TA / N) Promoting Prince Charles's views on architecture (TA) More freedom for architectural profession (N) Energy efficiency (B) Thriving community – local facilities, infrastructure (TA / N) Build quality (TA / N / B)	☑* ☑* ☒ / ☑ ☑ ☑ ☑ ☒ / ☒ ☒ / ☒ / ☒
Social level	Relation with a local community (land ownership), family, friends Social group dynamics (identity) Reputation and public image (negative legacy)	Material and symbolic legacy	Appearance / kerb appeal (TA) Affordable housing (TA) Community engagement (B) Sensitive design – view of the church tower, screen planting (B)	☒ ☑ ☑ ☑
Instrumental level	Financial incentives: funding, land value	Material legacy	Commercial success (TA / N) Long-term value (TA, N)	☒ / ☒ ☒

* The cohesiveness of design is questionable on both estates, but overall, they were considered successful in realising their design aspirations.

The role of landowners and other stakeholders

The investigated case studies illustrated that even though landowners were the only ones that explicitly conceptualized housing schemes as their legacy, collaboration between all stakeholders was actually key in delivering "higher" housing quality on the investigated housing schemes. The closer the collaboration between stakeholders, the more likely it was that the vision for the development would be realised. Therefore, it is important to consider the role of various stakeholders in those schemes, and ask whether landowners' involvement was necessary to achieve the desired outcomes and what exactly they brought to the table.

One striking issue about the development history of the considered schemes is the relatively week position of architects and planning authorities – two groups of stakeholders that were presumed to play the role of mediators between landowners / developers and future users (see Figure 5 on page

52). In reality, they had very little agency in the development process – architects were following their clients' requests, while planning authorities either reinforced landowners' vision without questioning their objectives or impeded the development altogether.

Architects usually emphasized the professional relation between them and developers and the fact that, as their clients, developers dictated the terms. A notable exception here is Newhall, where landowners believed that architectural profession has a crucial role to play in housing delivery and gave architects much more creative freedom.

Planning authorities contributed to achieving landowners' aspirations at Newhall by helping to promote the scheme and by reducing the time for approving planning applications. They were also able to resist the pressures of the government's delivery targets due to their commitment to the long-term vision for the development championed by the landowners. This was particularly important as delivery targets place excessive focus on the number of units without any reference to the housing quality, and therefore, encourage reverting to the standardised volume housebuilders' approach (Building Better Building Beautiful Commission, 2020, pp. 118-122; Stakeholders, 2018). However, planning officers in Harlow have contributed very little on top of what landowners wanted to achieve, and if fact, lowered their own statutory expectations regarding affordable housing to offset the high build costs of the development.

At Tadley Acres and Burwell, the overall impact of the planning authorities was rather negative. In Burwell, the Parish Council significantly delayed Phase 4 of the development, which illustrates that a good relation with a planning authority and local community is absolutely crucial for RES schemes – something that Hastoe was very well aware of and emphasized every step of the way. However, Hastoe's determination to protect that relation sometimes led to a less suitable solution being chosen with a detrimental effect to the scheme, e.g. compromising on the colour of the rooftile, which turn out to *"stick out like a sore thumb"* (Stakeholders, 2018). At Tadley Acres, planning authorities' main impact on the scheme was that due to the changing policy and local politics the school had not been built.

Dealing with Highway Authorities was particularly challenging as they were rarely accepting of any non-standard materials or innovative designs. For instance, getting Highway Authorities to move away from cul-de-sac layout towards a more pedestrian-friendly road design was a massive struggle, even though the same principles are now incorporated in the official planning guidance, namely the Manual for Streets (Department for Transport, 2007). Consequently, landowners considered the planning process as one of the main deterrents. In fact, landowners at Newhall admitted that the whole process was exhausting, which contributed to their decision to limit their involvement in Phase II (Stakeholders, 2018). The protracted timescale and complexity of the planning system was a problem for planning authorities as well, who were often under-staffed and under-trained, and the staff rotation among planning officers only further contributed to these issues.

Furthermore, many stakeholders involved in the investigated schemes agreed that planning

policy and building regulations can be too prescriptive and undermine landowners', architects', housebuilders' as well as planning officers' aspirations (Stakeholders, 2018). This confirms the arguments put forward in Chapter 3 that excessive amount of regulation drives the quality down and encourages reverting to a standardized product, which results in a less diverse housing stock (Bernheimer, 2014). This leads to a vicious circle:

- Quality of housing delivered by volume housebuilders is lacking;
- Thus, the planning policy gets more complicated in order to regulate what is being built;
- Thus, the planning process gets more expensive and resource-exhaustive;
- Thus, it becomes increasingly difficult for anyone except volume housebuilders, who work at scale, to fund a protracted planning process.

As a result, the system that was meant to promote higher housing quality can sometimes be the main obstacle, which constitutes the most significant criticism of the planning system (Angle and Malam, 1998; RIBA, 2009; CABE, 2010; Watson *et al.*, 2016). Quality standards and indicators were seen as a bureaucratic box-ticking exercise and particularly irrelevant on legacy schemes, where higher standards were already set by the stakeholders (Stakeholders, 2018).

Stakeholders had mixed feelings about other forms of quality control such as design reviews and public participation. Architects believed that design reviews too often do not offer constructive criticism, either because the panel did not understand the constraints of the project or because the members of the panel had a negative and egocentric attitude from the start (Stakeholders, 2018). That being said, opposite examples were also quoted, where design reviews were a thoroughly positive experience and, with the right people on the panel, produced valuable and insightful feedback.

Some stakeholders also believed that public participation has little impact on the actual design and is usually a PR exercise intended to facilitate obtaining a planning permission (Stakeholders, 2018). The most common criticisms were that public opposition to a development usually has very little merit and constitutes nothing more than pure NIMBYism which only slows down the development process (Stakeholders, 2018). This was believed to be particularly true on larger strategic sites and greenfield developments, where there is no community living there and people would often oppose the development on a principle. On the other hand, some stakeholders believed that proper community engagement is essential, and even with all the research that goes into pattern books and local architecture, it always adds value (Stakeholders, 2018).

Lack of effective quality control measures is particularly problematic in the face of current housing shortage and low land supply, which makes developers compete over the site rather than the product, and consequently, lower the design and construction standards (as discussed in section 3.1.1). The stakeholders interviewed as part of this research generally agreed that since saleability is commonly used by volume housebuilders as a measure of a scheme's success, in a seller's market caused by low housing supply, they have no incentive to deliver a better product. It was believed that the visual aspect of properties was being given particularly little consideration following the logic:

"since houses sell, people must like them" (Stakeholders, 2018).

However, the investigated schemes illustrated that landowners are in a uniquely strong position to turn this issue around as they control the main resource – the land. Therefore, by refusing to sell their land, they are able to set standards well above statutory regulations. This is far more complicated for planning authorities, which is reflected in frequently changing policy on whether design alone should be the reason to refuse a planning permission for a development that otherwise fulfils expectations set out in statutory plans (see section 3.1.2). In other words, unlike the planning system, which has to be reasonable, *"landowners have the potential to be demanding"* in regard to what is being built on their land (Stakeholders, 2018). This has already been recognized at Poundbury, which pushed *"for design features which are better than normal practice and minimum Building Regulation requirements"* (*Architecture in Arcadia*, 1993, p. 43).

Furthermore, landowners can benefit from the raising land values on popular schemes. As argued in section 3.1.1, the fundamental obstacle to any additional investments in housing quality is that current system does not recognise the added value of good design – house prices are driven by mortgage valuations and viability studies (thus number of bedrooms), and the only way to increase profits is to lower the build costs. The idea of building something better and selling it for more is simply not part of that equation. However, on larger schemes, landowners can benefit from slowly bringing up the house prices thanks to homebuyers who buy without a mortgage. As their decisions are not encumbered by mortgage valuations, they might be willing to pay extra for the added quality and if a scheme attracts enough of such buyers, it starts to demonstrate an added value within that development. Valuation officers can then take it into account in their estimates, which drives up the house prices even for those buying with a mortgage. With larger schemes, it becomes clear at some point that the values on that site command a premium over the local market and the development *"becomes a recognised premium address"* (Stakeholders, 2018). This has a direct impact on the land value – since land value is the residual, if properties start selling at a premium and costs remain the same, then land value increases. This way landowners can recoup their investment in later phases by selling their land at a higher price.

This idea that higher housing quality (e.g., high ceilings, energy efficiency, storage space, dedicated study, adaptability or architectural detailing) drives up land values, which landowners can benefit from over the course of a project, is very much part of the legacy schemes' ethos and a significant motivation for landowners. And even though Tadley Acres and Newhall failed to demonstrate that, there is compelling evidence from other schemes suggesting that it only takes a few years to establish a premium at around 10-20% (Stakeholders, 2018; Knight Frank, 2020).

However, the argument that investing in higher housing quality leads to higher profits rarely speaks to housebuilders, who have different investment time horizons – they usually complete their phases within a few years and move on to the next scheme (Knight Frank, 2020). Consequently, landowners are much more likely to invest in housing quality than developers, particularly in the

early stages of a project (e.g., initial investments in design codes, pattern books, masterplan design, infrastructure, local facilities and landscaping). This is also the reason why, without landowners' involvement, the aspirations listed in Table 14 would be most likely value-engineered out of the project and development would revert to standard house types, low quality materials and conventional methods and designs.

This is particularly problematic that, based on the investigated schemes, housebuilders have significant influence over development outcomes, and consequently, the issue of maintaining control over the development process was one of the main concerns for the landowners (Stakeholders, 2018). It was suggested in Chapter 3 that there are two main approaches to achieve this – securing a favourable land deal with a developer and including design codes in the legal agreements. However, the investigated schemes demonstrated that the effectiveness and applicability of these quality control measures are somewhat questionable.

Design codes are often quoted to provide developers with an alternative *"path of least resistance"* (RICS, 2016; Stakeholders, 2018). In Chapter 3, it was also argued that they could provide an opportunity for planning authorities and architects to play a more active part in housing delivery, which based on the gathered evidence seems crucial. Unfortunately, the investigated schemes suggest that, even with the help of the National Model Design Code (Hopkirk, 2020; Ministry of Housing Communities & Local Government, 2020b), planning authorities might lack the necessary resources to engage in preparing design codes. RIBA (2009) suggested that perhaps developers could pick up this task in return for a simplified and quicker process of obtaining a planning permission, but this research proposes that landowners might be better suited since they have a long-term interest in the local area.

Design codes were particularly popular among landowners, who believed they set the tone for the development and, together with restrictive covenants, helped to maintain landowners' vision over time. However, evidence gathered in this research as well as other studies (Building Better Building Beautiful Commission, 2020) suggests that their effectiveness can be limited – even with a favourable land deal, design codes written into legal agreements, landowner's supervision and support from planning authority, they proved to be difficult to enforce and getting housebuilders to do what they had signed up for was often a struggle. Establishing a strong landowner-housebuilder partnership turned out to be a much more successful approach to quality control and required increasingly less oversight from the landowners.

A favourable land deal with a developer was more effective than design codes, however, securing it proved to be a challenge. The landowners at Newhall made different arrangements in almost every phase, which makes the scheme a perfect showcase of various approaches: from Option Agreement, through Joint Venture, to Agreement for Lease and developing the land themselves. Option agreement, which was also used on the landowners' previous development – Church Langley, resulted in landowners losing control over the development and being disappointed with the end

result. Joint Venture, proved difficult to implement since finding a willing developer for a landowner-led scheme was a challenge. In Phase II, landowners tried a new approach – Agreement for Lease – by which they leased the land to a developer and transferred the freehold directly to the ultimate occupier once each house is sold. This was a rather innovative approach and landowners were very enthusiastic about it, but it still needs further research and scrutiny (Phase II was not investigated as part of this research). Finally, developing the land themselves turned out to be exhaustive for the landowners and financially difficult. Jon Moen also emphasized that for most landowners this is not a viable possibility due to lack of knowledge and expertise, and they were only able to do that because of the extensive experience they gained in the previous phases.

At Tadley Acres, the landowners worked with the same housebuilder throughout the entire development and for the most part, followed the "consortium of builders" approach, which is a preferred model of the Duchy of Cornwall (Stakeholders, 2018). Landowners were able to build on the established relationship with the housebuilder, and despite a shaky start, things were going smoother from phase to phase. With time, this approach made the design standards and principles much more powerful as they were no longer just legal covenants imposed on a developer, but a shared vision for a common project. It also aligned landowners' and developers' investment time horizons, which allowed housebuilders to take a more long-term view. These benefits were largely lost at Newhall, where each phase involved a different housebuilder-architect team and the landowners had to start building these relations from scratch every time. This slowed down the development process and made it difficult to enforce design standards.

Also, landowners and developers at Tadley Acres learned from each other and adjusted their approach, which enabled them to lower the build costs and further increase the profits. This illustrates another advantage of a close partnership between all stakeholders – the possibility to fully benefit from the knowledge and expertise of everyone involved. In fact, many of the exceptional qualities delivered by the investigated schemes were achieved thanks to the effective collaboration. For instance, house types and architectural detailing at Tadley Acres were developed through careful negotiations between landowners' and developer's architects, while a strong partnership with a planning authority at Newhall sped up the planning process and allowed the landowner to deliver bespoke designs. Furthermore, stakeholders almost universally agreed that the whole process constituted *"a massive learning curve"* for them and they gained valuable knowledge through the experience (Stakeholders, 2018).

This is illustrated by the fact that every group of stakeholders got things wrong at times – whether it was a landowner or a Parish Council member insisting on the use of a particular material that simply did not work, a developer refusing to implement design codes, an architect not anticipating some of the build issues, planning authorities changing their mind about local provisions or policy makers introducing short-sighted policies – there was no one who had all the answers. Also, stakeholders were not shy to admit their own mistakes as well as the shortcomings of their schemes,

and believed that they would be able to do better next time (Stakeholders, 2018). This suggests that legacy models of housing delivery can be improved upon and have the potential to deliver more than what the investigated schemes would suggest.[58]

However, evidence gathered in this research suggests that there is a significant challenge that might prevent many legacy schemes from ever being built; and that is lack of funding, particularly in the early stages of the development. For most legacy schemes, there are significant upfront costs related to the planning process itself, i.e., designing the masterplan, producing design codes and pattern books, promoting the scheme, public consultation and community engagement. These upfront costs cause cashflow issues and often force landowners to rely on bank loans, which together with the unpredictability of a housing market, can cause significant financial difficulties (as it did at Newhall). Lack of funding is particularly problematic for smaller and medium-size landowners, e.g. the Moen brothers were only able to finance the planning stage thanks to the profits from their previous development at Church Langley; while the Vagg family relied on the financial support of the Duchy of Cornwall, who had the necessary resources such as time and manpower. Therefore, the complexities of the development process seem to be less discouraging for institutional landowners, who can rely on the expertise of hired professionals and delegate some of the responsibilities to their design and development teams. They do not have to sacrifice as much of their personal time as smaller landowners would (Stakeholders, 2018).

Lack of funding is also a significant issue for RES schemes and the reason why they are now being cross-subsidizing with open market properties. In addition, stakeholders admitted that in order to ensure viability of RES schemes, property size is kept as close to the regulatory minimum as possible, which clearly was a problem for the residents (Socha, 2018; Burwell residents, 2017). Also, the financial benefits of getting involved in a RES scheme are relatively modest compared to open market schemes – either the one-time income from selling the land or the modest long-term low-risk income from the land lease (CPRE suggests that a lease term of at least 60 years would be required for a satisfactory return (Walker, 2016)). Consequently, finding suitable land for RES is often a challenge as landowners are reluctant to put forward their site for affordable housing due to the "hope value" of land, i.e., they hold on to the land hoping that their site might get allocation for open market housing in 5 years' time, and therefore, be worth significantly more money. Therefore, it might be necessary to provide alternative financial incentives in order to encourage landowners' involvement, possibly an income tax relief or a rollover provisions on capital gains tax (Walker, 2016).

The role of legacy schemes in the delivery of affordable housing is particularly relevant in the face of the extremely high house prices (in 2019 lower income households could expect to pay 9

[58] More contemporary examples of legacy schemes already exist, e.g., Nansledan development in Newquay, but for this research older schemes were selected as case studies as it was considered necessary to investigate the residents' perspective as well.

times their annual earnings in order to buy a house in England).[59] Commercial legacy schemes could also help raise the standards set for affordable housing by the planning system, as in case of additional affordable housing built voluntarily by the Duchy as part of the Tadley Acres scheme. Another example is the Blenheim Estates' partnership with WODC (West Oxfordshire District Council, 2019), which allowed to set affordable rents at as low as 60% of market levels (as opposed to the usual 80% requirement). As mentioned in section 2.1.3, the key feature of Blenheim's approach is retaining the ownership to affordable housing and PRS properties, which is considered a form of a low-risk investment and diversifying their portfolio (Walker, 2016; Stakeholders, 2018; Sallabank and Daura, 2020). Land retention is becoming increasingly popular among landowners and makes housing schemes even more susceptible to the legacy motive. Therefore, it is argued here that it should be further encouraged, particularly that not all landowners might be concerned about the issue of housing affordability, as evidenced by Newhall development.

Lack of funding also has a negative impact on infrastructure and local facilities, which is further exacerbated by "call for sites" and "5-year land supply" approach to land allocation (CABE, 2005b; RIBA, 2009; Building Better Building Beautiful Commission, 2020; Knight Frank, 2020; Savills, 2016). This was reflected in the residents' surveys – public transport was judged as the worst or the second worst aspect of the considered estates (Socha, 2018). Also, the rate at which houses were being developed on the investigated schemes (see Table 4 on page 147) confirmed that a 5-year land supply creates too short of a timeframe to build a self-sufficient settlement.

Furthermore, the "property ladder" approach to homeownership results in homebuyers seeing their property as a temporary accommodation and being more likely to settle for a lower quality product (RIBA, 2009; Stakeholders, 2018; Newhall residents, 2018; Tadley Acres residents, 2018). This is particularly dangerous in terms of quality and long-term legacy of housing estates that we are building today and illustrates the need for design champions – someone to drive the quality when the planning and development system falls short. This role could be played by other stakeholders as well – planning authorities (who in some locations define the aesthetics and identity of a place through design codes and careful planning decisions), a community (good examples of which are cooperative practices and community land trusts), or a housing association (who can actually become a long-term landowner as in case of Hastoe). However, in case of legacy schemes it is typically played by a long-term private landowner.

Evidence gathered in this research illustrated that landowners play an important curatorial role in legacy schemes – they provide a long-term view and a sense of stewardship over the housing development process. For instance, landowners at Newhall invested in master planning the entire site

[59] This is based on median weekly equivalised household income – £522 according to Households Below Average Income data (Department for Work & Pensions, 2020) and median house price – £243,950 (Office for National Statistics, 2020).

even though they knew they would not be able to use this to promote the scheme (only Phase 1 could have been included in the Local Plan), which illustrates that landowners are able to overcome the short-sightedness of both the planning system and homebuyers' choices. It also provides some evidence for Bracewell-Milnes argument that all kind of assets are *"best and most efficiently looked after by long-term family owners"* (Bracewell-Milnes, 1997, p. 173). While "family" does not necessarily apply here, long-term ownership does seem crucial – Hastoe was particularly concerned with the quality of housing they were building precisely because they own them in perpetuity. Also, with development spanned over decades, having someone to consistently lead the way is crucial in ensuring continuity and a coherent vision (though admittedly, this was achieved to a varying degree of success on the considered schemes and landowners at Tadley Acres did not have as much foresight as the Moen brothers at Newhall).

Even though, the importance of collaboration between all stakeholders was evident in the investigated schemes, in the end it was the landowners and their legacy motive that were the driving force behind the investments in higher housing quality. And while landowners might have their own personal motives, and therefore, prioritise aspects of housing quality that are relevant to them (and not necessarily correspond to homebuyers' or other stakeholders' perspectives), the fact remains that their involvement was essential in introducing innovation and above-standard qualities into the considered housing developments, such as:

- Bespoke contemporary design;
- Traditional architectural detailing;
- Innovative (at the time) approach to street design and traffic calming;
- High energy efficiency;
- Live/work units and dedicated workspaces.[60]

[60] That last point seems particularly relevant today as ONS estimates that over 46% of employees worked from home as of April 2020 and 86% of them did so due to Covid-19 pandemic (Office for National Statistics, 2020a). With the lifestyle changes brought about by the Covid-19 outbreak and the majority of people working from home, that additional quality of the development is in all likelihood appreciated more than ever (though the data collection for this research concluded before the outbreak and does not provide evidence for that).

6.5. THE QUALITY OF LEGACY SCHEMES

The housing quality of the considered schemes is extremely difficult to measure or quantify due to the subjective nature of the concept. Consequently, even if legacy schemes are able to realise landowners' aspirations, that does not necessarily mean that the achieved development outcomes can be universally considered as "better". There are many aspects of housing quality and not all stakeholders share the landowners' idea of what constitutes good housing quality.

As illustrated in section 5.3.2, people's preferences not always align with those of other stakeholders and in fact, many purposeful design choices were disliked by the residents, e.g. low visibility at crossroads (this was an intentional design feature intended to slow down the traffic, but many people perceived it as a safety risk); or live/work units with separate entrances (this was meant to prevent people from using the space as an extra bedroom but proved to be both unpopular and ineffective). Also, the aspects of housing quality identified in Chapter 3 are all interrelated and positive investments in one area of a development can negatively impact the other, e.g., at Newhall investments in bespoke design endangered scheme's profitability and reduced affordable housing provisions. Therefore, it was argued that improving just one aspect of a development does not necessarily lead to a higher quality product. And having in mind that the investigated schemes tend to reflect landowners' personal and individualistic perspectives on housing quality, it seems crucial to ask whether their point of view should be universally accepted, e.g., can we consider a beautifully designed but less affordable estates "better"?

Certainly, not everyone would have agreed with that. In fact, price and property size were some of the most important factors for residents and often the least important concerns for other stakeholders – driving up the house prices is actually one of the explicit aspirations of legacy schemes. Also, appearance and kerb appeal was not as important for residents as some studies would suggest (particularly those conducted by the Prince's Foundation (Prince's Foundation for the Built Environment, 2014)) and architectural style seemed to be a matter of a personal preference. What is even more telling is that none of the schemes, not even Tadley Acres, was considered traditional suggesting that people perceive new-build estates as "contemporary" irrespectively of architectural style (Socha, 2018).

The residents paid much more attention to visual diversity – they appreciated houses that do not look the same and considered Newhall and Tadley Acres more visually attractive than the more monotonous development in Burwell. This provides evidence for the argument that the general preference for traditional styles might have more to do with clearly defined frontages and buildings' relation to the street than the architectural style itself (Smith, 2016). This also correlates quite closely with architects' opinion (contrary to what was suggested in section 3.2.2) – some architects had a personal preference for a particular architectural style, but generally they considered it more of a stylistic choice and they did not think that it directly affected housing quality.

This raises some questions regarding legacy schemes, which tend to place an extra emphasis on the visual attractiveness of the development, often at the expense of affordability or other aspects of housing quality. Since appearance and architectural style are not particularly important for other stakeholders, then who is all this effort in architectural design for?

The investigated schemes illustrated that first and foremost, it serves landowners' expressive needs. For example, the investments in bespoke and innovative design at Newhall seem to serve the landowners' agenda to give more creative freedom to the architectural profession; while the design of Tadley Acres and other Duchy's schemes seems to serve the Prince's of Wales agenda to promote a traditional architectural style and new urbanist principles. To a smaller extent, it seems to cater to more affluent homebuyers, for whom appearance was much more important than for other residents (people with annual income above £80,000 ranked appearance as the second most important factor when choosing a property, though price was still on the top of the list (Socha, 2018)).

This suggests that legacy schemes constitute a rather self-centred endeavour and that landowners generally act with their own self-interest in mind. In fact, the idea of self-interest is embedded in the concept of legacy itself as legacy building is by definition driven by the concerns about one's life meaning and how one will be remembered after death. However, the question of whether the motives behind legacy schemes are altruistic seems relatively insignificant, particularly that some economists, psychologists and social scientists do not recognize the existence of altruistic behaviour (Cropanzano *et al.*, 2001; Rocha and Ghoshal, 2006; Jensen, 1994; Jensen and Meckling, 1994; Masson and Pestieau, 1997). What is more important in the context of housing developments is that legacy motive (altruistic or not) often leads to prosocial behaviour, e.g., Duchy's self-centred concerns about their image and reputation translated themselves into affordable housing provisions. This provides evidence for Fox's et al. (2010) argument that legacy, at the very least, provides a mechanism for translating one's self-centred motives (to leave a legacy) into long-term benefits for a collective. This is best illustrated by the fact that landowners could have sold the land outright and would have made more money.

That being said, it should be pointed out that the relation between legacy schemes and social betterment is disputable. Perpetual saving is beneficial in case of land ownership and real estate as it entices the land or property owner to take the role of a steward rather than a consumer (Bracewell-Milnes, 1997) and this was clearly visible in the case studies. However, legacy building encourages the accumulation of wealth and therefore deepens social inequalities, particularly when it comes to homeownership (see Table 1 on page 60).

Due to a certain amount of flexibility and human agency involved in leaving and receiving an inheritance, it is also essential to consider whose legacy is being preserved and whose lost (Earlie, 2015; Huyssen, 1995; Derrida, 1994; Shrimali, 1998). It has been argued in section 2.1 that legacy can be constructed and is open to interpretation and destruction, i.e., as much as we do not get to decide what we inherit, we do get to decide what to pass on to future generations. Therefore, the

validity of favouring the interests of a very narrow fragment of society (in this case the landowners) should be questioned in order to ensure that our architectural legacy does not *"reinforce for some the feeling of belonging and for others the feeling of exclusion"* (Bourdieu, Schnapper and Darbel, 1991, p. 112). Landowners' legacy schemes are one example of an array of housing development practices which help achieve standards higher than those set by the planning system and the building industry; and should be perceived as such – one of the possible solutions. Also, the delivery mechanism whereby the landowners are the primary beneficiaries of the resulting uptake in land value should be challenged, particularly that CIL and s106 agreements are often insufficient or ineffective in transferring some of that value to the community (though this lies outside the scope of this research).

Nevertheless, the investigated schemes were able to struck a better balance between costs and other aspects of housing quality and achieve standards often unattainable for conventional developments, e.g. Burwell scheme provided the very much needed affordable housing, which was also affordable to live in due to high energy efficiency; Newhall produced extremely innovative and functional contemporary designs with better space standards; and Tadley Acres used sensitively-placed traditional detailing in order to elevate standard house types and create attractive streetscapes. Furthermore, they can certainly be considered ahead of its time, which is well illustrated by the innovative (at the time) approach to street design and traffic calming that has been since adopted by the planning policy (Department for Transport, 2007). Therefore, it is argued that, while whether the investigated schemes can be considered "better" seems to be a matter of personal opinion, they certainly delivered "more".

Also, the considered schemes were characterized by something that is perhaps lacking among most new-build developments – variety. Landowners' priorities were influenced by their life experiences, values and beliefs, and therefore, were much more individualistic and personal compared to other stakeholders, who to some extent seemed to represent the general views of their profession. This was reflected in the considered schemes, which all had their own peculiar characteristics and constituted rather unique examples of housing developments in the UK. The fact that all three estates were considered comparably successful by the residents, despite being so drastically different, illustrates that people's preferences vary (particularly in terms of architectural style) and more choice and diversity among the properties available on the market is needed.

However, if variety in itself constitutes an added value, then it is important to further consider the impact of the Prince of Wales and the Prince's Foundation on legacy schemes. As discussed in section 2.1.3, a combination of regular events, publications and housing developments built by the Duchy of Cornwall, fueled by a powerful patronage of the Prince of Wales, turned out to be extremely effective at disseminating knowledge and best practices, both among landowners and industry as a whole. This certainly helps navigate the complexities of the planning and development process, but also makes legacy schemes more and more alike as they often follow a similar set of design principles (new urbanist principles in particular) and a similar model of housing delivery. And while many of

the new urbanist principles, such as mixed use, good social mix and well-designed public realm, have been widely accepted as "better" by virtually all stakeholders, this approach also has its flaws, e.g. overemphasis on aesthetics and visual qualities, architectural design sometimes bordering on pastiche, overly deterministic belief that good design creates good communities and insufficient attention to cultural and regional differences. These issues were visible at Tadley Acres, but in themselves they seem less problematic than the danger of losing the diversity among legacy schemes, particularly that evidence gathered in this research suggests that these type of housing estates might not be to everyone's liking.

Also, it is worth considering that perhaps the mere fulfilment of popular desire should not be the main duty of architecture, otherwise, it "*turns into production of commodities for the consumer society [and] loses its poetic and metaphysical content"* (Pallasmaa, 2007). And while Léon Krier (1998, p. 21) would not have agreed with this argument, the Newhall case study suggests that maybe it is time to forgive the failures of the post-war modernist architecture and place more trust in the architectural profession once again.

6.6. SUMMARY

This research established a link between legacy and housing quality by illustrating step by step how legacy motive (i.e., the drive to leave behind a lasting legacy) leads to higher housing quality (i.e., additional investments in various aspects of housing quality). The main argument goes as follows.

1. *Leaving a legacy is a universal human motive.*

Based on various theories in the fields of philosophy, psychology and economy, this research argues that the concept of legacy is a fundamental aspect of human existence as it is inherently related to such notions as meaning of life, sense of belonging and symbolic immortality. Motivation theories such as TMT (Becker, 1997) and Maslow's pyramid of needs (Maslow and Frager, 1987) further suggest that leaving behind a lasting legacy can be considered a universal human motive, and a particularly powerful one in the case of intergenerational decisions-making that characterizes land development.

2. *Landowners are the only stakeholder group that considers housing developments their legacy.*

In Chapter 2 it was illustrated that housing schemes are not necessarily landowners' legacy and there are examples of projects that constitute architects', planning authorities' or local communities' legacy. However, on the investigated schemes, the landowners were the only stakeholders that conceptualized housing developments as their legacy. The examples used in Chapter 2 and the evidence gathered through the case studies suggest that this might be closely related to the amount of agency that stakeholders have within the development process. That is to say, architects, planners and communities might have considered housing schemes their legacy if they felt they are the ones determining the final outcome.

That was not the case on the considered schemes – landowners were the ones driving the development and other stakeholders had relatively little agency within the process (perhaps with the exception of housebuilders). Also, landowners are in a uniquely strong position to do that as they control the main resource – land. The importance of long-term landownership is also illustrated by the fact that Hastoe Housing Association were the only interviewed housebuilder who truly perceived housing schemes as their legacy and that was because they owned the land and the houses in perpetuity.

Consequently, the investigated schemes were almost universally considered as landowners' legacy, and legacy motive, even though universal, did not affect other stakeholders' decision-making. It is argued here that other stakeholders were still motivated to leave behind a lasting legacy, but they would try to satisfy that need through other pursuits. That being said, the fact that other stakeholders did not conceptualize housing developments as their legacy does not mean they did not influence the

final outcome. The investigated schemes illustrated that it takes a close partnership and collaboration between all stakeholders to achieve the aspirations set by the landowners.

Also, there is no doubt that not every landowner will conceptualize housing schemes as their legacy, but the case studies investigated in this research provided clear evidence that at least some landowners do.

3. *The legacy motive affects landowners' decision-making and translates itself into specific aspirations related to housing quality.*

The case studies illustrated that landowners who conceptualize housing schemes as their legacy were likely to be driven by additional social, expressive and intrinsic motives, which are unlikely to be witnessed on other housing developments. That is not to say that landowners were not driven by instrumental motives – quite the opposite, in case of open market schemes, landowners often expressed their aspiration to achieve commercial success as well.

Legacy motive translated itself into such social, expressive and intrinsic aspirations as providing affordable housing, creating thriving communities, promoting specific design principles (e.g., new urbanism) or specific approaches to housing delivery (e.g. giving more freedom to architects) and building to higher standards (e.g. energy efficiency). The investigated schemes illustrated that these aspirations can vary significantly from person to person (preference for a traditional or contemporary architectural style) and at the same time be extremely consistent among landowners or even industry as a whole (principles of mixed-use high-density developments). This demonstrates the impact of personal and collective identity – landowners' aspirations were heavily influenced by such factors as relation with the local community, various social groups dynamics, concerns with public image and reputation, personal values and beliefs and understanding of what constitutes good housing quality.

Unlike social, expressive and intrinsic needs, which more often than not reinforced the legacy motive, instrumental needs discouraged landowners' involvement. Currently there are almost no financial incentives for landowners to engage in housing delivery, i.e., there is not enough funding particularly for the early stages of the development process, it is more tax efficient to sell land in bigger plots, "hope value" of land discourages putting land forward for RES schemes, and the additional profits from raising land values remain questionable. This is particularly relevant since it was argued that some sort of hierarchy in landowners' extrinsic motives does exist, and therefore, instrumental needs are most likely to undermine other aspirations. And while landowners interviewed as part of this research decided to get involved despite these financial deterrents, it appears that this is one of the main reasons why more landowners do not do the same.

In order for legacy model to be applicable on a wider scale, landowners and developers need to have confidence that investments in better quality are going to lead to higher profits. Institutions such as Savills (2016), RICS (2016), the Prince's Foundations (2007) and Knight Frank (2020) have been arguing for years that a premium sufficient to offset additional costs is achievable, but there still

needs to be more robust evidence regarding the long-term commercial value of legacy schemes and more transparency in the methods used for calculating house premiums.

Another discouraging factor was related to landowners' cognitive processes. Lack of knowledge and experience affected landowners' confidence in their ability to navigate the complexities of the planning and development process, and thus undermined the legacy motive. Therefore, it is vital to provide landowners with the necessary resources related to land management and delivering legacy schemes (whether commercial or RES) – the work that is already being done by such organisation as the Prince's Foundation, CLA, RICS, as well as many institutional landowners, law firms and housing associations (e.g. Hastoe Housing Association is organising conferences to help landowners understand what RES is and how to best manage their land).

The fact that landowners decided to pursue their social, expressive and intrinsic aspirations even though it was not necessarily financially beneficial nor easily achievable also illustrates that they tend to choose a sufficient solution that satisfies most needs simultaneously (following Simon's (1957) *satisficing* concept). Therefore, in order to encourage landowners' involvement in housing developments, it is preferable to appeal to all levels of landowners' motives, for instance through financial incentives, strengthening ties with local communities, emphasizing the negative implications of low-quality housing or ensuring that landowners have enough influence over the development process to express their personal values and beliefs.

Understanding landowners' motives is not only an important step in establishing a link between legacy and housing quality; it also provides insights on how particular type of a landowner could be motivated to pursue particular outcomes. For instance, giving smaller landowners confidence that they would maintain control over the development process is likely to encourage further investments in architectural design, while appealing to institutional landowners' concerns about their reputation might encourage further investments in affordable housing provisions. Especially that evidence gathered in this research clearly suggests that the fear of leaving negative legacy is a much more powerful drive than leaving a positive one. In fact, the most evident example of the impact of legacy motive is the "we'd better not screw it up" attitude common among landowners (but not other stakeholders) and a popular belief that most landowners get involved in housing schemes because they believe that without their intervention the quality of the development is going to be appalling (Stakeholders, 2018). And while this clearly constitutes a strong incentive for the landowners to do better, it also points to a massive fault in the current system of housing delivery.

4. *Legacy schemes are able to overcome at least some of the obstacles to higher housing quality and achieve some of their aspirations.*

Housing development process is extremely complex and there are plenty of obstacles that might prevent landowners' involvement or affect the final shape of a scheme. Going through the planning and design stage to a finished product takes a lot of determination and persistence and the original

principles often get eroded due to mounting build costs or the necessity to accommodate other stakeholders' interests. All of these issues might prevent legacy schemes from achieving the desired development outcomes and delivering legacy schemes.

This is well illustrated by the investigated schemes, which failed to deliver on many of their aspirations, e.g., build quality, local facilities, infrastructure, commercial success and long-term value. It is also evident that some of these issues compromised the long-term legacy of the schemes, e.g., the leaching render at Tadley Acres which had a massive impact on visual attractiveness of the scheme, or the resale values at Tadley Acres and Newhall which suggest that homebuyers would have made a better investment buying a property somewhere else in town.

These shortcomings can be largely attributed to complicated planning process and lack of funding. The investigated case studies illustrated that obtaining a planning permission is a protracted and costly process and the amount of bureaucracy is not only discouraging to landowners, who might fear that they lack the necessary resources and knowledge to see the development through, it also has a direct impact on viability of a scheme. Consequently, even relatively wealthy landowners struggle to finance the planning stage, which is also the stage when the design aspirations are most likely to get diluted. Lack of funding is also a problem for RES schemes, which might need to compromise on some aspects of housing quality (e.g., property size) in order to ensure viability of the scheme. Therefore, providing viable sources of finance, particularly for advance infrastructure and planning process, is crucial. It has been suggested by landowners that this could take a form of a loan that is paid back gradually as development progresses (Stakeholders, 2018).

Despite these difficulties, the investigated schemes managed to achieve above-standard qualities in some aspects of housing quality, which are often unattainable for conventional models of housing delivery, e.g., bespoke contemporary design, architectural detailing, high energy efficiency, sensitive layout and pedestrian-friendly street design. The key element in realising these aspirations seemed to be a collaboration between all stakeholders, suggesting that *"the creation of successful places depends on the skills of designers and the vision and commitment of those who employ them"* (RICS, 2016), rather than policy and regulation. Various methods of quality control, including design codes, proved to be ineffective without either a strong partnership with a housebuilder or the support of planning authority. Collaboration between stakeholders also reduced the detrimental effect of lack of skills and knowledge as it allowed to benefit from the expertise of everyone involved. However, stakeholders admitted that there definitely was *"a massive learning curve"* (Stakeholders, 2018), which suggests that there is a need for a better understanding of legacy schemes not only among landowners but all stakeholders (developers and planning officers in particular); and knowledge regarding best practices, most common mistakes and methods of delivery should be disseminated more widely.

It is also important to point out that, unlike other stakeholders, landowners were instrumental in overcoming at least some of the obstacles to higher housing quality – they financed masterplanning

future phases of their projects, which went well beyond the 5-year land supply; they managed to produce comprehensive design codes despite lack of funding; they invested in various aspects of housing quality even though house prices are mostly driven by number of bedrooms; and they introduced innovative approaches to a highly regulated and bureaucratic process. While the conventional housing delivery process lacks a long-term perspective and tends to produce a very average product, landowners provided a long-term vision for the development and were able to set standards well above statutory regulations. This illustrates that landowners play a vital curatorial role in legacy schemes and provide a sense of stewardship over the housing development process, largely due to their long-term landownership – many of the factors affecting legacy motive are closely related to the long-term landownership (e.g., relation with the local community, sense of duty or the possibility to benefit from raising land values), and therefore, do not affect other stakeholders' decision-making.

5. Can legacy schemes be universally considered as "better"?

The investigated schemes did surpass conventional developments in some areas of housing quality prioritized by the landowners; however, these priorities did not always align with other stakeholders' opinions. In that respect, legacy schemes can be perceived as a rather self-centred endeavour that mostly serves landowners' needs. This was well illustrated by the emphasis on financial return and architectural design, which was in direct contradiction to residents' preference – price and affordability were one of the main concerns for homebuyers, while the external appearance was relatively low on their list of priorities.

However, following Pallasmaa's (2007) argument, it was questioned whether the mere fulfilment of popular desire should be the main duty of architecture. Therefore, the considered schemes were also judged against architectural theory (regionalism and new urbanism in particular), illustrating that while Tadley Acres and Burwell focused more superficially on reproducing vernacular aesthetic, Newhall was rather successful at creating a distinct sense of place. This can be in large part attributed to its unique development process, which gave architects more creative freedom and demonstrated the role architects could play in improving housing quality if they had more agency within the development process.

Also, landowners' aspirations went well beyond the visual qualities of the investigated schemes illustrating that legacy motive provides a mechanism for translating one's self-centred desires (to leave a legacy) into long-term benefits for a collective. This is clearly evidenced by the fact that:

a) Landowners at Newhall could have sold the land to the highest bidder and made more money (if they had, the development would have ended up being another Church Langley).
b) The Duchy insisted on providing affordable housing when they were not required or asked to do so (had they not, additional 60 affordable units would not have been delivered).

c) The landowner in Burwell did not hold on to the land in a hope to sell it for a commercial development (if he had, the affordable housing would not have been built).

Legacy schemes were also able to strike a better balance between costs and other aspects of housing quality, and while not perfect, they certainly can be considered ahead of its time. They constituted distinctive and innovative examples of housing developments, which in itself should be considered a positive and important contribution to the housing stock in the UK, dominated by a homogeneous and standardised product.

Therefore, while it might not be appropriate to use the word "better" to describe the quality of legacy schemes, it is argued that they have the potential to deliver "more". Consequently, providing a viable and attractive delivery mechanisms for legacy schemes should be considered a valid approach to improving the quality of new housing developments.

7

CONCLUSIONS

Legacy schemes are becoming an increasingly popular mechanism for housing delivery, particularly among landed estates and larger landowners, but also medium-size landowners and even smaller farmer landowners. This is well reflected in frequent references to legacy schemes in policy papers and industry reports (Ministry of Housing Communities & Local Government, 2020b; Building Better Building Beautiful Commission, 2020; RICS, 2016; Knight Frank, 2020). The interest in legacy projects can be seen as a response to the low quality of conventional housing developments caused by a combination of complex issues such as complicated planning system, land allocation process, reliance on volume housebuilders, lack of funding, government's delivery targets and housing shortage. Most importantly, the current planning and development system is short-sighted and does not recognise the added value of good design.

Legacy schemes are characterized by landowners playing an active part in the development process and explicitly conceptualizing these housing projects as their legacy. This affects their motivation and decision-making, and therefore, has an impact on the development outcomes. This research contributes to the discourse on legacy schemes by investigating the role of legacy motive in housing schemes and providing evidence for the relation between the concepts of legacy and housing quality. It is argued that legacy motive leads to a more long-term and socially conscious view of housing developments and translates itself into additional investments in various aspects of housing quality. And while one should be careful about using the word "better" to describe the development outcomes of legacy schemes, this research demonstrated that they have the potential to deliver "more". The investigated schemes delivered standards above those imposed by the planning system and thanks to the landowners' curatorial role were able to:

- Introduce variety to mass housing;
- Build schemes that were ahead of its time;
- Invest in architectural and urban design;
- Create attractive streetscapes and distinctive neighbourhoods rather than just deliver houses;
- Introduce above-standard qualities, e.g., in terms of size, volume, energy efficiency, landscaping;
- Deliver affordable housing.

Further evidence gathered in this research is summarised below together with some more specific conclusions and suggestions (see the grey boxes).

The most effective way of ensuring that the vision for the development does not get eroded is aligning stakeholders' interests through partnerships between landowners, housebuilders, architects and planning authorities. Strong collaboration between stakeholders also allows to benefit from the knowledge and expertise of everyone involved.

Close partnership between landowners and planning authorities could speed up the planning process, reinforce design principles and help deliver affordable housing.

Design codes proved to be difficult to enforce without a strong partnership with a developer or a planning authority.

Better understanding of legacy schemes is necessary not only among landowners, but all stakeholders. Planning officers in particular should be better trained in understanding the principles of legacy developments so that they can assist in their delivery.

Within the context of housing developments, legacy motive is strongly related to the long-term landownership and the amount of agency within the development process. Therefore, it is less evident in other stakeholders' actions, who have less control over the final outcome, and whose presence in the area is either temporary (e.g., developers) or more anonymous (e.g., planning officers).

Landowners are in a unique position to deliver legacy schemes – unlike the planning system, which has to be reasonable, they *"have the potential to be demanding"* (Stakeholders, 2018). Therefore, landowners' involvement should be encouraged.

Architects could play a vital role in improving the quality of housing developments, yet on legacy schemes they usually take more of a back seat and have very little agency in the development process.

A model developed in this research (Figure 101) provides insights into how legacy motive can be reinforced (as well as undermined).

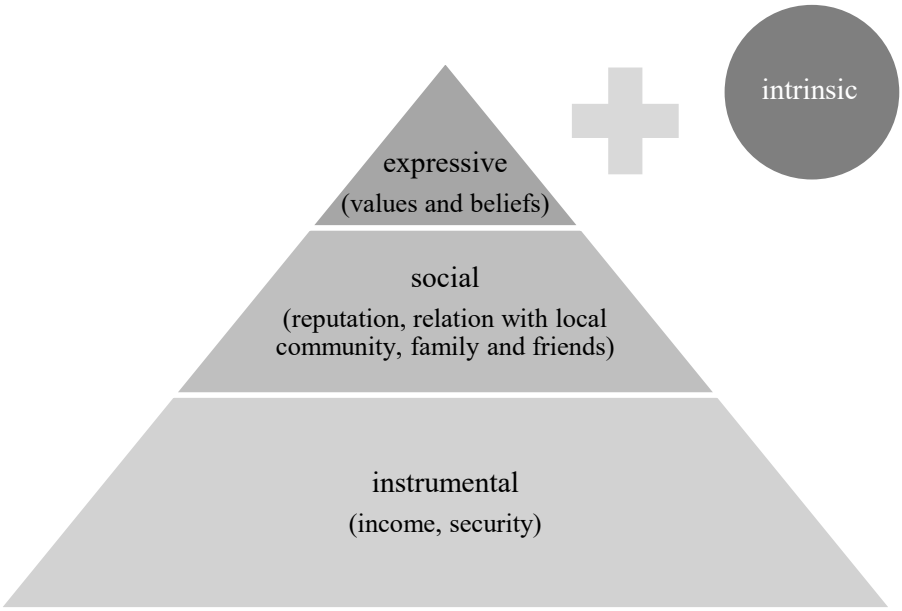


Figure 101: A model for the analysis of landowners' motives.

Instrumental motives are a powerful drive for all landowners irrespective of the size of their landholdings. The long-term land value constitutes a particularly important concern for landowners, partly because they expect to reap the benefits on later phases of the development (instrumental motive), and partly because they believe land value to be strongly related to "good housing quality" and that is very much part of the delivery model (expressive motive). Smaller and mid-size landowners were more concerned with timeframe and lack of funding for the scheme, especially at the early stages of the development (i.e., to cover planning and infrastructure costs).

> Increasing landowners' confidence in the fact that higher quality leads to higher land values would encourage their involvement in commercial schemes.
>
> Lack of funding for planning and infrastructure is one of the main deterrents to landowners' involvement.
>
> Financial incentives such as tax exemptions, preferential loans, grants and subsidies could be considered by policy makers (though in order to be effective, these financial benefits would have to be tied to specific aspects of quality, e.g., energy efficiency, use of specific materials, property size, architectural design or affordable housing).
>
> Illustrating financial benefits of retaining the freehold to rental and affordable properties might encourage landowners to follow this model of delivery.

On the social level, landowners' motives depend on the nature of their relations with the local community, their family and other stakeholders. Local landowners with a personal connection to the

community are concerned about their reputation in the local village or town, while larger landowners focus more on public opinion and their reputation at large.

Avoiding negative legacy is often a more powerful motivation than pursuing a positive one and landowners are often driven by fear that without their involvement the development outcomes will be lacking.

> Emphasizing and reinforcing connections between landowners and local communities can have a positive impact on their decisions and potentially minimise NIMBY attitudes.
>
> Good examples of legacy schemes should be publicized, and landowners' input recognized.
>
> Emphasizing the negative implications of low-quality housing might be particularly effective. It might also be worthwhile to consider the impact of publicizing the worst examples of housing developments (similarly to Carbuncle Cup architectural award).

Landowners' expressive motives reflect their personal values and beliefs and are influenced by landowners' belonging to social groups such as a family or an institution. Therefore, expressive aspirations can vary significantly from person to person and at the same time be extremely consistent among landowners or even industry as a whole. Perceived lack of control over the development outcomes, often resulting from lack of knowledge and expertise, undermines these motives.

> Organizations such as CLA, CPRE or Prince's Foundation can significantly influence landowners' aspirations through dissemination of knowledge and best practice.
>
> Larger landowners, with more resources and experience, are more likely to take a proactive approach to housing delivery. Reinforcing landowners' confidence in their ability to realise their aspirations is likely to significantly encourage their involvement.

Intrinsic motives such as sense of duty and emotional attachment to land strongly influence landowners' decision-making, which can lead to a more sensitive approach to land development and protective attitudes towards the ideal of countryside living or rural life.

> Landowners could be incentivised by emphasizing environmental benefits of their actions or in case of larger landowners, particularly landed estates, by stressing the impact of housing provisions on sustainability of their other enterprises.

There is a significant overlap between landowners' instrumental, social, expressive and intrinsic motives, which tend to act alongside each other and accumulate over time. This provides evidence for Simon's (1957) *satisficing* concept, according to which people tend to choose a sufficient solution that satisfies most needs simultaneously, rather than an optimal one. Nevertheless, it was

demonstrated that some sort of hierarchy in extrinsic motives does exist and certain needs, e.g., profitability of a scheme, might take precedence over the others.

> In order to encourage landowners' involvement, it is preferable to appeal to all levels of motives simultaneously. Overlooking lower-level needs might have particularly detrimental effect.

This research also provided evidence for the existing theories in behavioural science:

- The concept of perceived behavioural control (Ajzen, 1991) – lack of control over the outcome weakened legacy motive;
- Extreme power imbalance (Chen, Lee-Chai and Bargh, 2001; Greenberg, 1978; Handgraaf *et al.*, 2008) – the Duchy's privileged position has led to a higher concern for those that are powerless and vulnerable;
- Moral licensing (Monin and Miller, 2001; Sachdeva, Iliev and Medin, 2009) – some stakeholders believed that their ethical and moral conduct in the past gave them a *license* to act immorally;
- Impact of death anxiety on legacy motive (Hunter and Rowles, 2005; Grant and Wade-Benzoni, 2009) – immediate reminders of death (father's illness) reinforced instrumental motives and led to selling off parts of the land.

Bibliography

2011 Census: Office for National Statistics,. Available at: **https://www.nomisweb.co.uk/**.

Abdolmohammadi, M. J., Read, W. J. and Scarbrough, D. P. (2003) 'Does selection-socialization help to explain accountants' weak ethical reasoning?', *Journal of Business Ethics,* 42(1), pp. 71-81.

Abrams, R. (2003) 'Byker Revisited', *Built Environment (1978-),* 29(2), pp. 117-131.

ADAM Architecture (2009) *YouGov Survey Published This Week Suggests People Prefer Traditionally Designed Buildings.* Available at: **http://www.adamarchitecture.com/images/PDFs/YouGov%20survey_Oct09_results&followup.pdf** (Accessed: 20 Oct. 2017).

Adopted Replacement Harlow Local Plan (2006). Available at: **https://www.harlow.gov.uk/planning-and-building-control/planning-policy/adopted-replacement-harlow-local-plan** (Accessed: 22 November 2020).

Ajzen, I. (1991) 'The theory of planned behaviour', *Organizational Behavior and Human Decision Processes,* 50(2), pp. 179-211.

Alison Brooks Architects (2012) *Newhall Be Harlow*. Available at: **https://www.alisonbrooksarchitects.com/project/newhall/** (Accessed: 15 December 2020).

Anderson, C. A., Lepper, M. R. and Ross, L. (1980) 'Perseverance of social theories - the role of explanation in the persistence of discredited information', *Journal of Personality and Social Psychology,* 39(6), pp. 1037-1049.

Anderson, J., Shiers, D. and Steele, K. (2008) 'The Green Guide to Specification: An Environmental Profiling System for Building Materials and Components, Third Edition', pp. 11-20.

Angle, H. and Malam, S. (1998) *Kerb Appeal: The external appearance and site layout of new houses*: Popular Housing Forum.

Anson, B. (1981) *I'll fight you for it!: behind the struggle for Covent Garden.* London: Cape.

Appleyard, L. and Rowlingson, K. (2010) *Home-ownership and the distribution of personal wealth*: Joseph Rowntree Foundation.

Aquino, K. and Reed, A. (2002) 'The self-importance of moral identity', *Journal of Personality and Social Psychology,* 83(6), pp. 1423-1440.

Archer, M. S. (1998) 'Introduction: Realism in the social sciences', in Archer, M.S. (ed.) *Critical realism: essential readings*. London: Routledge, pp. 189-205.

Architecture in Arcadia. (1993) *Architectural design profile; no. 103.* London: Academy Editions.

Arrondel, L., Masson, A. and Pestieau, P. (1997) 'Bequest and inheritance: Empirical issues and France-US comparison', *Is Inheritance Legitimate?: Ethical and Economic Aspects of Wealth Transfers*, pp. 89-125.

Aslet, C. (2017) 'Nansledan, Prince Charles's new Cornish village, shows that he's down with the surfer scene', *The Times*. Available at: **https://www.thetimes.co.uk/article/nansledan-prince-charless-new-cornish-village-shows-that-hes-down-with-the-surfer-scene-ctk5pn0fl** (Accessed: 15 December 2020).

Bandura, A. (1986) *Social foundations of thought and action: a social cognitive theory.* Englewood Cliffs, N.J: Prentice-Hall, p. Prentice-Hall series in social learning theory.

Bandura, A. (1997) *Self-efficacy: the exercise of control.* New York: W.H. Freeman.

Barratt Eastern Counties (2000) *Newhall house types*. ref. HW/ST/00/00040. [planning documentation] (Accessed).

Barrow, M., Bachan, R. and Royal Institution of Chartered, S. (1997) *The real cost of poor homes: footing the bill: how poor quality housing affects the lives of residents and service providers.* London: Royal Institute of Chartered Surveyors.

Becker, E. (1997) *The denial of death.* First Free Press paperbacks edn. New York: Free Press Paperbacks, a division of Simon and Schuster.

Becker, G. S. (1976) 'Altruism, Egoism, and Genetic Fitness: Economics and Sociobiology', *Journal of Economic Literature,* 14(3), pp. 817-826.

Becker, G. S. (1981) *A treatise on the family.* Cambridge, Mass.: Harvard University Press.

Becker, G. S. and Tomes, N. (1986) 'Human-capital and the rise and fall of families', *Journal of Labor Economics,* 4(3), pp. S1-S39.

Ben-Joseph, E. (2005) *The code of the city: standards and the hidden language of place making.* Cambridge, Mass.: MIT.

Bernheim, B. D., Shleifer, A. and Summers, L. H. (1985) 'The strategic bequest motive', *Journal of Political Economy,* 93(6), pp. 1045-1076.

Bernheimer, L. (2014) *Tomorrow's Home: Emerging social trends and their impact on the built environment*: ADAM Architecture.

Bhaskar, R. (1998) 'Societies', in Archer, M.S. (ed.) *Critical realism: essential readings*. London: Routledge, pp. 206-257.

Bhaskar, R. (2008) *A realist theory of science.* Rev. edn. London: Routledge.

Biddulph, M. (2007) *Introduction to residential layout.* 1st edn. Amsterdam; London: Butterworth-Heinemann.

Birkbeck, D. and Kruczkowski, S. (2015) *Building for Life 12: The sign of a good place to live*: Nottingham Trent University: CABE for the Building for Life Partnership.

Bloor Homes *Tadley Acres, Field Farm, Shepton Mallet*. [sales brochure] (Accessed).

Bourdieu, P., Schnapper, D. and Darbel, A. (1991) *The love of art: European art museums and their public.* Cambridge: Polity Press.

Brace, I. (2004) *Questionnaire design: how to plan, structure, and write survey material for effective market research.* London: Kogan Page.

Bracewell-Milnes, B. (1997) 'The hidden costs of inheritance taxation', *Is Inheritance Legitimate?: Ethical and Economic Aspects of Wealth Transfers*, pp. 156-201.

Bressi, T. W. (1993) 'Planning the American Dream', in Katz, P. (ed.) *The new urbanism: toward an architecture of community*. London: McGraw-Hill, pp. xxv-xliii.

Brown, J. D. (2001) *Using surveys in language programs.* Cambridge: Cambridge University Press.

Brown, N. (1967) 'The Form of Housing', *Architectural Design,* 37, pp. 432-443.

Bryman, A. (2001) *Social research methods.* Oxford: Oxford University Press, p. 3-25.

Building Better Building Beautiful Commission (2020) *Living with beauty: promoting*

health, well-being and sustainable growth. Available at: https://www.gov.uk/government/publications/living-with-beauty-report-of-the-building-better-building-beautiful-commission (Accessed: 24 January 2020).

Burton, R. J. F. (2004) 'Reconceptualising the "behavioural approach" in agricultural studies: a socio-psychological perspective', *Journal of Rural Studies,* 20(3), pp. 359-371.

Burwell residents 2017. Interviews with residents in Burwell. *In:* Socha, M. (ed.).

CABE (2002) *The value of good design: How buildings and spaces create economic and social value*, London: Commission for Architecture & the Built Environment. Available at: https://www.designcouncil.org.uk/sites/default/files/asset/document/the-value-of-good-design.pdf (Accessed: 25 January 2020).

CABE (2005a) *Better neighbourhoods: making higher densities work*, London: Commission for Architecture & the Built Environment. Available at: https://webarchive.nationalarchives.gov.uk/20110118185901/http://www.cabe.org.uk/files/better-neighbourhoods.pdf (Accessed: 25 January 2021).

CABE (2005b) *What home buyers want: Attitudes and decision making among consumers*, London: Commission for Architecture & the Built Environment. Available at: https://www.mae.co.uk/assets/pdfs/151123_Mae_Architects_What_Home_Buyers_Want_Housing_Architecture.pdf (Accessed: 25 January 2021).

CABE (2009) *Space in new homes: what residents think*, London: Commission for Architecture & the Built Environment. Available at: https://webarchive.nationalarchives.gov.uk/20110118105129/http://www.cabe.org.uk/files/space-in-new-homes.pdf (Accessed: 25 January 2021).

CABE (2010) *Improving the design of new housing: What role for standards?* , London: Commission for Architecture & the Built Environment. Available at: https://www.designcouncil.org.uk/sites/default/files/asset/document/improving-the-design-of-new-housing.pdf (Accessed: 25 January 2021).

CABE and Department for Communities and Local Government (2006) *Preparing Design Codes: A Practice Manual*, London. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7623/152675.pdf (Accessed: 25 January 2021).

Cahill, K. M. (2001) *Who owns Britain.* Edinburgh: Canongate.

Canizaro, V. B. (2007) *Architectural regionalism: collected writings on place, identity, modernity, and tradition.* New York: Princeton Architectural Press.

Chen, S., Lee-Chai, A. Y. and Bargh, J. A. (2001) 'Relationship orientation as a moderator of the effects of social power', *Journal of Personality and Social Psychology,* 80(2), pp. 173-187.

Clark, T. (2015) 'Code for Sustainable Homes scrapped', *Building*. Available at: https://www.building.co.uk/news/code-for-sustainable-homes-scrapped/5074697.article (Accessed: 15 December 2020).

Cornwall Council (2020) *Nansledan Local Development Order*. Available at: https://www.cornwall.gov.uk/environment-and-planning/planning/local-development-orders/nansledan-local-development-order/ (Accessed: 25 January 2021).

Country Land and Business Association (2017) *Strong Foundations: Meeting rural housing needs*. Available at: https://www.cla.org.uk/strongfoundations (Accessed: 7 March 2018).

Cousal, H. and King, L. C. (2013) *Private client wills, trusts and estate planning* Guildford: CLP. Available at: http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781909176393 .

Cowan, R. (1991) 'Community Choice [Coin Street Housing Development]', *Architects Journal,* 194(10).

Cox, D. (1987) 'Motives for private income transfers', *Journal of Political Economy,* 95(3), pp. 508-546.

Cropanzano, R., Byrne, Z. S., Bobocel, D. R. and Rupp, D. E. (2001) 'Self-enhancement biases, laboratory experiments, George Wilhelm Friedrich Hegel, and the increasingly crowded world of organizational justice', *Journal of Vocational Behavior,* 58(2), pp. 260-272.

Cullen, D. (1997) 'Maslow, monkeys and motivation theory', *Organization,* 4(3), pp. 355-373.

Darling, E. (2007) 'A new landscape of health', *Re-forming Britain: narratives of modernity before reconstruction*. London: Routledge, pp. 51–80.

Davis, F. (1996) *A Shepton Mallet camera, volume IV*. The Shepton Mallet Amenity Trust Ltd.

Deci, E. L. and Ryan, R. M. (2000) 'The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior', *Psychological Inquiry,* 11(4), pp. 227-268.

Department for Communities and Local Government (2017) *Fixing our broken housing market*. Available at: https://www.gov.uk/government/publications/fixing-our-broken-housing-market (Accessed: 25 January 2021).

Department for Transport (2007) *Manual for Streets*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/341513/pdfmanforstreets.pdf (Accessed: 25 January 2021).

Derrida, J. (1994) *Specters of Marx: the state of the debt, the work of mourning, and the new international.* New York: Routledge.

Derrida, J. and Rottenberg, E. (2002) *Negotiations: interventions and interviews, 1971-2001.* Stanford, California: Stanford University Press.

Duany, A. and Plater-Zyberk, E. (2008) 'The traditional neighborhood and urban sprawl', in Haas, T. (ed.) *New urbanism and beyond: designing cities for the future*. New York: Rizzoli International Publications, pp. 64-66.

Earlie, P. (2015) 'Derrida's Archive Fever: From Debt to Inheritance', *Paragraph,* 38(3), pp. 312-328.

East Cambridgeshire District Council 2017. *RE: URGENT - 17/00419/FUM Cornfields Burwell.*

East Cambridgeshire District Council (2020) *Growth Delivery and Masterplans*. Available at: **https://www.eastcambs.gov.uk/masterplans/growth-delivery-and-masterplans** (Accessed: April 2020).

Elm, D. R. and Nichols, M. L. (1993) 'An investigation of the moral reasoning of managers', *Journal of Business Ethics,* 12(11), pp. 817-833.

Erikson, E. H. (1980) *Identity and the life cycle.* New York: Norton.

Erreygers, G. and Vandevelde, T. (1997) *Is inheritance legitimate?: ethical and economic aspects of wealth transfers.* Berlin: Springer.

Essex County Council (2020) *The Essex Design Guide*. Available at: **https://www.essexdesignguide.co.uk/** (Accessed: 15 December 2020).

Fishbein, M. and Ajzen, I. (1975) *Belief, attitude, intention and behavior: an introduction to theory and research.* Reading, Mass.: Addison-Wesley.

Forrest, R., Kennett, T., Leather, P. and Joseph Rowntree, F. (1997) *Home owners on new estates in the 1990s.* Bristol: Policy Press.

Fox, M., Tost, L. P. and Wade-Benzoni, K. A. (2010) 'The Legacy Motive: A Catalyst for Sustainable Decision Making in Organizations', *Business Ethics Quarterly,* 20(2), pp. 153-185.

Frank, B. and Schulze, G. G. (2000) 'Does economics make citizens corrupt?', *Journal of Economic Behavior & Organization,* 43(1), pp. 101-113.

Gann, D., Salter, A. and Whyte, J. (2003) 'Design Quality Indicator as a tool for thinking', *Building Research & Information,* 31(5), pp. 318-333.

Gann, D. and Whyte, J. (2003) 'Design quality, its measurement and management in the built environment', *Building Research & Information,* 31(5), pp. 314-317.

Gasson, R. (1973) 'Goals and values of farmers', *Journal of Agricultural Economics,* 24(3), pp. 521-542.

Goffman, E. (1966) *Behavior in public places: notes on the social organization of gatherings.* 1st Free Press paperback edn. New York: Free Press.

Gonçalves, P. (2019) *HMRC Prepares For A Windfall As Britons Are At A Loss Dealing With IHT*: International Investment (Accessed: 11 December 2020).

Graham, W. K. and Balloun, J. (1973) 'Empirical test of Maslow's need hierarchy theory', *Journal of Humanistic Psychology,* 13(1), pp. 97-107.

Grant, A. M. and Wade-Benzoni, K. A. (2009) 'The hot and cool of death awareness at work: mortality cues, aging, and self-protective and prosocial motivations', *Academy of Management Review,* 34(4), pp. 600-622.

Grant, J. (2005) *Planning the Good Community: New Urbanism in Theory and Practice*: Taylor & Francis.

Greenberg, J. (1978) 'Effects of reward value and retaliative power on allocation decisions - justice, generosity, or greed', *Journal of Personality and Social Psychology,* 36(4), pp. 367-379.

Halloran, M. J. and Kashima, E. S. (2004) 'Social Identity and Worldview Validation: The Effects of Ingroup Identity Primes and Mortality Salience on Value Endorsement', *Personality and Social Psychology Bulletin,* 30(7), pp. 915-925.

Handgraaf, M. J. J., Van Dijk, E., Vermunt, R. C., Wilke, H. A. M. and De Dreu, C. K. W. (2008) 'Less Power or Powerless? Egocentric Empathy Gaps and the Irony of Having Little Versus No Power in Social Decision Making', *Journal of Personality and Social Psychology,* 95(5), pp. 1136-1149.

Hanley, S. J. and Abell, S. C. (2002) 'Maslow and relatedness: Creating an interpersonal model of self-actualization', *Journal of Humanistic Psychology,* 42(4), pp. 37-57.

Harlow Local Development Plan (2020). Available at: **https://www.harlow.gov.uk/planning-and-building-control/planning-policy/harlow-local-development-plan/harlow-local** (Accessed: 22 November 2020).

Harwood, E. and Powers, A. (2012) 'From Downturn to Diversity, Revisiting the 1970s', *Twentieth Century Architecture,* (10), pp. 8-35.

Haslett, D. W. (1997) 'Distributive justice and inheritance', *Is Inheritance Legitimate?:*

Ethical and Economic Aspects of Wealth Transfers, pp. 133-155.

Heidegger, M. and Hoeller, K. (2000) *Elucidations of Hölderlin's poetry.* Amherst, N.Y: Humanity Books.

Heidegger, M., Robinson, E. and Macquarrie, J. (1962) *Being and time.* Oxford: Basil Blackwell.

Higgott, A. and Wray, T. (2012) *Camera constructs: photography, architecture and the modern city.* Farnham: Ashgate.

Holmes, J. G., Miller, D. T. and Lerner, M. J. (2002) 'Committing altruism under the cloak of self-interest: The exchange fiction', *Journal of Experimental Social Psychology,* 38(2), pp. 144-151.

Homeowners Alliance, BLP and RESI (2019) *The HomeOwner Survey 6 years of housing concern trends with spotlight on leasehold, generation rent, new homes & home improvements.* Available at: **https://hoa.org.uk/wp-content/uploads/2019/08/2019_HomeOwner_survey_report.pdf** (Accessed: 28 January 2020).

Homes and Communities Agency (2008) *Housing Quality Indicators (HQI) Form*. Available at: **https://www.gov.uk/guidance/housing-quality-indicators** (Accessed: 11 December 2020).

Homes and Communities Agency (2009) *Affordable Housing Survey: A review of the quality of affordable housing in England*. Available at: **https://www.housinglin.org.uk/_assets/Resources/Housing/Support_materials/Other_reports_and_guidance/HCA_Affodable_Housing_survey.pdf** (Accessed: 17 November 2020).

Hopkirk, E. (2020) 'Urbed appointed to write model design code as part of planning reforms', *Building Design*. Available at: **https://www.bdonline.co.uk/news/urbed-appointed-to-write-model-design-code-as-part-of-planning-reforms/5107488.article** (Accessed: 25 January 2021).

Howard, E. (2015) *Garden cities of to-morrow: (being the second edition of "To-morrow : a peaceful path to real reform").* London: Forgotten Books.

Hunter, E. G. (2007) 'Beyond death: Inheriting the past and giving to the future, transmitting the legacy of one's self', *Omega-Journal of Death and Dying,* 56(4), pp. 313-329.

Hunter, E. G. and Rowles, G. D. (2005) 'Leaving a legacy: Toward a typology', *Journal of Aging Studies,* 19(3), pp. 327-347.

Huyssen, A. (1995) *Twilight memories: marking time in a culture of amnesia.* New York London: Routledge.

Ilbery, B. W. (1983) 'Goals and values of hop farmers', *Transactions of the Institute of British Geographers,* 8(3), pp. 329-341.

Jacobs, J. (1961) *The death and life of great American cities.* New York: Random House.

Jensen, M. C. (1994) 'Self interest, altruism, incentives, and agency theory', *Journal of Applied Corporate Finance,* 7(2), pp. 40-45.

Jensen, M. C. and Meckling, W. H. (1994) 'The nature of man', *Journal of Applied Corporate Finance,* 7(2), pp. 4-19.

Jonas, E., Schimel, J., Greenberg, J. and Pyszczynski, T. (2002) 'The Scrooge effect: Evidence that mortality salience increases prosocial attitudes and behavior', *Personality and Social Psychology Bulletin,* 28(10), pp. 1342-1353.

Julean, D. (2016) 'Why Architects See Things Differently. An Architectural Approach On Teaching Space Perception', *European Scientific Journal,* (April, Special Edition).

Katz, P. (1993) *The new urbanism: toward an architecture of community.* London: McGraw-Hill.

Khan, S. (2017) *Answer for Lifetime Homes*: The Mayor of London. Available at: **https://www.london.gov.uk/questions/2017/1915** (Accessed: 11 December 2020).

Khasreen, M. M., Banfill, P. F. G. and Menzies, G. F. (2009) 'Life-Cycle Assessment and the Environmental Impact of Buildings: A Review', *Sustainability,* 1(3).

Kings, D. and Ilbery, B. (2010) 'The Environmental Belief Systems of Organic and Conventional Farmers: Evidence from Central- Southern England', *Journal of Rural Studies,* 26(4), pp. 437-448.

Knight Frank (2020) *Building Better, Building Beautiful Commission: Cost & Value*. Available at: **https://www.knightfrank.co.uk/research/building-better-building-beautiful-commission-cost-value-2020-7017.aspx** (Accessed: 25 January 2021).

Knobloch-Westerwick, S. and Meng, J. B. (2009) 'Looking the Other Way Selective Exposure to Attitude-Consistent and Counterattitudinal Political Information', *Communication Research,* 36(3), pp. 426-448.

Kollewe, J. (2017) 'Why are Britain's new homes built so badly?', *The Guardian*. Available at: **https://www.theguardian.com/money/2017/mar/11/why-are-britains-new-homes-built-so-badly** (Accessed: 15 December 2020).

Koltko-Rivera, M. E. (2006) 'Rediscovering the later version of Maslow's hierarchy of needs: Self-transcendence and opportunities for theory, research, and unification', *Review of General Psychology,* 10(4), pp. 302-317.

Kotlikoff, L. J. (1992) *Generational accounting : knowing who pays, and when, for what we spend.* New York: Free Press.

Kotre, J. (1995) 'Generative outcome', *Journal of Aging Studies,* 9(1), pp. 33-41.

Krier, L. o. (1998) *Architecture: choice or fate.* Windsor, Berks, England: Andreas Papadakis.

Kvale, S. (1996) *InterViews: an introduction to qualitative research interviewing.* Thousand Oaks, Calif: Sage.

Lawler, E. E. and Suttle, J. L. (1972) 'Casual correlational test of need hierarchy concept', *Organizational Behavior and Human Performance,* 7(2), pp. 265-287.

Lawson, T. (1998) 'Economic science without experimentation / Abstraction', in Archer, M.S. (ed.) *Critical realism: essential readings*. London: Routledge, pp. 144-185.

Le Vine, S. and Jones, P. (2012) *On the Move: making sense of car and train travel trends in Britain*: RAC Foundation.

Lefaivre, L. and Tzonis, A. (2003) *Critical regionalism: architecture and identity in a globalized world. Architecture in focus* Munich: Prestel.

Leishman, C., Aspinall, P., Munro, M. and Warren, F. J. (2004) *Preferences, quality and choice in new-build housing*: Joseph Rowntree Foundation.

Lenclos, J.-P. and Lenclos, D. (2004) *Colors of the world: a geography of color.* New York: W.W. Norton.

Letwin, O. (2018) *Independent review of build out: final report*. Available at: **https://www.gov.uk/government/publications/independent-review-of-build-out-final-report** (Accessed: 25 January 2021).

Linquist, S. P. (2010) *The evolution of culture.* Farnham: Ashgate.

Locke, E. A. and Latham, G. P. (2002) 'Building a practically useful theory of goal setting and task motivation - A 35-year odyssey', *American Psychologist,* 57(9), pp. 705-717.

Lord, C. G., Ross, L. and Lepper, M. R. (1979) 'Biased assimilation and polarization - effects of prior theories on subsequently considered evidence', *Journal of Personality and Social Psychology,* 37(11), pp. 2098-2109.

Lynch, K. (1960) *The image of the city.* Cambridge, Mass.: MIT Press.

Marcoux, J. S. (2001) 'The 'casser maison' ritual - Constructing the self by emptying the home', *Journal of Material Culture,* 6(2), pp. 213-235.

Marwell, G. and Ames, R. E. (1981) 'Economists free ride, does anyone else - experiments on the provision of public goods', *Journal of Public Economics,* 15(3), pp. 295-310.

Maslow, A. H. (1973) *The farther reaches of human nature.* New York: Viking Press.

Maslow, A. H. and Frager, R. (1987) *Motivation and personality.* 3rd edn. New York: Harper & Row.

Masson, A. and Pestieau, P. (1997) 'Bequests motives and models of inheritance: A survey of the literature', *Is Inheritance Legitimate?: Ethical and Economic Aspects of Wealth Transfers*, pp. 54-88.

McAdams, D. P. (1996) *The stories we live by: personal myths and the making of the self.* New York: Guilford Press.

McCain, G. and Ray, N. (2003) 'Legacy Tourism: The Search for Personal Meaning in Heritage Travel', *Tourism Management,* 24(6).

Mendip District Local Plan 2006-2029 (2014). Available at: **https://www.mendip.gov.uk/localplan** (Accessed: 22 November 2020).

Mercier, H. and Sperber, D. (2017) *The enigma of reason: a new theory of human understanding.* London: Allen Lane.

Ministry of Housing Communities & Local Government 2017. First ever garden villages named with government support.

Ministry of Housing Communities & Local Government (2019a) *English Housing Survey 2018-2019*. Available at: **https://www.gov.uk/government/statistical-data-sets/tenure-trends-and-cross-tenure-analysis** (Accessed: 15 December 2020).

Ministry of Housing Communities & Local Government (2019b) *National Design Guide: Planning practice guidance for beautiful, enduring and successful places*. Available at: **https://www.gov.uk/government/publications/national-design-guide** (Accessed: 24 January 2020).

Ministry of Housing Communities & Local Government (2020a) *English Housing Survey 2019 to 2020*. Available at: **https://www.gov.uk/government/statistics/english-housing-survey-2019-to-2020-headline-report** (Accessed: 20 December 2020).

Ministry of Housing Communities & Local Government (2020b) *Planning for the future*. Available at: **https://www.gov.uk/government/consultations/planning-for-the-future** (Accessed: 16 September 2020).

Monin, B. and Miller, D. T. (2001) 'Moral credentials and the expression of prejudice', *Journal of Personality and Social Psychology,* 81(1), pp. 33-43.

Montada, L. (1998) 'Justice: Just a Rational Choice?', *Social Justice Research,* 11(2), pp. 81-102.

Morley, K. (2016) 'Britain's bungalow crisis: Chronic shortage means buyers pay up to twice as much for homes with no stairs', *The Telegraph*. Available at: **https://www.telegraph.co.uk/news/2016/07/19/britains-bungalow-crisis-chronic-shortage-means-buyers-pay-up-to/** (Accessed: 15 December 2020).

Morris, S. (2001) 'Market Solutions for Social Problems: Working-Class Housing in Nineteenth-Century London', *The Economic History Review,* 54(3), pp. 525-545.

National Planning Policy Framework (2019): Department for Communities and Local Government,. Available at: **https://www.gov.uk/government/publications/national-planning-policy-framework--2**.

Natural Colour System (2019) *Exterior Colour Design: some guidelines for exterior colour choice*. Available at: **https://www.ncscolour.co.uk/training/exterior-colour-design-3.html** (Accessed: 15 December 2020).

Neher, A. (1991) 'Maslow theory of motivation - a critique', *Journal of Humanistic Psychology,* 31(3), pp. 89-112.

Neuman, W. L. (2014) *Social research methods: qualitative and quantitative approaches.* 7th edn. Harlow, Essex: Pearson Education Limited.

Newhall residents 2018. Interviews with residents at Newhall. *In:* Socha, M. (ed.).

Nicol, S., Roys, M., Garrett, H. and BRE (2010) *The cost of poor housing to the NHS*: BRE.

Office for National Statistics (2019) *Living alone in the UK*. Available at: **https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/datasets/livingaloneintheuk** (Accessed: 11 December 2020).

Oxford dictionary of English. (2010) 3rd edn. Oxford: Oxford University Press.

Pallasmaa, J. (2007) 'Tradition and Modernity: The Feasibility of Regional Architecture in Post- Modern Society', in Canizaro, V.B. (ed.) *Architectural regionalism: collected writings on place, identity, modernity, and tradition*. New York: Princeton Architectural Press, pp. 129-139.

Park, J. (2017) *One Hundred Years of Housing Space Standards: What now?* Available at: **https://levittbernstein.co.uk/site/assets/files/2682/one_hundred_years_of_housing_space_standards.pdf** (Accessed: 25 January 2021).

Parker, B. and Unwin, R. (1901) *The art of building a home.* 2nd edn. London: Longmans, Green.

Parsons + Whittley (2017a) *Plan as Proposed 3292.11 Rev A*. [planning documentation]. Available at: **https://pa.eastcambs.gov.uk/online-applications/** (Accessed: 11 August 2020).

Parsons + Whittley (2017b) *Plan as Proposed 3292.15 Rev A*. [planning documentation]. Available at: **https://pa.eastcambs.gov.uk/online-applications/** (Accessed: 11 August 2020).

Parsons + Whittley (2017c) *Supporting Plan 3292.02 Rev A*. [planning documentation]. Available at: **https://pa.eastcambs.gov.uk/online-applications/** (Accessed: 11 August 2020).

Partridge, E. (1966) *Origins: a short etymological dictionary of modern English, 4th ed.* London: Routledge and Kegan Paul.

Pavlides, E. (2007) 'Four Approaches to Regionalism in Architecture', in Canizaro, V.B. (ed.) *Architectural regionalism: collected writings on place, identity, modernity, and tradition*. New York: Princeton Architectural Press, pp. 157-167.

Polletta, F. and Jasper, J. M. (2001) 'Collective identity and social movements', *Annual Review of Sociology,* 27, pp. 283-305.

Ponemon, L. A. (1992) 'Ethical reasoning and selection-socialization in accounting', *Accounting Organizations and Society,* 17(3-4), pp. 239-258.

Porter, T., Mikellides, B. and Μικελλίδης, Β. ρ. (2018) *Colour for architecture today.* 1st edn. London: Taylor & Francis.

Prentice, R., Guerin, S. and McGugan, S. (1998) 'Visitor learning at a heritage attraction: a case study of Discovery as a media product', *Tourism Management,* 19(1), pp. 5-23.

Prince of Wales (1989) *A vision of Britain: a personal view of architecture.* London: Doubleday.

Prince's Foundation (2020) *Walkability and mixed-use: Making valuable and healthy communities*. Available at: **https://princes-foundation.org/resources** (Accessed: 25 January 2021).

Prince's Foundation for Building Community (2016) *Building a Legacy: A landowner's guide to popular development.* Available at: **https://princes-foundation.org/resources** (Accessed: 17 September 2020).

Prince's Foundation for the Built Environment (2007) *Valuing Sustainable Urbanism*. Available at: **https://princes-foundation.org/resources** (Accessed: 25 January 2021).

Prince's Foundation for the Built Environment (2014) *Housing Communities: What people*

want. Available at: **http://www.housing-communities.org/** (Accessed: 25 January 2021).

Prince's Foundation for the Built Environment and University College of Estate Management (2019) *The value of community: An Evidence Informed Development Model*. Available at: **https://princes-foundation.org/resources** (Accessed: 17 September 2020).

Proctor and Matthews (2004) *Abode, Newhall: a residential community with a distinctive identity inspired by traditonal English market towns*. Available at: **https://www.proctorandmatthews.com/project/abode-newhall-0** (Accessed).

Pyszczynski, T., Greenberg, J. and Solomon, S. (1999) 'A dual-process model of defense against conscious and unconscious death-related thoughts: An extension of terror management theory', *Psychological Review,* 106(4), pp. 835-845.

Pyszczynski, T., Solomon, S. and Greenberg, J. (2015) 'Thirty Years of Terror Management Theory: From Genesis to Revelation', in Olson, J.M. and Zanna, M.P. (eds.) *Advances in Experimental Social Psychology, Vol 52 Advances in Experimental Social Psychology*. San Diego: Elsevier Academic Press Inc, pp. 1-70.

RIBA (2009) *Improving Housing Quality: Unlocking the Market*.

Richter, G. (2015) 'The Debt of Inheritance Revisited: Heidegger's Mortgage, Derrida's Appraisal', *Oxford Literary Review,* 37(1), pp. 67-91.

RICS (2016) *Placemaking and value*. Available at: **https://www.rics.org/globalassets/rics-website/media/upholding-professional-standards/sector-standards/land/placemaking_and_value_1st_edition.pdf** (Accessed: 25 January 2021).

Roberts-Hughes, R. (2011) *The case for space: the size of England's new homes*: RIBA.

Robinson, J. M. (1988) *The English country estate.* London: Century in association with the National Trust.

Rocha, H. O. and Ghoshal, S. (2006) 'Beyond self-interest revisited', *Journal of Management Studies,* 43(3), pp. 585-619.

Roger Evans Associates (2003) *dwg 766-102 Site Layout and Key Plans*. ref. HW/ST/03/00378. [planning documentation]. Available at: **https://planningonline.harlow.gov.uk/online-applications/** (Accessed: 28 January 2021).

Roger Evans Associates (2004) *dwg Newhall Phase II Built Form Masterplan_Redacted*. ref. HW/PL/04/00302. [planning documentation]. Available at: **https://planningonline.harlow.gov.uk/online-applications/** (Accessed: 28 January 2021).

Rogers, R. (2004) *City revival on course*: The Guardian. Available at: **https://www.theguardian.com/society/2004/aug/05/communities.regeneration**

(Accessed: 9 May 2022).

Rowlingson, K. and McKay, S. (2005) *Attitudes to inheritance in Britain*: Joseph Rowntree Foundation. Available at: **https://www.jrf.org.uk/report/attitudes-inheritance-britain** (Accessed: 11 October 2020).

Rozenblit, L. and Keil, F. (2002) 'The misunderstood limits of folk science: an illusion of explanatory depth', *Cognitive Science,* 26(5), pp. 521-562.

Russell, B. H. (2013) *Social research methods: qualitative and quantitative approaches.* 2nd edn. Los Angeles: SAGE Publications.

Ryan, R. M. and Deci, E. L. (2000a) 'Intrinsic and extrinsic motivations: Classic definitions and new directions', *Contemporary Educational Psychology,* 25(1), pp. 54-67.

Ryan, R. M. and Deci, E. L. (2000b) 'Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being', *American Psychologist,* 55(1), pp. 68-78.

Sachdeva, S., Iliev, R. and Medin, D. L. (2009) 'Sinning Saints and Saintly Sinners: The Paradox of Moral Self-Regulation', *Psychological Science,* 20(4), pp. 523-528.

Sallabank, J. and Daura, J. (2020) *Placemaking: A patient approach to creating communities*: Farrer & Co and ADAM Architecture. Available at: **https://www.farrer.co.uk/legal-services/property/placemaking-a-patient-approach-to-creating-communities/** (Accessed: 25 January 2021).

Santander (2019) *Santander First-Time Buyer Study. The future of the homeownership dream*. Available at: **https://www.santander.co.uk/assets/s3fs-public/documents/santander-first-time-buyer-study.pdf** (Accessed: 28 January 2021).

Savills (2016) *The Value of Placemaking*. Available at: **https://www.savills.co.uk/research_articles/229130/208527-0** (Accessed: 25 January 2021).

Sawyer, C. and Spero, M. (2015) *Succession, wills and probate.* 3rd edn. London: Routledge.

Sayer, A. (1992) *Method in social science: a realistic approach.* 2nd edn. London: Routledge, p. 86-93.

Seale, C. (2004) *Researching society and culture.* 2nd edn. London: SAGE.

Secured by Design: Homes (2019): Police Crime Prevention Initiatives. Available at: **https://www.securedbydesign.com/guidance/design-guides** (Accessed: 11 December 2020).

Sharp, D. and Rendel, S. (2008) *Connell Ward and Lucas: Modern movement architects in England 1929-1939.* 1st Frances Lincoln ed. edn. London: Frances Lincoln.

Shrimali, K. M. (1998) 'A Future for the Past?', *Social Scientist,* 26(9/10), pp. 26-51.

Shrubsole, G. and Powell-Smith, A. (2017) *What land does the Duchy of Cornwall own?*: Who owns England? Available at: **https://whoownsengland.org/2017/03/15/what-land-does-the-duchy-of-cornwall-own/** (Accessed: 15 December 2020).

Simon, H. A. (1957) *Models of Man, social and rational. Mathematical essays on rational human behavior in a social setting.* New York: John Wiley & Sons.

Skinner, B. F. (1953) *Science and human behavior.* New York: Free Press.

Sloman, S. A. and Fernbach, P. (2017) *The knowledge illusion: why we never think alone.* London: Macmillan.

Smith, A. and Sutherland, K. (1993) *An Inquiry into the nature and causes of the wealth of nations.* Selected edn. Oxford: Oxford University Press.

Smith, M. J. (1998) *Social science in question.* London: Sage Publications in association with the Open University.

Smith, N. B. (2016) *A Direct Planing Revolution for London?* : CREATE Streets. Available at: **https://www.createstreets.com/wp-content/uploads/2016/03/A-Direct-Planning-Revolution-for-London-February-2016-Final-3.pdf** (Accessed: 25 January 2021).

Sober, E. and Wilson, D. S. (2000) 'Summary of: 'Unto others - The evolution and psychology of unselfish behavior'', *Journal of Consciousness Studies,* 7(1-2), pp. 185-206.

Socha, M. 2018. Questionnaire with residents at Tadley Acres, Newhall and Burwell.

Sommer, R. (1969) *Personal space: the behavioral basis of design.* Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Spring, D. (1984) 'Land and Politics in Edwardian England', *Agricultural History,* 58(1), pp. 17-42.

Stakeholders 14 January 1994. *RE: Field Farm Development, Shepton Mallet.*

Stakeholders 2018. Interviews with stakeholders involved in the development of Tadley Acres, Newhall and Burwell. *In:* Socha, M. (ed.).

Starkey, J. (2017) 'Lord Best calls for 50 villages like Prince Charles's Poundbury', *The Times*. Available at: **https://www.thetimes.co.uk/article/lord-best-calls-for-50-villages-like-prince-charles-s-poundbury-zg5xc9wmf** (Accessed: 15 December 2020).

Strutt & Parker and Rural Housing Solutions (2017) *Rural Affordable Housing on Rural Exception Sites: A hands-on guide for landowners.* Available at: **https://www.struttandparker.com/publications/demystifying-affordable-housing-a-hands-on-guide-for-landowners** (Accessed: 25 January 2021).

Stryker, S. and Burke, P. J. (2000) 'The past, present, and future of an identity theory', *Social Psychology Quarterly,* 63(4), pp. 284-297.

Swenarton, M. (1989) 'Raymond Unwin: The Education of an Urbanist', *Artisans and architects: the Ruskinian tradition in architectural thought*. Basingstoke: Macmillan, pp. 126-166.

Swenarton, M. (2011) 'Geared to producing ideas, with the emphasis on youth: the creation of the Camden borough architect's department under Sydney Cook', *Journal of Architecture,* 16(3), pp. 387-414.

Swenarton, M. (2012) 'Developing a new format for urban housing: Neave Brown and the design of Camden's Fleet Road estate', *The Journal of Architecture,* 17(6), pp. 973-1007.

Sykes, D. (2019) *What is the average energy bill in the UK?*: Octopus Energy. Available at: **https://octopus.energy/blog/what-is-the-average-energy-bill-in-the-uk/** (Accessed: 15 December 2020).

Tadley Acres residents 2003. *RE: Objection letters to Mendip District Council regarding planning application Ref. 106714/026.*

Tadley Acres residents 2018. Interviews with residents at Tadley Acres. *In:* Socha, M. (ed.).

Taormina, R. J. and Gao, J. H. (2013) 'Maslow and the Motivation Hierarchy: Measuring Satisfaction of the Needs', *American Journal of Psychology,* 126(2), pp. 155-177.

Taylor, M. (2015) *Garden Villages: Empowering localism to solve the housing crisis*, London: Policy Exchange.

Tetlow King *Tadley Acres house types*. [planning documentation] (Accessed).

Tuckett, I. (1988) 'Coin Street - There is another way', *Community Development Journal,* 23(4), pp. 249-257.

Turner, J. C. (1987) *Rediscovering the social group: a self-categorization theory.* Oxford: Basil Blackwell.

Turner, J. C., Brown, R. J. and Tajfel, H. (1979) 'Social comparison and group interest in ingroup favoritism', *European Journal of Social Psychology,* 9(2), pp. 187-204.

Unwin, R. (1994) *Town planning in practice: an introduction to the art of designing cities*

and suburbs. New York: Princeton Architectural Press.

Vroom, V. H. (1982) *Work and motivation.* [Corrected reprint] edn. Malabar, Fla.: R.E. Krieger Pub. Co.

Wade-Benzoni, K. A., Sondak, H. and Galinsky, A. D. (2010) 'Leaving a Legacy: Intergenerational Allocations of Benefits and Burdens', *Business Ethics Quarterly,* 20(1), pp. 7-34.

Wade-Benzoni, K. A., Tost, L. P., Hernandez, M. and Larrick, R. P. (2012) 'It's Only a Matter of Time', *Psychological Science,* 23(7), pp. 704-709.

Walker, T. (2016) *On Solid Ground - Encouraging landowners to invest in rural affordable housing*: CPRE. Available at: **http://www.cpre.org.uk/resources/housing-and-planning/housing/item/4425-on-solid-ground** (Accessed: 11 December 2020).

Watson, K. J., Evans, J., Karvonen, A. and Whitley, T. (2016) 'Re-conceiving building design quality: A review of building users in their social context', *Indoor and Built Environment,* 25(3), pp. 509-523.

Watts, V. and Stock, C. 2018. Render: A false economy? [unpublished].

Weir, S. (2017) *Purposeful design for homes and communities: Design Council response to the Housing White Paper*. Available at: **https://www.designcouncil.org.uk/resources/report/purposeful-design-homes-and-communities** (Accessed: 18 February 2018).

West Oxfordshire District Council (2019) *The Blenheim Estates-WODC Affordable Housing Partnership: A New Approach to the Delivery of Affordable Housing in West Oxfordshire*. Available at: **https://www.westoxon.gov.uk/media/pe0p0tlu/the-blenheim-estates-wodc-affordable-housing-partnership.pdf** (Accessed: 17 September 2020).

White, R. E. (2000) 'On Maslow, monkeys. and evolution', *Academy of Management Review,* 25(4), pp. 697-699.

Whitehouse, C. and King, L. C. (2013) *A modern approach to wills, administration and estate planning (with precedents).* 2nd edn. Bristol: Jordans.

Whyte, W. H., Jr. and Conservation, F. (1980) *The social life of small urban spaces.* Washington, D.C: Conservation Foundation.

Wolf, C. (2016) *The SAGE Handbook of Survey Methodology* Los Angeles: Sage Reference. Available at: **http://sk.sagepub.com/reference/the-sage-handbook-of-survey-methodology** (Accessed: 25 January 2017).

Your Harlow (2019) 'Criticism of Newhall houses over low number of affordable homes'.

Available at: https://www.yourharlow.com/2019/03/22/criticism-of-newhall-houses-over-low-number-of-affordable-homes/ (Accessed: 15 December 2020).

Appendix A: Housing standards, guidance and indicators

Building for Life

Building for Life (BfL) is a government-endorsed standard created by CABE[61] (together with the Home Builders Federation, Design for Homes and the Civic Trust) in order to measure and assess design quality, promote high quality schemes and support consultation and community participation (Birkbeck and Kruczkowski, 2015). It serves as a guide and design tool for developers and local authorities and focuses on the design of urban environment. The Built for Life quality mark is granted based on the following criteria:

- The character of the development;
- Footways and paths;
- Bus stops and car parking;
- Clear definition of private and public space;
- Facilities and services, e.g., public transport;
- The design of streets and spaces, e.g., landscaping, design of street corners, design of homes (to be tenure-blind);
- Providing a suitable housing mix (building types and tenures).

Code for Sustainable Homes / Home Quality Mark

The Code for Sustainable Homes (CSH), which now has been abandoned, used to be a government owned standard developed by BRE that focused on sustainable design. It covered the following issues:

- Energy performance and carbon emissions
- Water and waste management

[61] CABE used to be publicly funded, mostly by the Department for Communities and Local Government, but it now has been incorporated into the Design Council – an independent charity.

- Materials
- Pollution
- Health and Wellbeing
- Management
- Ecology

Following the Housing Standards Review in 2012, the CSH has been abandoned and some of the issues covered by the code are now included in the building regulations. A new voluntary sustainability standard was introduced instead (the Home Quality Mark) in order to recognise schemes that exceed minimum regulations (developers might use to promote their scheme, but local authorities cannot demand it) (Clark, 2015).

Lifetime Homes

Lifetime Homes was developed by the Joseph Rowntree Foundation and focuses on the issues of accessibility, adaptability and inclusive design, intended to make homes more adaptable for lifetime use. Some of the issues it refers to include:

- Car parking width.
- Entrances and access to the home.
- Communal stairs and lifts, doorways, hallways.
- Space to turn and move around.
- Bathroom and WC layout.
- Sockets and controls.

Lifetime Homes standard can be required by local planning policies, e.g. London Plan (Khan, 2017). Some of the Lifetime Homes guidelines were incorporated into the CSH (CABE, 2010).

Manual for Streets

Manual for Streets (Department for Transport, 2007) is a technical guidance concerning the design of residential streets, which meet the needs of all users and encourages more walkable and pedestrian friendly neighbourhoods. It does not constitute a legal requirement, however, many of its recommendations have been incorporated into other regulations and policies.

Secured by Design

Secured by Design (SBD) is the UK Police initiative focused on crime prevention through the use of design measures and security standards and is supported by the Home Office and the Department for Communities and many Local Authorities (*Secured by Design: Homes*, 2019). Housing estates designed to SBD standards reportedly experienced lower crime rates (CABE, 2010).

Housing Quality Indicators

Housing Quality Indicators (HQIs) are a measurement and assessment tool used to evaluate housing

schemes funded by the Homes and Communities Agency (Homes and Communities Agency, 2008). Funding is allocated based on the HQIs scores, which refer to both the design of homes as well as its context and surroundings. These include:

- location;
- visual impact, layout and landscaping;
- open space;
- routes and movement;
- unit size;
- unit layout;
- noise, light, services and adaptability;
- accessibility within the unit;
- sustainability;
- external environment (assessed based on Building for Life criteria).

Appendix B: List of issues investigated through interviews with stakeholders and residents

List of issues investigated through interviews with the stakeholders and residents (the exact questions differed depending on the specific nature of each of the case studies and on each of the interviewees):

1. Information related to land ownership and estate management (landowners only)
2. Groups and associations that interviewees identify themselves with (including political affiliations)
3. Professional experience and involvement in the project
4. Details related to a particular housing scheme
5. Interviewees' opinions on landowners' role in the development process
6. Main opportunities and obstacles to landowners' involvement in housing projects (e.g., the role of financial incentives or skills and knowledge)
7. Interviewees' personal values and their reflection in the project
8. Relation with local community
9. Connection to the countryside
10. Interviewees' perceptions on quality control, e.g., standards and indicators, building codes
11. Interviewees' perceptions on housing quality, e.g., which aspects of housing quality are the most important to them
12. Interviewees' experiences related to leaving or receiving an inheritance
13. Interviewees' thoughts on inheritance tax
14. Interviewees' conceptualizations of housing developments as legacy projects
15. Interviewees' thoughts on different types of legacy (including negative legacy)
16. The relationships between various stakeholders
17. Factors that facilitate and restrain landowners' control over development process and assessment of their impact.

18 The importance of different types of legacy, e.g. Is the legacy of values more important than material legacy? Does that depend on interviewee's financial situation?

19 The consequences of inheritance tax, e.g., spending rather than leaving an inheritance.

20 The relation between land ownership and attitude to housing development (differences in attitudes between various stakeholders, e.g., landowners as stewards rather than consumers).

21 Retrospective bequests, i.e. To what extent bequeathing patterns are influenced by interviewees' parents and their values?

22 The hierarchical order of extrinsic motives, e.g. Are wealthier landowners less motivated by financial incentives such as tax exemptions, grants and subsidies? Are landowners unlikely to embark on projects that serve the general community rather than their personal interests unless their financial situation is secured?

23 The relation between personal wealth and legacy motive, e.g. Are wealthier people more preoccupied with what happens to their material possessions after their death? Does it undermine the hierarchical order of motives?

24 The relation between extrinsic and intrinsic motives, e.g. Do external rewards undermine intrinsic motives or does intrinsic and extrinsic motives act alongside each other? Is most behaviour in our adult life extrinsically motivated? Do extrinsic motives lead to protectionist views on countryside and anti-development attitudes?

25 The relation between motives, cognition and identity, e.g. Which of these has the strongest influence over landowners' decision-making? Do landowners' skills and knowledge influence their decision to get involved in housing development? Do they do it even despite the lack of knowledge? Are interviewees' personal and collective values reflected in housing projects they were involved with?

26 Illusion of explanatory depth, e.g. Do interviewees (landowners in particular) believe to know more about the development process than they actually do?

27 Confirmation bias, e.g. How likely are the interviewees to change their perceptions on housing quality?

28 Do people have an intrinsic (and altruistic) tendency to save up in order to secure their children's future?

29 The relation between political affiliation and understanding of legacy, e.g. Do politically conservative interviewees understand a positive legacy as one that reinforces tradition and existing social order (with a particular emphasis on the social status of their own family) and vice versa?

30 Moral license, e.g. Are various stakeholders (landowners in particular) favouring their own in-group interests at the expense of other people?

31 Power imbalance, e.g. Do more powerful stakeholders take more social responsibility

for their actions?

32 Relation between estate management and legacy motive, i.e. Does a legacy motive play a less significant role on the estates managed by professional land agents? Are estate agents more prone to favour self-interest over the interest of others?

33 Do landowners as a group emphasize responsibility to future generations more than other stakeholders? Does that impact their understanding and motivation to leave a legacy?

Appendix C: Tadley Acres design vs. Shepton Mallet architecture

Shepton Mallet	Tadley Acres
	
	

















Appendix D: Newhall design vs. Harlow architecture

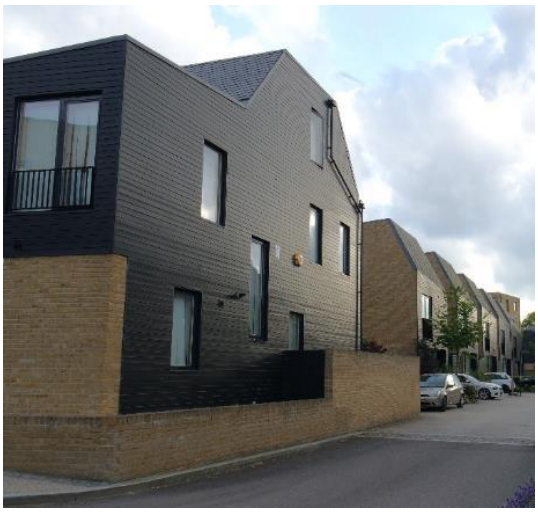
Harlow	Newhall
	
	


© 2020 Google


© 2020 Google


© 2020 Google






© 2020 Google




© 2020 Google




© 2020 Google


© 2020 Google


© 2020 Google


© 2020 Google


© 2020 Google


© 2020 Google



Appendix E: House price analysis

One of the aspects of material legacy is the financial value of the houses that are being built. This means both the prices at which houses originally sell as well as the long-term value of the property that potentially benefits the homeowners. Therefore, the following house price analysis (restricted to two commercial schemes where houses were sold on the open market – Tadley Acres and Newhall) seeks to answer two main questions: first of all, was there a premium on the properties located on those estates; and secondly, did the value of the houses increase over time, which is particularly relevant when talking about lasting legacy.

There is a distinction made between Tadley Acres North (dwellings located north from the school site) and Tadley Acres South (dwellings located south from the school site) due to significant differences in design, density, property mix and property sizes. Similarly, sale values at Newhall Be – the most architecturally distinctive and publicized part of the scheme – are also analysed separately in order to investigate the impact of this particularly innovative design.

* * *

Data sources

The analysis is based on the sales values obtained from the Land Registry and a subscription service called Land Insight, which is intended to help developers find the right sites to purchase and includes information on land ownership, planning applications, sales prices and property details. The data from Land Insight, unlike the Land Registry, includes information on house sizes (square footage and/or number of bedrooms), which allows for a more detailed analysis. Unfortunately, the Land Insight data is quite limited – only selected properties are included, and the data does not go further back than 2013. For these reasons the Land Insight data might be less reliable, and therefore, it was decided that if at any point the Land Insight data seems to be contradictory to the Land Registry, it should be deemed invalid and disregarded.

Tadley Acres

The data from the Land Registry for Shepton Mallet area was scanned for any distinctive or atypical values that might skew the results.[62] There were two entries at £250,000 that clearly stood out from other sales (see Figure 102) and another property that sold at outstandingly low £7,650. Those three values were excluded from further analysis.

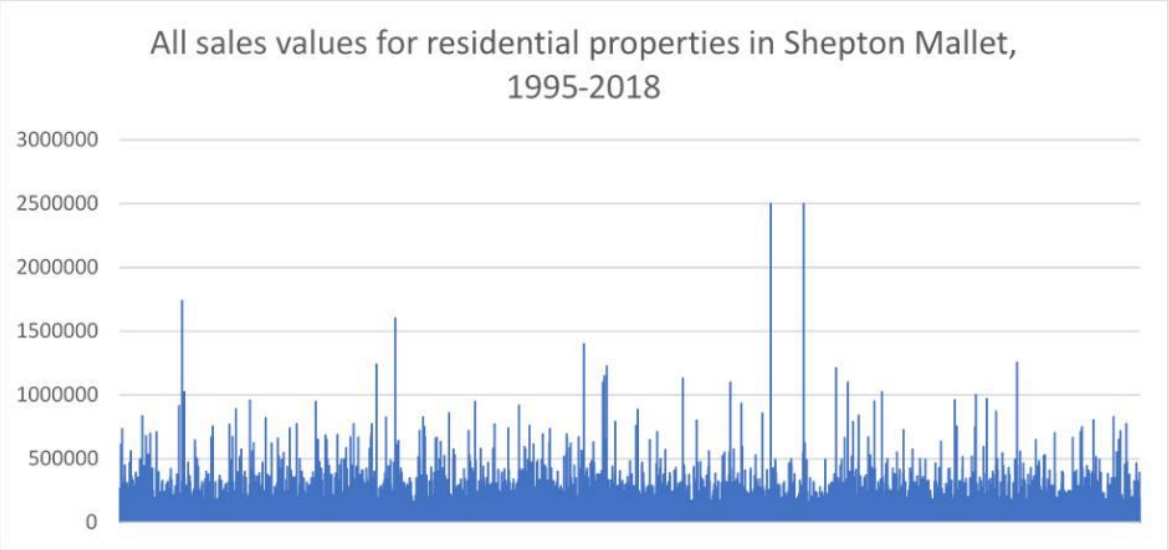


Figure 102: Sales values for residential properties in Shepton Mallet, 1995-2018.

Furthermore, the data from the Land Registry, which includes neighbouring localities and villages, shows that the average sales prices for the entire area are significantly higher than the average prices for the town itself. This suggests that there is a premium on more rural locations, which in itself is not surprising having in mind the ideal of countryside living, so popular in the UK, as well as a debateable attractiveness of Shepton Mallet. Consequently, as the Tadley Acres development is located within the built-up area of the town, it seemed reasonable to exclude neighbouring localities from further analysis (see Figure 103).[63]

[62] There are several reasons why some sales might stand out significantly from the average prices. For instance, a sale of a large luxurious mansion might surpass the local market several times, while a derelict property would sell for a fraction of average prices. Including such properties in the analysis was deemed unhelpful and disruptive to the purpose of this research.

[63] The three atypical sales discussed above refer to properties located outside the built-up area shown in Figure 103 and therefore would be excluded anyway at this stage.

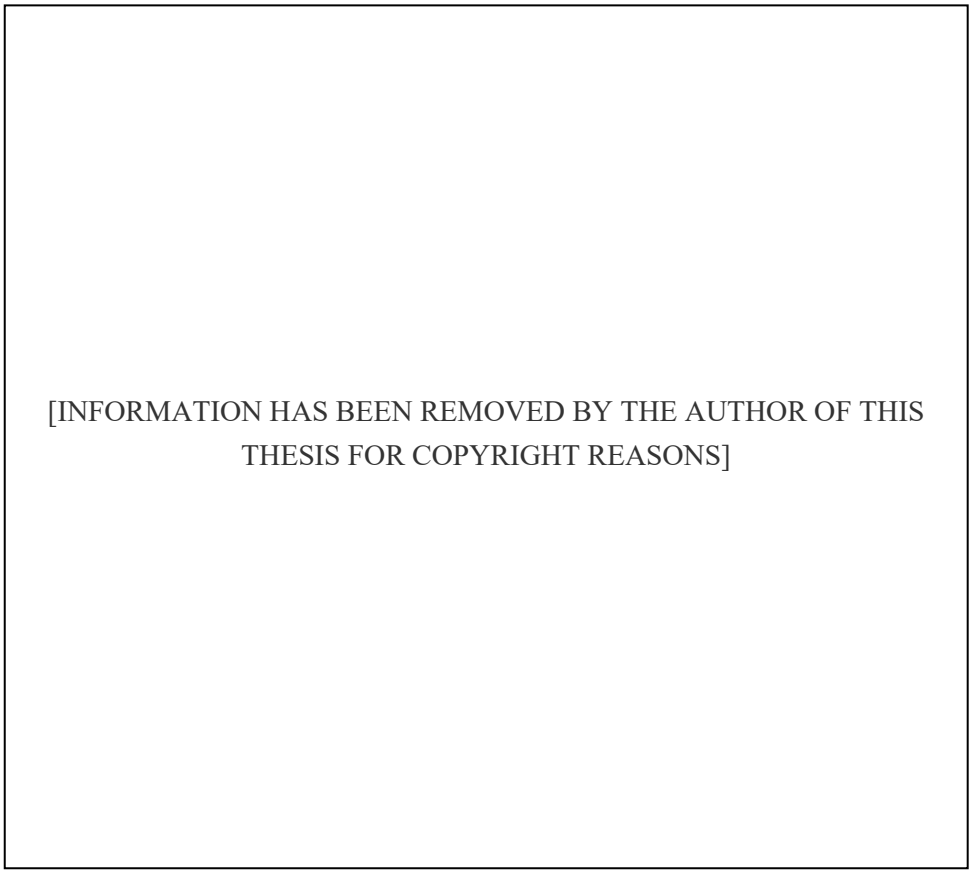


Figure 103: The area considered in the analysis of house prices at Tadley Acres.

Newhall

The same steps were repeated for the Land Registry data for Harlow area. The area of Harlow that was considered in the analysis corresponds with the local authority boundary (see Figure 104). This also excluded the detached "cottage" property in Matching Green sold for £2,325,000, which is the only one that significantly stands out from other residential sales (see Figure 105). Another terraced property sold at a low £1,000 was also ignored.

[INFORMATION HAS BEEN REMOVED BY THE AUTHOR OF THIS THESIS FOR COPYRIGHT REASONS]

Figure 104: The area considered in the analysis of house prices at Newhall.

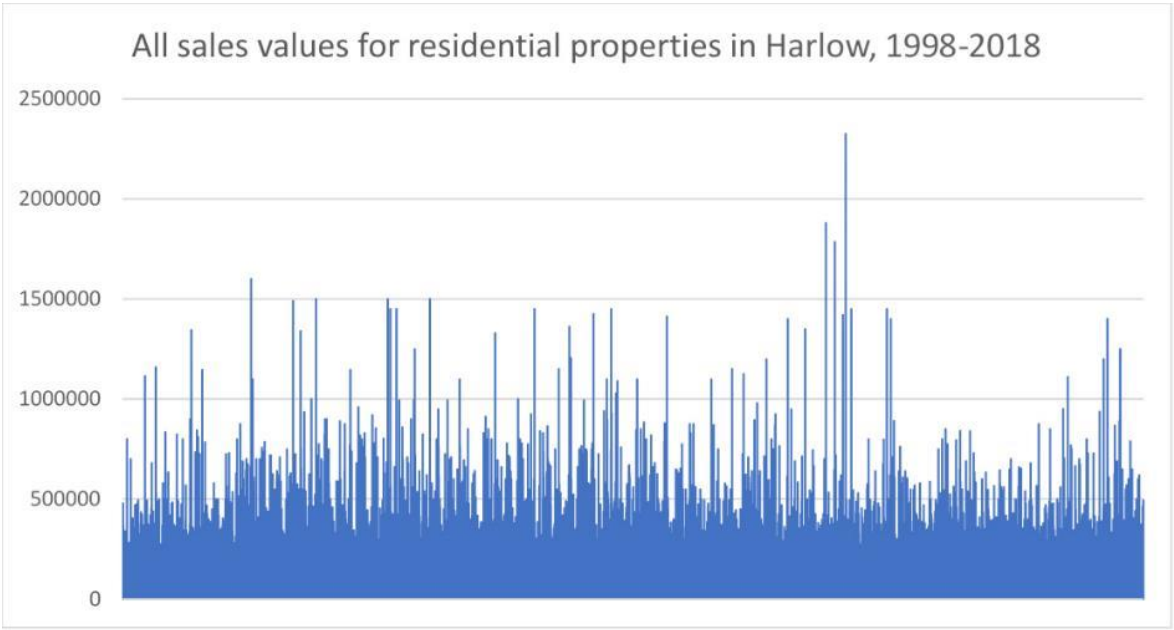


Figure 105: Sales values for residential properties in Harlow, 1998-2018.

* * *

Local market

The average prices in Shepton Mallet in 2017 were £123,000 for flats, £175,000 for terraced, £216,000 for semi-detached and £288,000 for detached properties, while in Harlow the prices ranged from £174,000 for flats and £280,000 for terraced to £350,000 for semi-detached and £481,000 for detached (based on Land Registry data).

Higher prices in Harlow might be caused by its attractive location right next to M11, which makes it only about 20 minutes' drive away from London and Stansted Airport. However, compared to other towns and cities located at a similar distance from London (i.e., Hemel Hempstead New Town, Welwyn Garden City, city of Chelmsford), prices in Harlow are relatively low. Shepton Mallet also benefits from the proximity to major centres of employment, namely Bristol and Bath, but (just as in Harlow) the average house prices are lower than in other neighbouring towns and cities such as Wells or Frome.[64]

This means that homebuyers' money goes a little bit further in Shepton Mallet and Harlow, both of which can be considered relatively affordable compared to other similar locations, and therefore, they potentially attract buyers for whom the price of a property is a crucial issue.

Furthermore, the average prices for new builds in Shepton Mallet and in Harlow are generally higher than the average prices including resale values (this is true for all property types except detached), suggesting that there is a premium on new builds in both towns. This is more evident in Harlow than in Shepton Mallet (see Figure 106 and Figure 107), perhaps as a result of Harlow being a New Town with more contemporary architecture and shortage of traditional housing (preferred by many homebuyers), which causes homebuyers to choose from the new housing stock instead.

[64] Wells and Frome might seem more attractive to the homebuyers due to their historic sites, thriving town centres and shopping facilities.

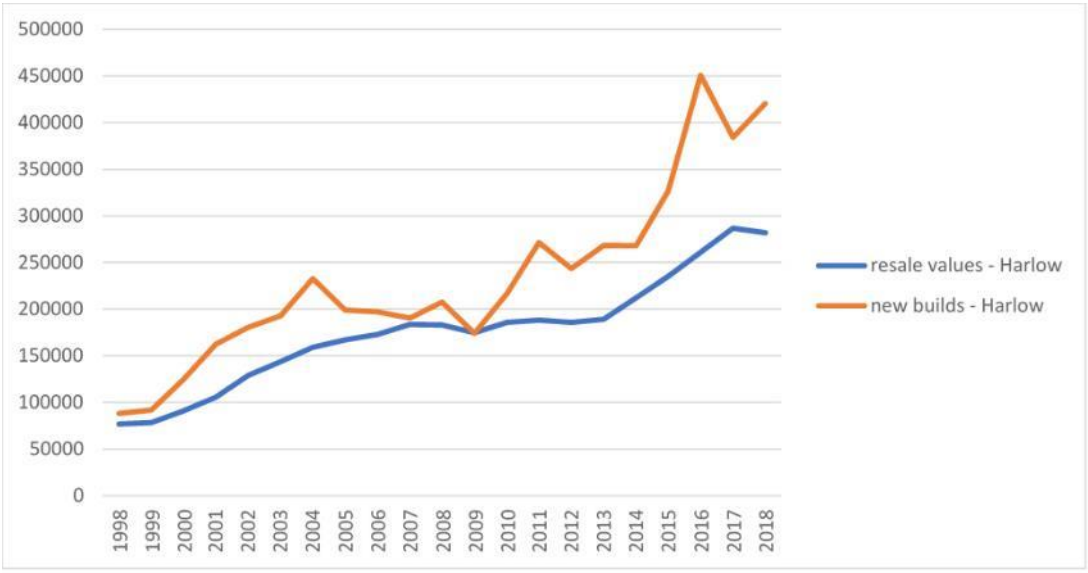


Figure 106: Average house prices for new builds in Harlow compared to the average resale values – all property types.

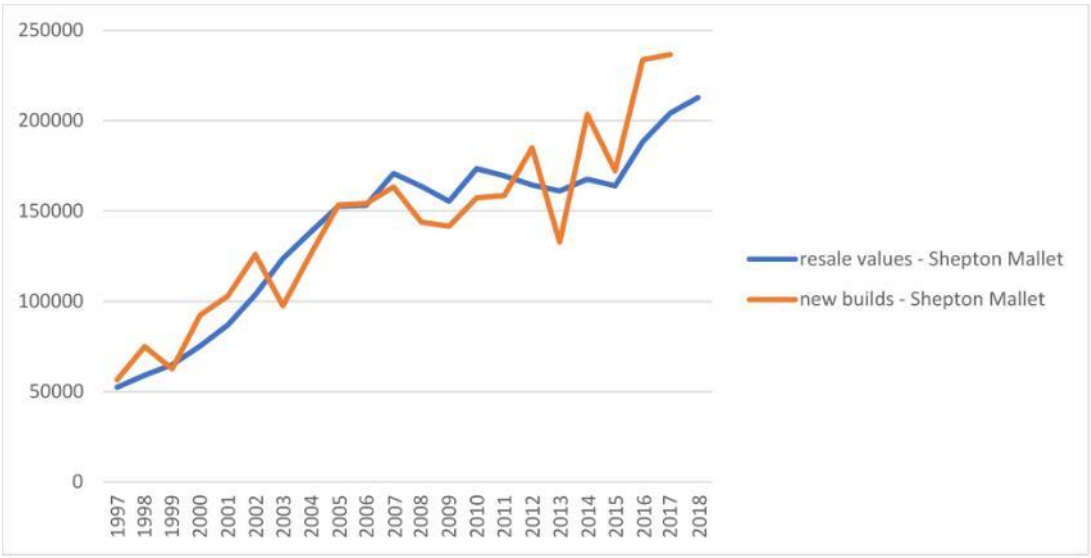


Figure 107: Average house prices for new builds in Shepton Mallet compared to the average resale values – all property types.

* * *

How premiums on house sales values were calculated?

One of the crucial issues when calculating the premiums on house sales was to account for the significant differences resulting from inflation, as the analysis spanned over 20 years. For this reason, it was not possible to use an overall average of all house sales at the considered schemes (e.g., the southern part of Tadley Acres was always going to achieve higher sales values as it was built later than the northern part of the scheme). Instead, the yearly averages were calculated and then compared with yearly average house prices in the local area. The result was a percent difference between

average yearly prices at the considered schemes and average yearly prices in the local area (this was considered more appropriate than taking a simple average of all yearly premiums as percent values are not comparable – e.g., 5% of a higher value might actually constitute a higher profit than 10% of a lower value).

Also, the premiums were calculated for each property type separately in order to neutralize, at least to some extent, the differences resulting from property size, which is not specified in the Land Registry. Comparing average prices for all property types was deemed not reliable due to different housing mix at Tadley Acres and Shepton Mallet, as well as Newhall and Harlow (see Figure 108 and Figure 109). Prevalence of detached properties and absence of flats at Tadley Acres North (TA N) means that the average property size is relatively high and would result in misleadingly high premiums for the northern part of the scheme. On the other hand, relatively high number of flats and low number of detached properties at Tadley Acres South (TA S) means that the average property size is relatively low and would result in misleadingly low premiums. Correspondingly, the overall value for entire Tadley Acres would also be misleadingly high. Similar issues occur when calculating premiums for Newhall, where housing mix is also different from Harlow (Figure 109).

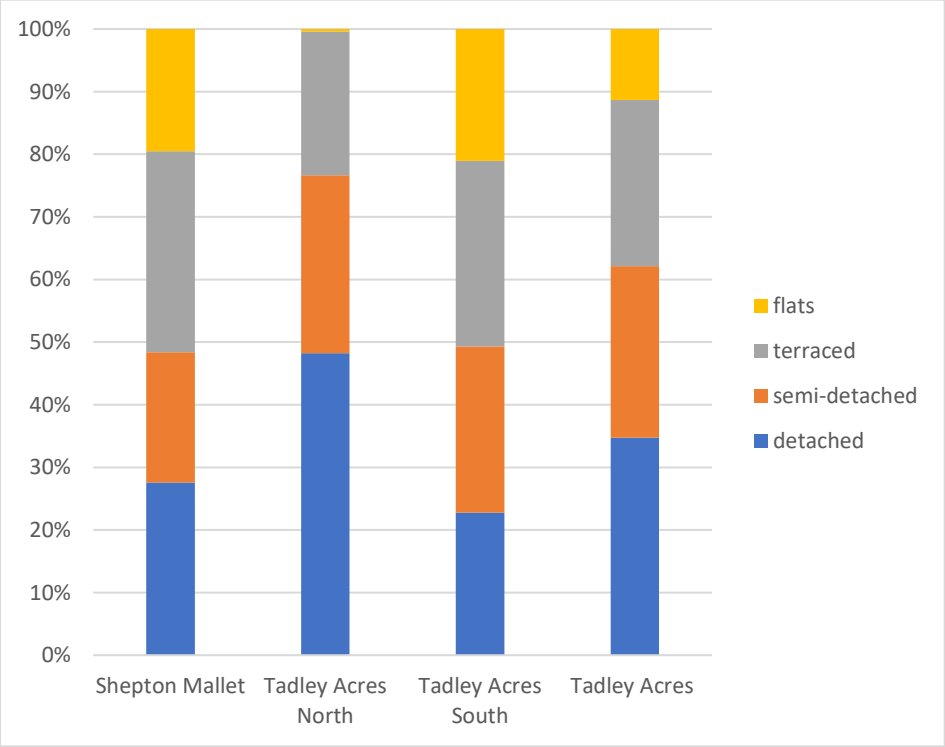


Figure 108: Property types at Tadley Acres and in Shepton Mallet based on the transactions in the Land Registry.

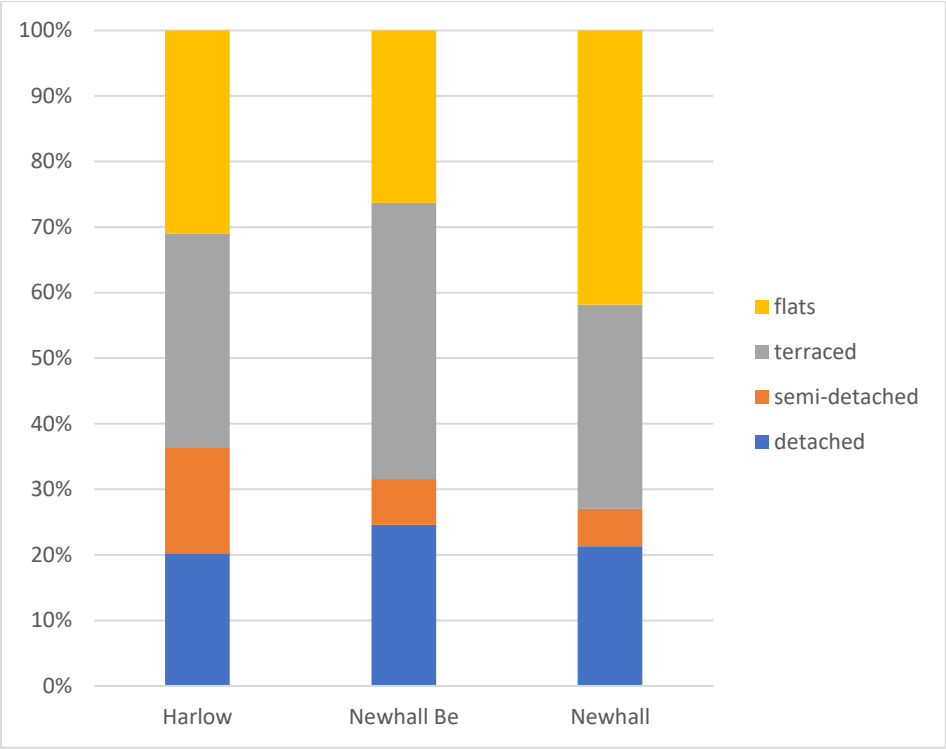


Figure 109: Property types at Newhall and in Harlow based on the transactions in the Land Registry.

* * *

Is there a premium on properties at Tadley Acres and Newhall?

Land Registry

Based on the Land Registry data, Tadley Acres achieved higher sales prices overall than properties in Shepton Mallet (see Figure 110). The highest difference can be observed for terraced properties (see Figure 111) and then semi-detached properties, both of which sold slightly better at the southern part of the scheme (see **Appendix F** for graphs for all property types).

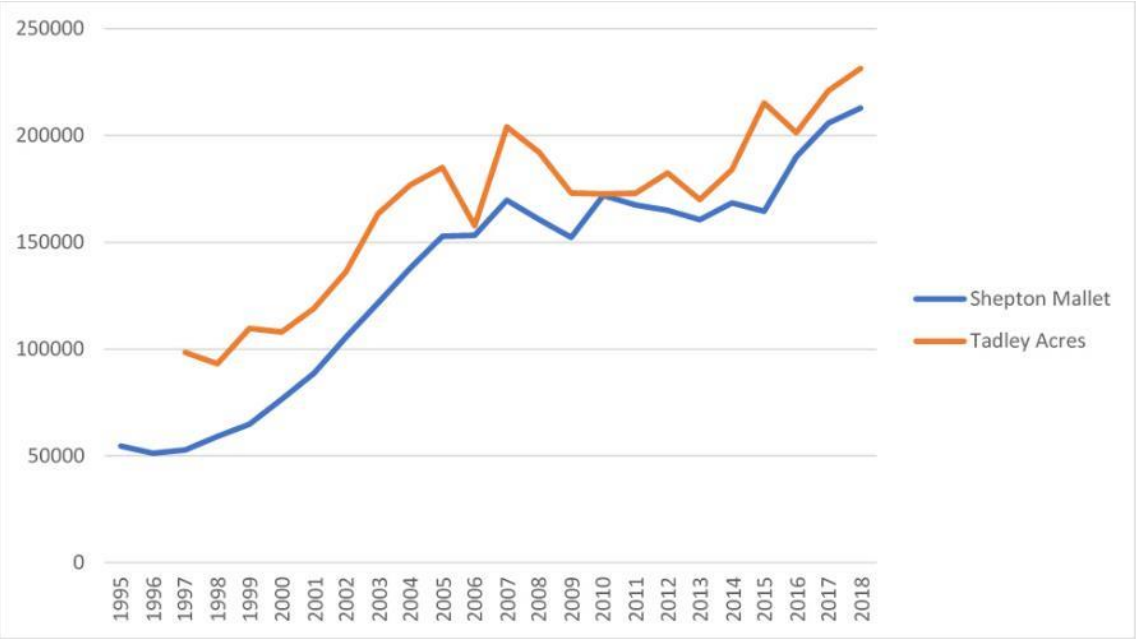


Figure 110: Average prices at Tadley Acres and in Shepton Mallet – all property types.

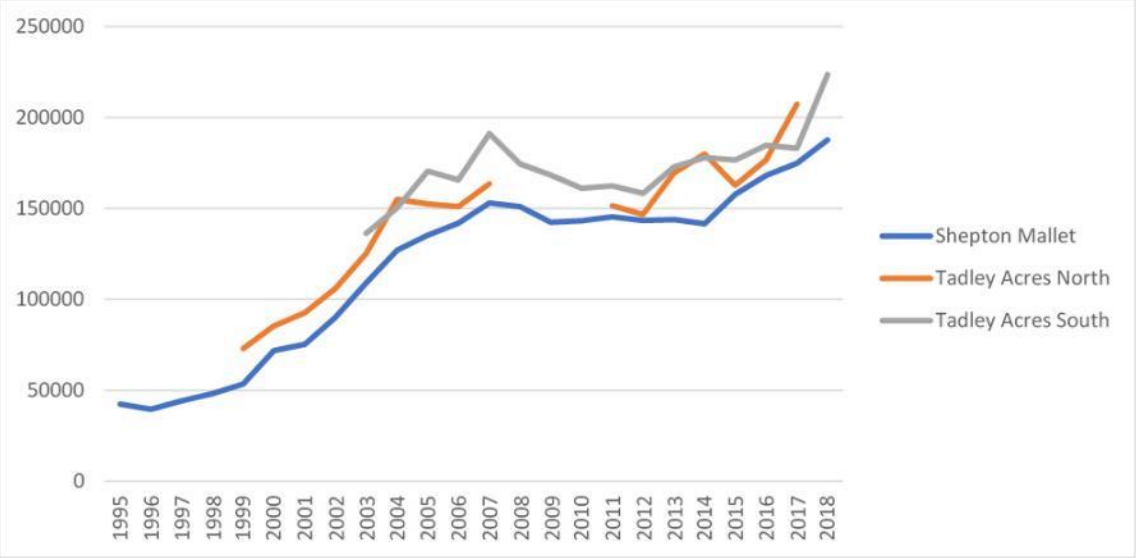


Figure 111: Average prices at Tadley Acres North, Tadley Acres South and in Shepton Mallet – terraced properties (freehold only).

Newhall also achieved higher sales prices compared to the local market (see Figure 112). This is true for all property types except for detached houses (see Figure 113), with the highest premiums observed on terraced properties and flats (see **Appendix G**).

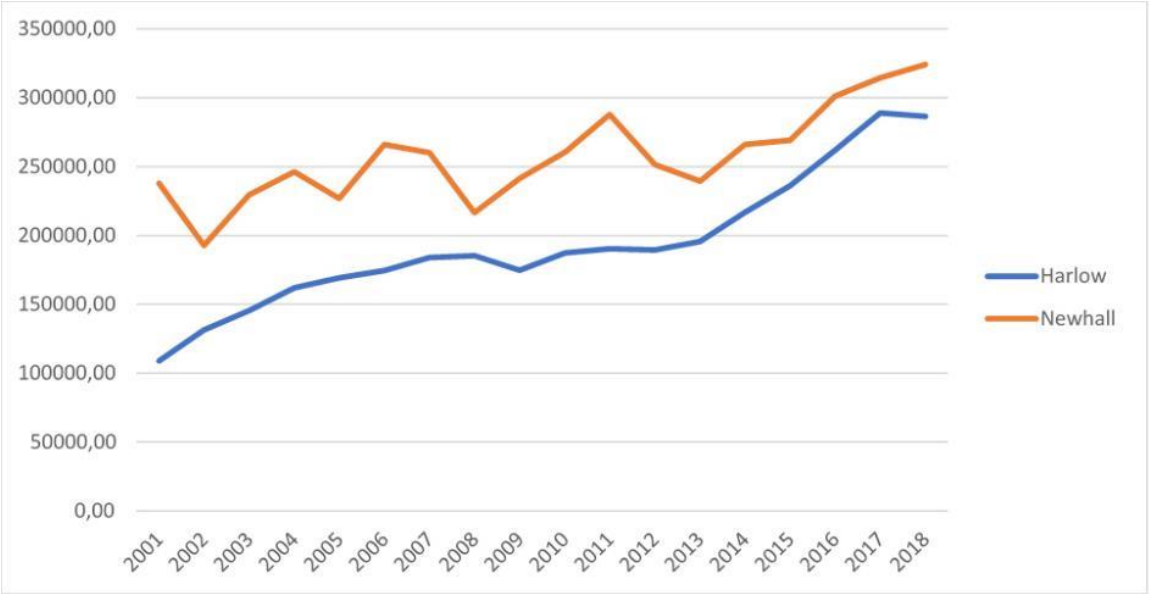


Figure 112: Average prices at Newhall and in Harlow – all property types.



Figure 113: Average prices at Newhall and in Harlow – detached properties (freehold only).

The data presented on the above charts includes all registered sales, which means that the results are heavily influenced by resale values. Therefore, in order to check how commercially successful, the considered schemes actually were, the premiums on initial sale were calculated.

At Tadley Acres, all property types achieved premiums compared to the average house prices in Shepton Mallet, with terraced properties being the most profitable across the entire estate (Table 15). Both Tadley Acres North and Tadley Acres South achieved highest premiums on terraced properties – 12.45% and 16.64% respectively (though the differences between property types at Tadley Acres North were marginal). Also, detached properties at Tadley Acres South were much less popular than at Tadley Acres North and achieved significantly lower premiums (3.45% compared to 11.42%).

Table 15: Average yearly premiums on initial sale at Tadley Acres.

	average yearly premiums					
	compared to Shepton Mallet			compared to new builds in Shepton Mallet		
	TA N	**TA S**	**TA**	**TA N**	**TA S**	**TA**
detached	11.42%	3.45%	**6.01%**	-8.18%	6.62%	**9.01%**
semi-detached	9.31%	10.36%	**10.17%**	-5.55%	5.27%	**5.60%**
terraced	12.45%	16.64%	**16.38%**	2.73%	0.90%	**0.42%**
flats	-	12.58%	**12.58%**	-	-2.92%	**-2.92%**

The situation is less clear-cut when comparing the initial sales values at Tadley Acres with average house prices of new builds in Shepton Mallet (Table 15). Here it seems that while the scheme overall sold at a premium, at the northern part of the estate only terraced properties achieved higher prices than other new builds in Shepton Mallet.[65] This is understandable due to overall premium on new build properties and suggests that Tadley Acres was not as successful as it might have initially seemed (particularly Tadley Acres North). Furthermore, due to a low number of new builds in Shepton Mallet (see Figure 114), the resulting premiums are strongly influenced by the standard and size of the properties built in Shepton Mallet each particular year. For these reasons, Shepton Mallet new-build market was not considered a reliable benchmark and the only conclusion that can be made based on the available data is that overall Tadley Acres was more profitable than other new builds in the local area (with the exception of flats, which nevertheless constitute only about 11% of the entire scheme).

[65] Notably, some premiums for the entire estate were higher or lower than any of the corresponding values for Tadley Acres North and Tadley Acres South. This is due to the overall values being heavily driven by sales at the southern part of the estate, which first of all, includes higher number of properties, and secondly, has higher average prices due to inflation (meaning that 5% premium at Tadley Acres South constitutes a higher profit than 5% at Tadley Acres North). For these reasons, it is perfectly possible for the overall value for the entire estate to be higher (only if the value for Tadley Acres South is the higher one) or lower (only if the value for Tadley Acres South is the lower one) than any of the constituent values.



Figure 114: Sales values for new-build detached properties in Shepton Mallet and at Tadley Acres.

At Newhall, all property types achieved significant premiums compared to the average house prices in Harlow, with terraced properties achieving an impressive 90.65%, flats – 61.24% and semi-detached properties – 44.36% (see Table 16). Newhall Be – the most architecturally distinctive and distinguished part of the scheme – achieved comparable premiums to the estate overall. Flats and terraced properties at Newhall Be were by far the most successful achieving 66.25% and 83.70% premium respectively (slightly higher than the rest of the estate for flats and slightly lower for terraced properties). Also, detached properties sold better at Newhall Be (11.01% premium compared to 5.12% at Newhall overall).

Table 16: Average yearly premiums on initial sale at Newhall.

	average yearly premiums			
	compared to Harlow		**compared to new builds in Harlow**	
	Newhall	**Newhall Be**	**Newhall**	**Newhall Be**
detached	5.12%	11.01%	-4.63%	-18.57%
semi-detached	44.36%	33.82%	20.50%	-2.85%
terraced	90.65%	83.70%	41.04%	26.10%
flats	61.24%	66.25%	23.93%	14.82%

In comparison to other new builds in Harlow,[66] the scheme achieved lower premiums

[66] Unlike in Shepton Mallet, there was a sufficient number of new builds sold in Harlow in order to constitute a reliable benchmark for house price comparison.

(understandable due to a premium on new build properties), but should still be considered successful, with terraced properties selling at 41.04% premium, flats at 23.93% and semi-detached at 20.50%. Detached properties at both Newhall and Newhall Be sold for lower prices compared to the local new-build market (-4.63% and -18.57%), which might potentially be related to the larger size of other new builds in Harlow, but also might indicate that homebuyers interested in detached properties did not consider Newhall desirable. Also, the particularly low value for Newhall Be is a result of relatively high average prices for new-build detached properties in Harlow in 2009, 2011 and 2012, when properties at Newhall Be were initially sold (as shown in Figure 115, even though performing below the local market, detached properties actually sold for slightly higher prices at Newhall Be than the rest of the estate).

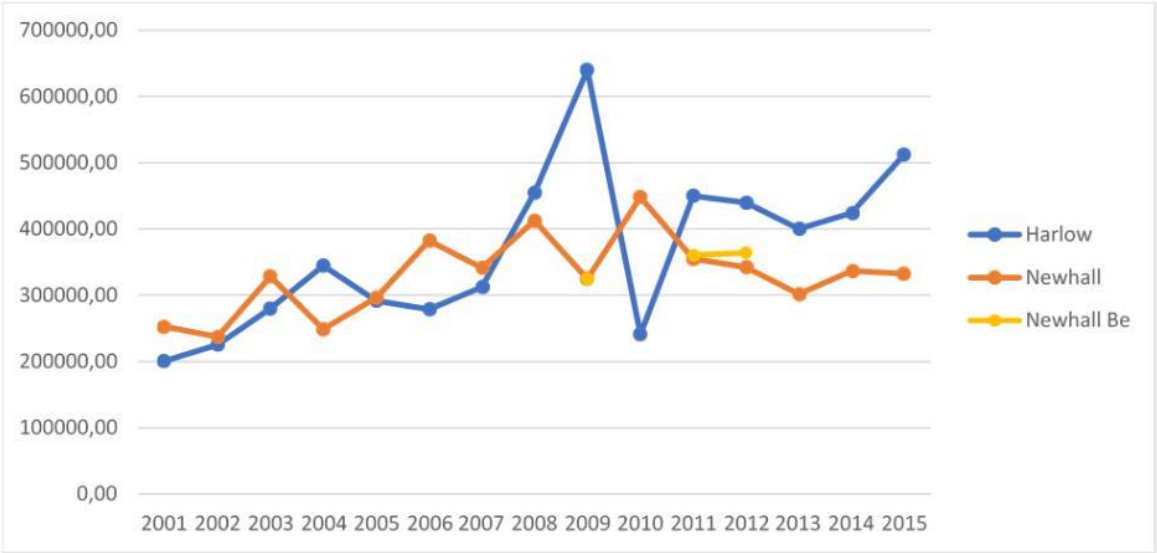


Figure 115: Sales values for new-build detached properties in Harlow and at Newhall.

Nevertheless, it seems safe to conclude that overall Newhall Be did not achieve higher sales than the rest of the estate. This is particularly significant when considering higher building costs resulting from the particularly innovative design of Newhall Be, which required custom solutions and more expensive materials. Purely from the developers' perspective, this investment did not translate itself into higher profits. This was confirmed by a then-Linden Homes-employee, who stated that as a result of high building costs Linden Homes made about 10-15% profit on Newhall Be, rather than the usual 20% (Stakeholders, 2018).

Land Insight

Unlike the data from Land Registry, Land Insight includes information about property size allowing to compare price per square foot and price per bedroom. At Tadley Acres the average prices per square foot were overall higher than in Shepton Mallet (Figure 116), but this was mostly due to

terraced properties across entire estate and semi-detached properties at Tadley Acres South. Other properties achieved prices per square foot similar or lower than the local market (see **Appendix H**). Also, the average price per square foot for detached properties is actually higher at Tadley Acres South than at Tadley Acres North (Figure 117), which might at first might seem contradictory to the Land Registry data.

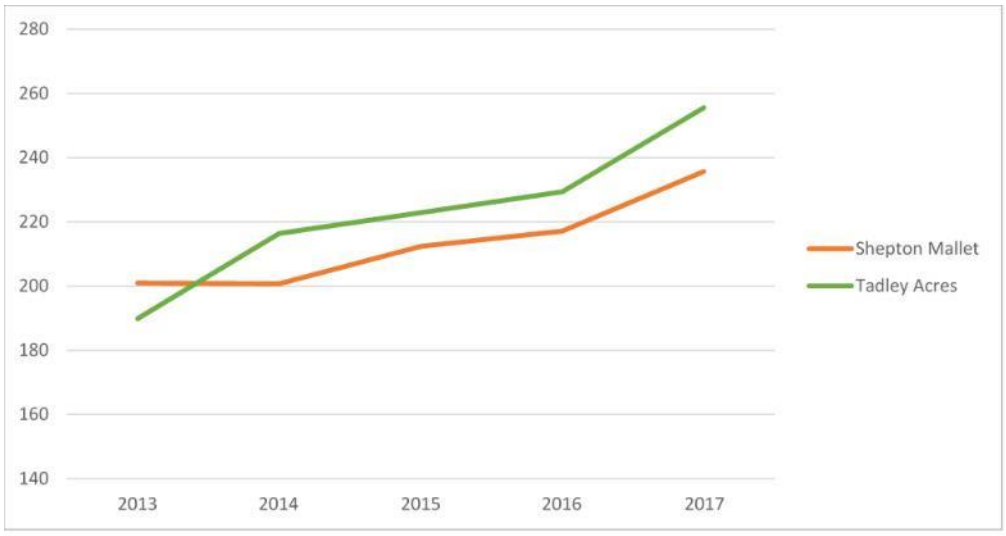


Figure 116: Average prices per square foot at Tadley Acres and in Shepton Mallet – all property types.

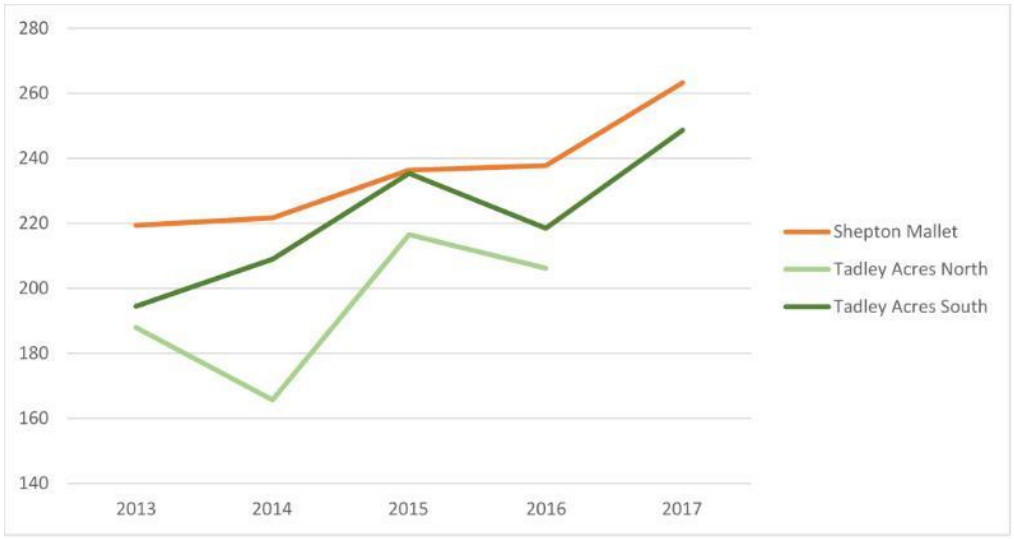
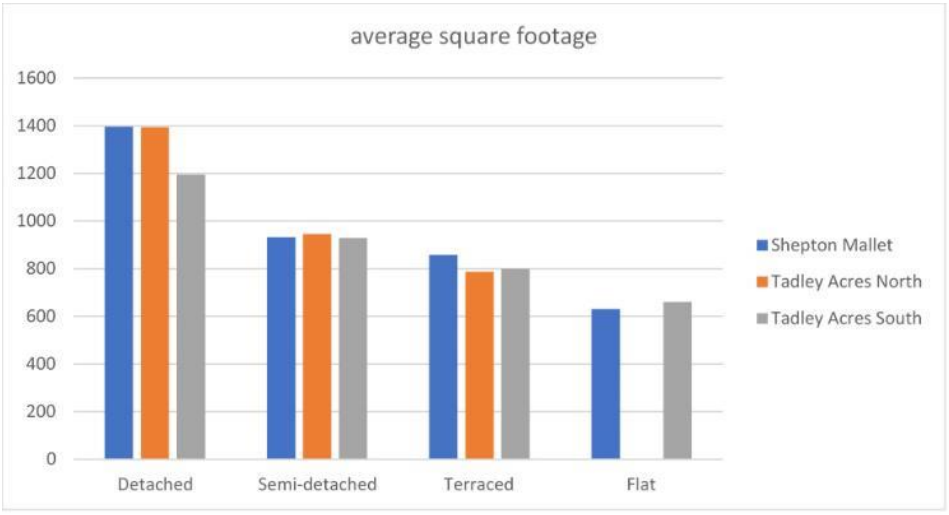
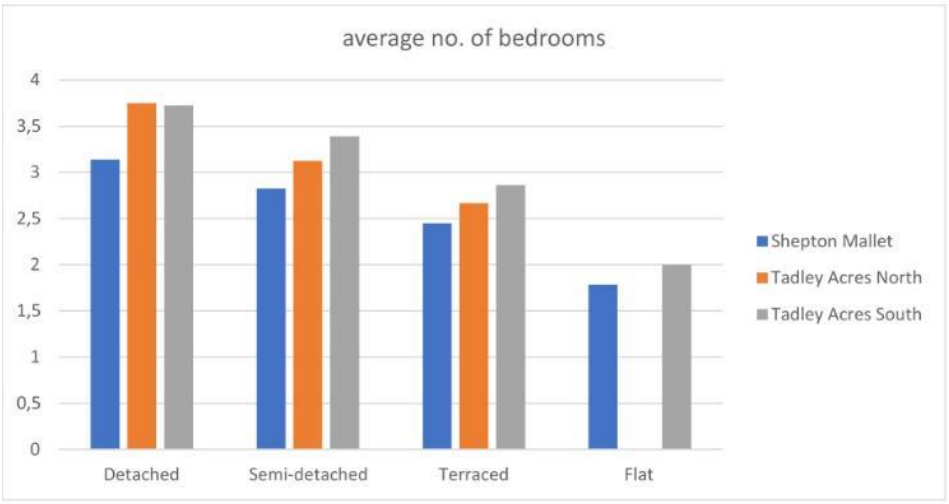


Figure 117: Average prices per square foot at Tadley Acres North, Tadley Acres South and in Shepton Mallet – detached properties (freehold only).

These differences can be easily explained by comparing the average property size in Shepton Mallet and at Tadley Acres. As illustrated below (Figure 118), according to Land Insight data the average square footage of properties is very similar at Tadley Acres and in Shepton Mallet, except for detached properties at the southern part of the estate, which are on average smaller than in Shepton Mallet. Correspondingly, the higher average prices per square footage for detached houses at Tadley Acres South are a direct result of smaller size of properties.





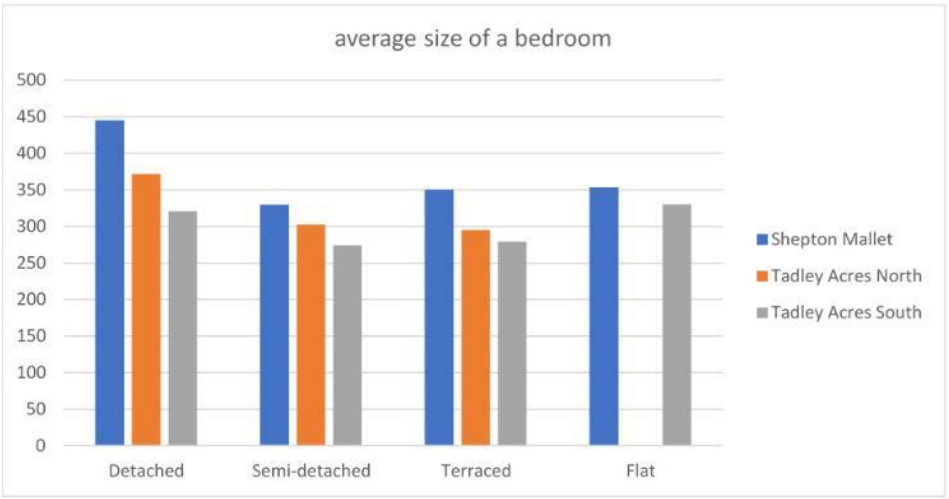


Figure 118: Average property sizes at Tadley Acres and in Shepton Mallet.

Furthermore, the properties at Tadley Acres (and the southern part in particular) have on average higher number of bedrooms than in Shepton Mallet, while at the same time having smaller or similar average square footage, suggesting that the premiums calculated based on total average prices from the Land Registry had been at least partly achieved by squeezing in more bedrooms. This also

contributes to the generally higher prices at Tadley Acres South, where the average number of bedrooms is higher across all property types (e.g. detached properties, which were the only ones that experienced higher premiums at the northern part of the estate (Table 15), are also the only property type with a similar number of bedrooms across entire estate).

Consequently, the average prices per bedroom were lower at Tadley Acres than in Shepton Mallet (Figure 119), meaning that the homebuyers paid less for each bedroom at Tadley Acres than they would elsewhere in Shepton Mallet, but at the same time they paid more for each square foot.

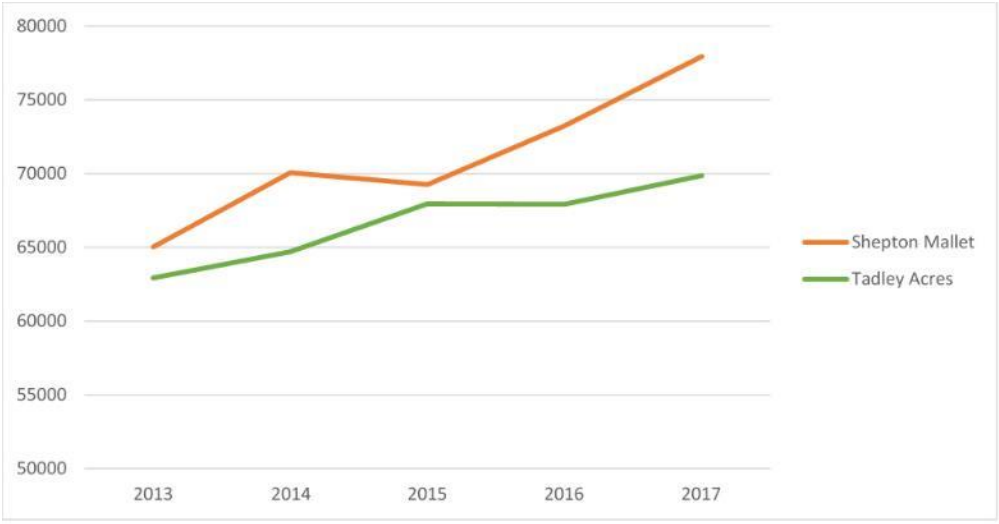


Figure 119: Average prices per bedroom at Tadley Acres and in Shepton Mallet – all property types.

At Newhall the average prices per square foot were overall only slightly higher than in Harlow (Figure 120). Terraced properties achieved prices per square foot similar to the local market and detached and semi-detached properties lower than the local market. Flats were the only property type selling at prices per square foot higher than the average in Harlow (see **Appendix I**). Also, based on the average prices per square foot properties at Newhall Be performed comparably to the rest of the estate.

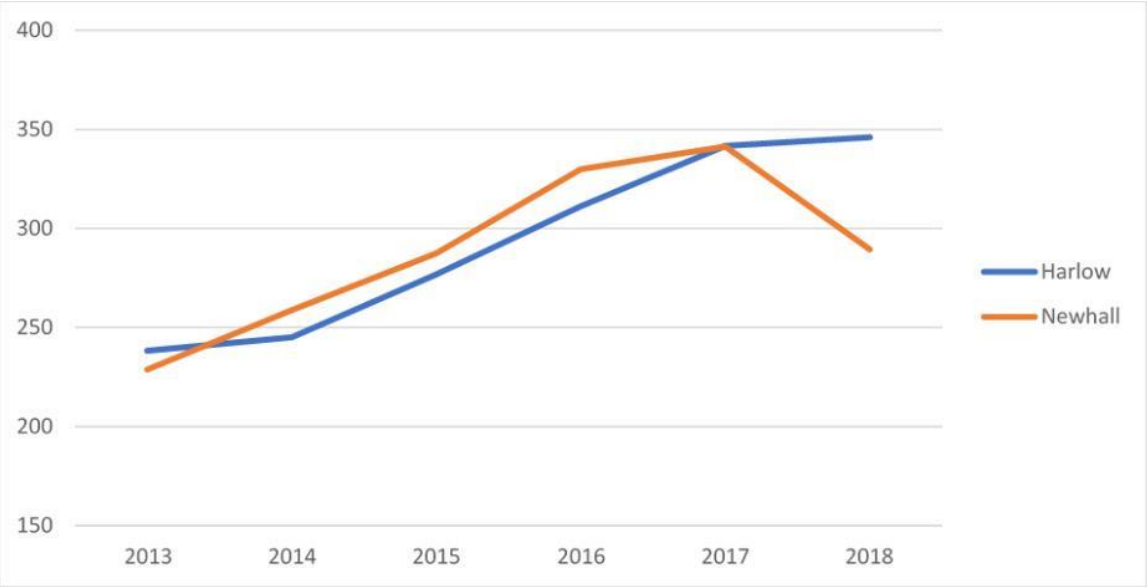
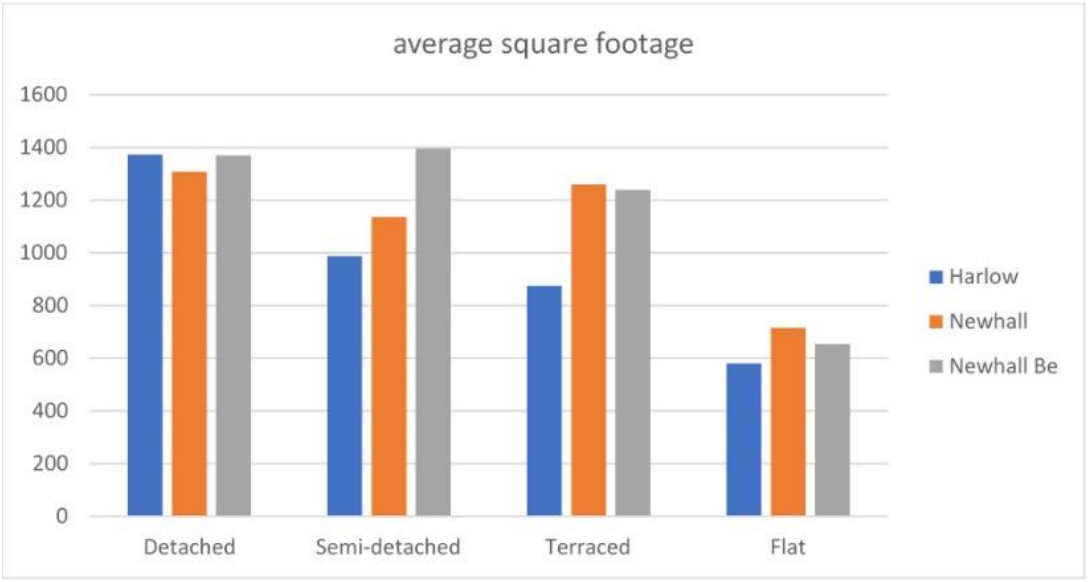
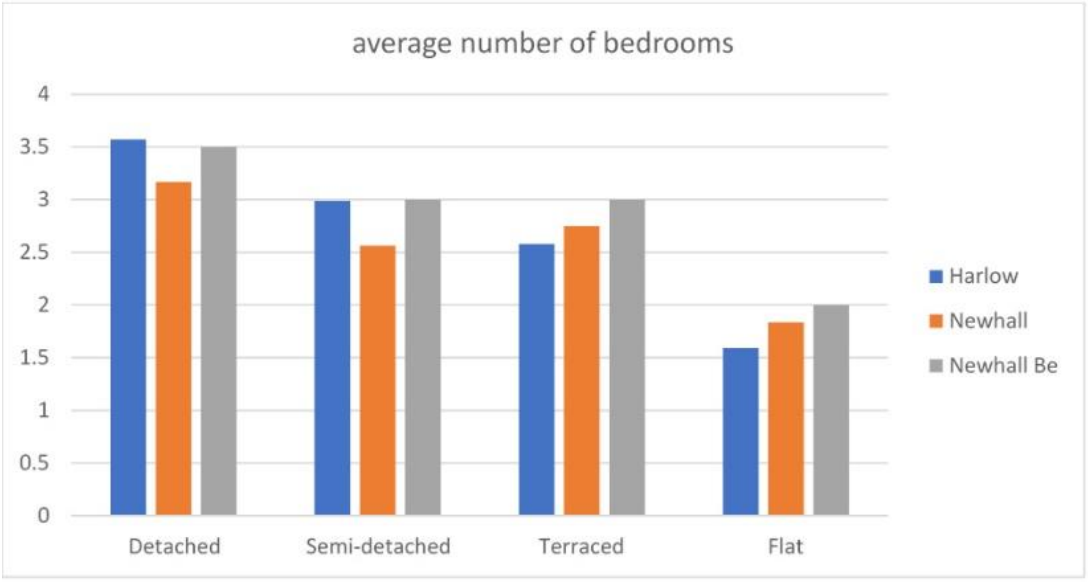


Figure 120: Average prices per square foot at Newhall and in Harlow – all property types.

However, the relatively low (compared to the Land Registry) average prices per square foot are caused by the significantly larger size of properties at Newhall. This is true for all property types except detached houses and is particularly evident in case of terraced properties (Figure 121).





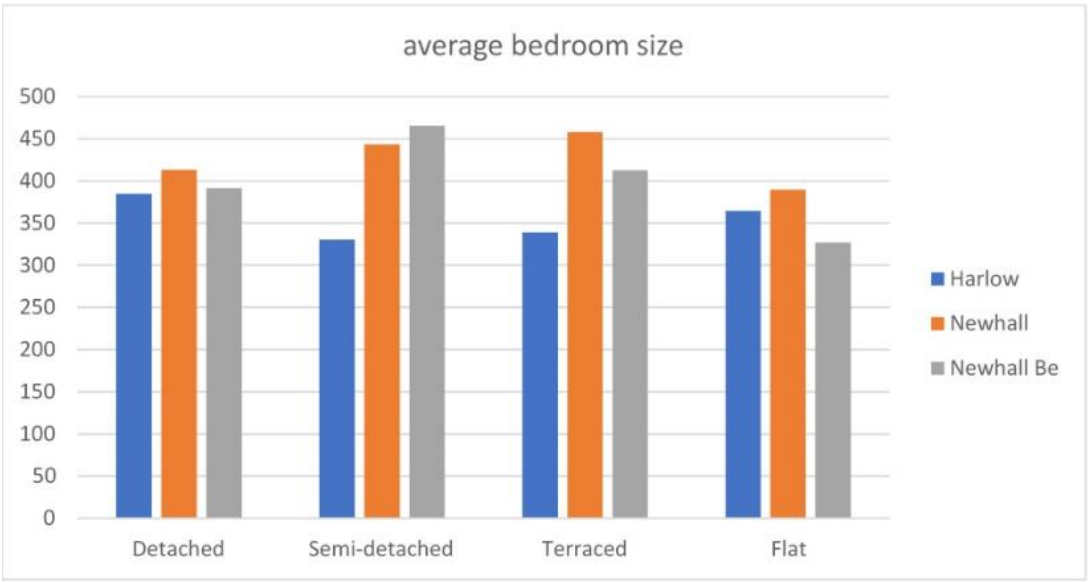


Figure 121: Average property sizes at Newhall and in Harlow.

Furthermore, detached and semi-detached properties at Newhall have lower average number of bedrooms than other properties on Harlow, which might suggest that premiums calculated based on total average prices from the Land Registry (Table 16) for these property types are slightly underestimated. Correspondingly, the premiums for terraced properties and flats might be slightly overestimated as they have higher average number of bedrooms than other properties on Harlow.

When looking at the average prices per bedroom, Newhall achieved higher average prices overall (see Figure 122) and on each property type separately.

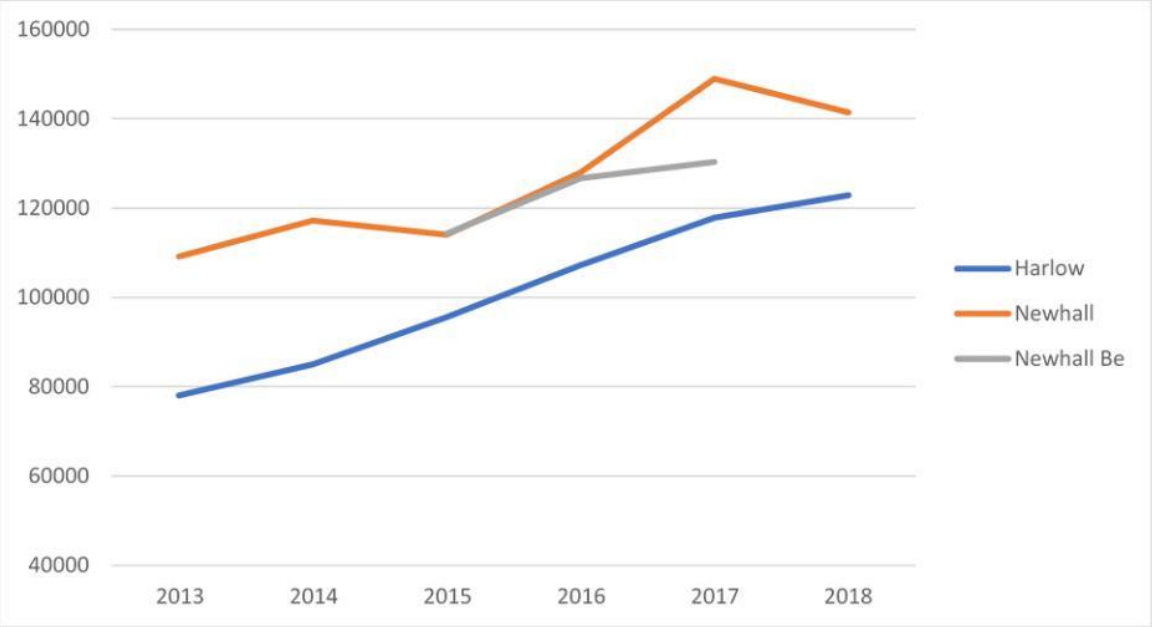


Figure 122: Average prices per bedroom at Newhall and in Harlow – all property types.

* * *

Did the value of properties increase over time?

In order to determine whether the value of properties at Tadley Acres and Newhall increased over time, all properties with multiple transactions were identified based on the Land Registry data. Then the earliest and the latest sale for each property was compared in order to find out what was the uplift in the property price. Finally, that value was compared to the percent change in the yearly average house prices in Shepton Mallet or Harlow during that same period of time (see Table 17).

Table 17: An example of how the uplift in value at Tadley Acres and Newhall was calculated (in this case the property decreased in value by about 15% compared to the local market).

property	sale date	sale price
6 ASH GROVE	14.06.2001	84,950
6 ASH GROVE	26.03.2002	99,950
6 ASH GROVE	09.09.2005	150,000
6 ASH GROVE	12.08.2011	140,000
6 ASH GROVE	28.03.2017	185,000
uplift in value		117.78%
local market uplift (between 2001 and 2017)		132.51%
uplift in value (compared to the local market)		**-14.73**

Based on the above approach, only 23.88% of properties at Tadley Acres (80 out of 335 properties with registered multiple sales) experienced a higher uplift than the local market, which means that 76.12% of properties lost in value compared to the local market. The average uplift at Tadley Acres was 45.53%, compared to 60.57% in Shepton Mallet, which further suggests that Tadley Acres properties are doing worse over time than an average property in Shepton Mallet (see Table 18, Figure 123 and Figure 124). It also seems that terraced houses were doing slightly better than other property types, however, the differences are relatively small. There were no significant differences between northern and southern part of the estate (see Figure 130).

Table 18: Uplift in value at Tadley Acres compared to the local market.

Property type	No. of properties with multiple transactions	No. of properties that increased in value compared to the local market		Average uplift in value	
				Tadley Acres	Shepton Mallet
detached	110	15	13.64%	54.50%	76.18%
semi	95	25	26.32%	58.10%	68.48%
terraced	100	33	33.00%	37.75%	43.44%
flat	30	7	23.33%	3.16%	15.45%
Total	**335**	**80**	**23.88%**	**45.92%**	**58.78%**

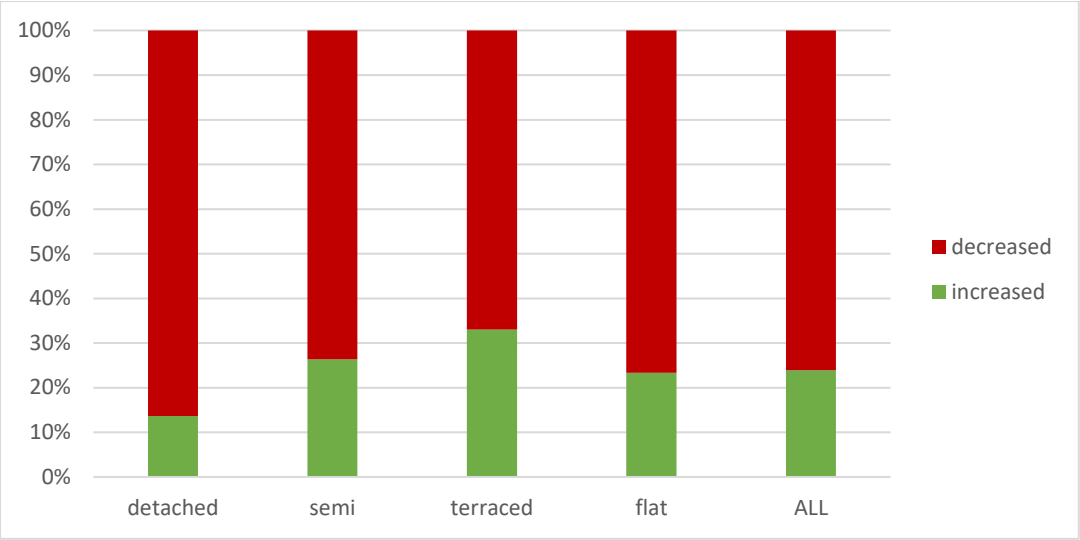


Figure 123: Number of properties at Tadley Acres that increased / decreased in value over time compared with the local market.

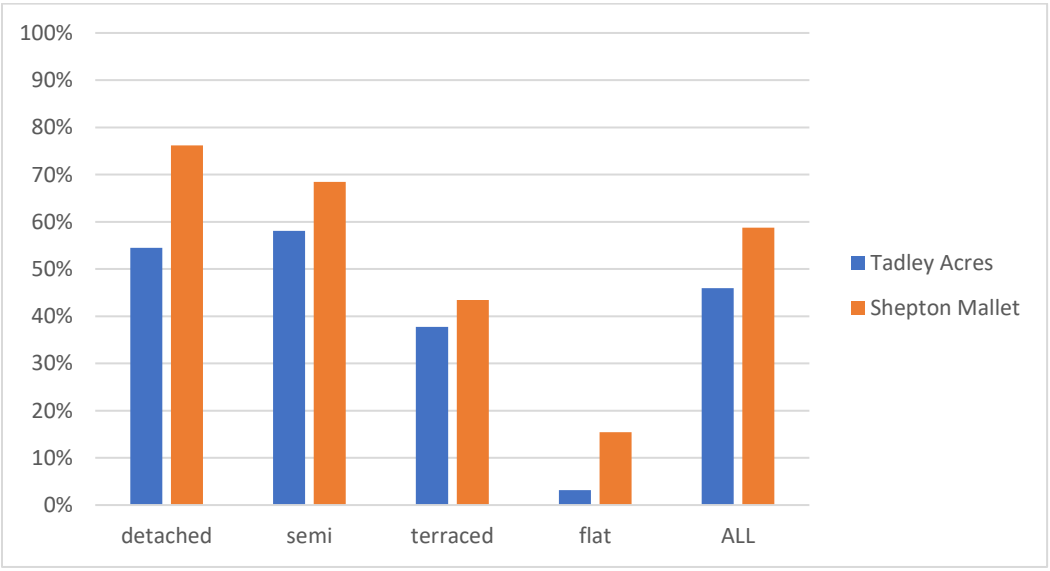


Figure 124: Average uplift in prices at Tadley Acres and in Shepton Mallet.

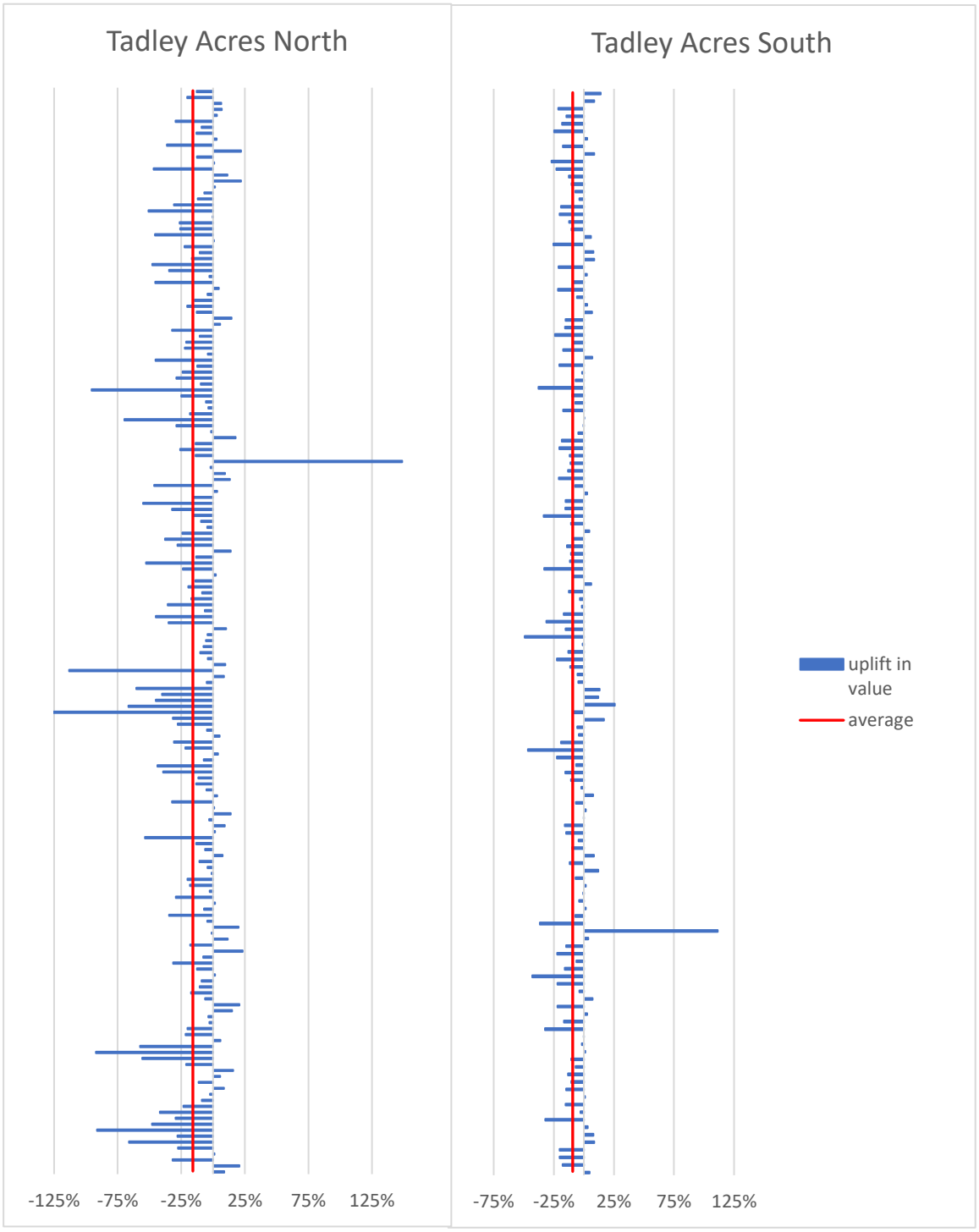


Figure 125: Uplift in value of properties at northern and southern part of Tadley Acres.

Newhall properties experienced similarly slow uplift in value. Only 8.78% (18 out of 205 properties with registered multiple sales) experienced a higher uplift than the local market, meaning that 91.22% of properties lost in value compared to the local market. The average uplift at Newhall was 22.83%, compared to 47.56% in Harlow (see Table 19 and Figure 126). Properties at Newhall Be did slightly better, however the uplift for Newhall Be was still 18.11% less than the local market uplift (compared with -24.73% for the entire estate).

Table 19: Uplift in value at Newhall compared to the local market.

Property type	No. of properties with multiple transactions	No. of properties that increased in value compared to the local market		Average uplift in value	
				Newhall	Harlow
detached	**36**	6	16.67%	28.89%	50.77%
semi	**11**	2	18.18%	24.47%	38.56%
terraced	**56**	5	8.93%	20.72%	43.74%
flat	**102**	5	4.90%	21.66%	49.49%
Total	**205**	**18**	**8.78%**	**22.83%**	**47.56%**

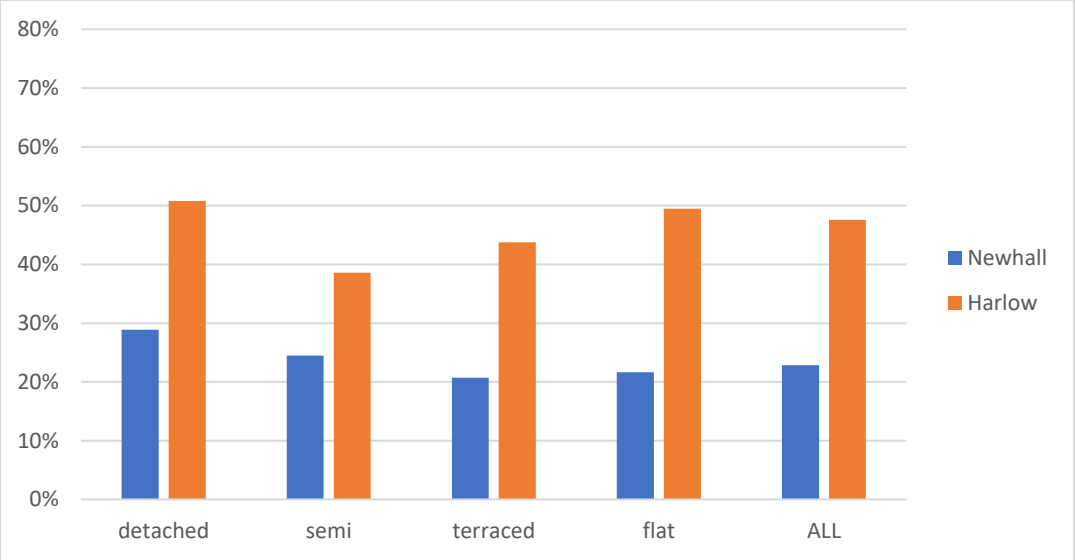


Figure 126: Average uplift in prices at Newhall and in Harlow.

Having in mind that both schemes achieved premiums on the initial sale, it was considered that one potential explanation for properties at Tadley Acres and Newhall not increasing in value as much as other properties in the local area was overinflated price when the houses were originally sold (as well as the before-mentioned overall premium on new-build properties). It is also reasonable to assume that developers with their expert knowledge, experience and understanding of the housing market are able to effectively promote the development and reach sales levels that might be difficult to achieve for homeowners or local estate agents. For these reasons, it was decided to repeat the above analysis using resale values only (thus ignoring the initial sale) and excluding new build homes from the average yearly prices in the local area.

Consequently, the number of properties that increased in value over time at Tadley Acres rose up to 29.01% (38 out of 131) and, even though the average uplift was still higher for the local market, the difference went down from 12.86% to 7.90% (see Table 20, Figure 127 and Figure 128).

Table 20: Uplift in value at Tadley Acres compared to the local market (resale values only).

Property type	No. of properties with multiple transactions	No. of properties that increased in value compared to local market		Average uplift in value	
				Tadley Acres	Shepton Mallet
detached	40	11	27.50%	24.27%	35.74%
semi	43	15	34.88%	37.65%	42.58%
terraced	35	8	22.86%	18.55%	24.86%
flat	13	4	30.77%	2.56%	13.51%
Total	**131**	**38**	**29.01%**	**24.98%**	**32.88%**

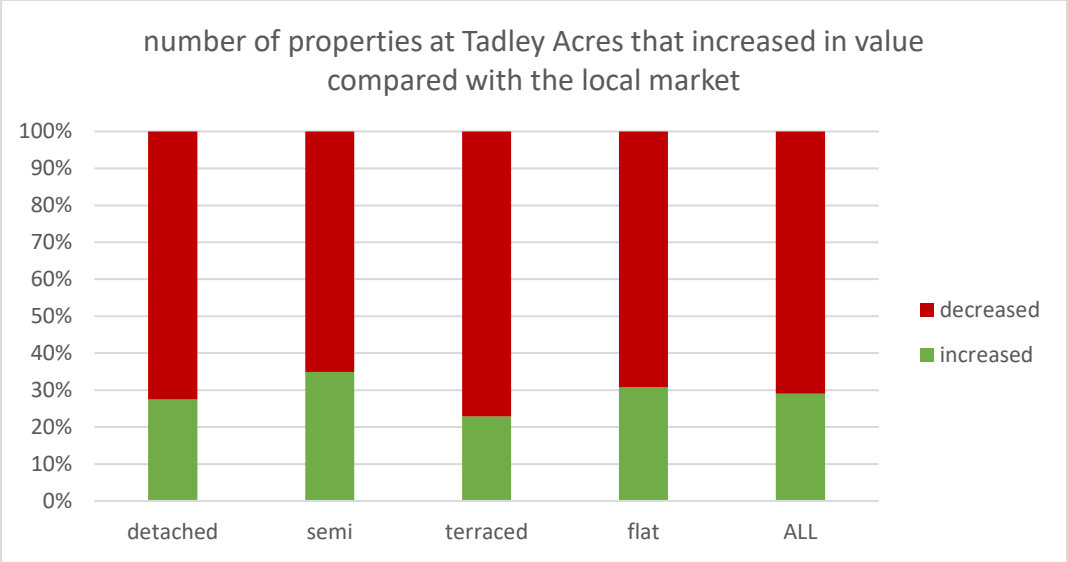


Figure 127: Number of properties at Tadley Acres that increased / decreased in value over time compared with the local market (resale values only).

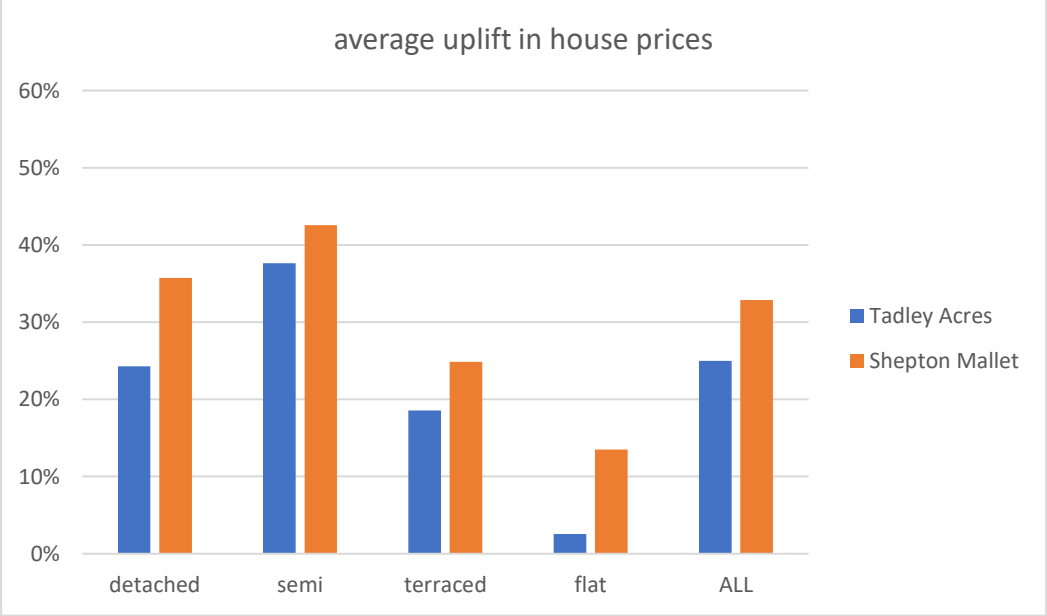


Figure 128: Average uplift in prices at Tadley Acres and in Shepton Mallet (resale values only).

After excluding new builds from the analysis at Newhall, the differences were more evident. The number of properties that increased in value rose from 8.78% up to 40.91% (36 out of 88) and the difference in average uplift fell from 24.73% to 5.98% (see Table 21, Figure 129 and Figure 130).[67]

Table 21: Uplift in value at Newhall compared to the local market (resale values only).

Property type	No. of properties with multiple transactions	No. of properties that increased in value compared to local market		Average uplift in value	
				Newhall	Harlow
detached	**17**	7	41.18%	18.17%	26.66%
semi	**6**	2	33.33%	28.69%	40.38%
terraced	**24**	9	37.50%	16.57%	22.40%
flat	**41**	18	43.90%	20.62%	24.81%
Total	**88**	**36**	**40.91%**	**19.59%**	**25.57%**

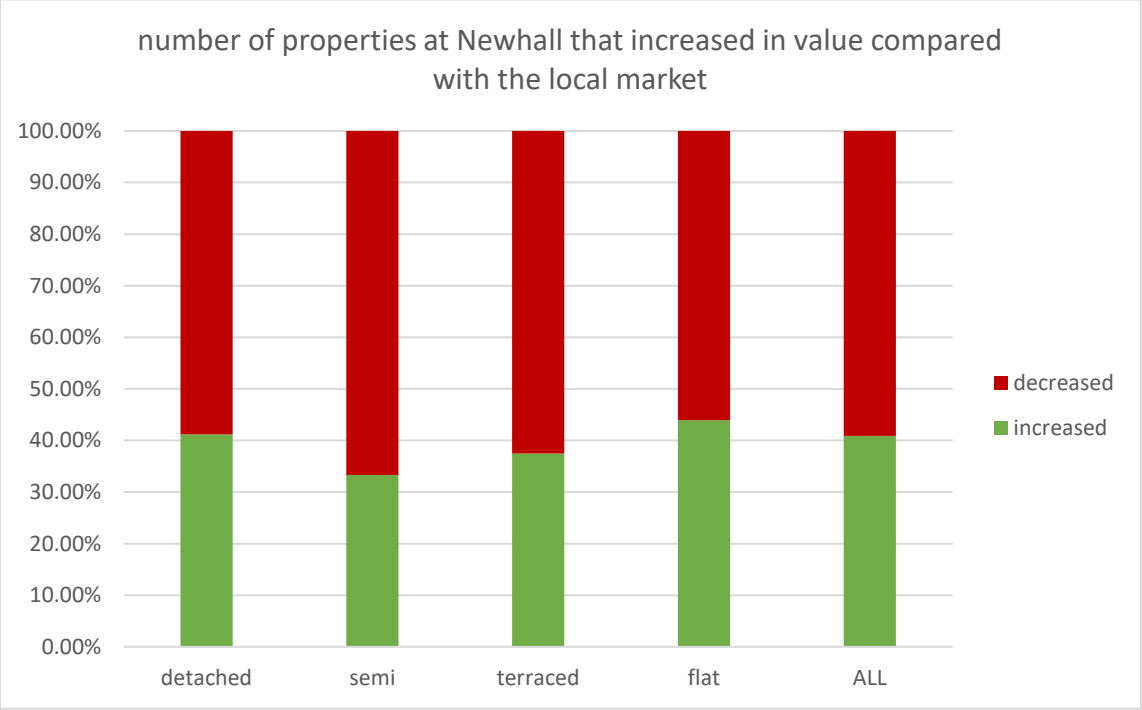


Figure 129: Number of properties at Newhall that increased / decreased in value over time compared with the local market (resale values only).

[67] One terraced property at Newhall, which sold for extremely low £50,000 in 2004, and therefore experienced an enormous 894% uplift in value in 2007 when it was resold for £497,000, was excluded from the analysis in order to avoid skewing the results.

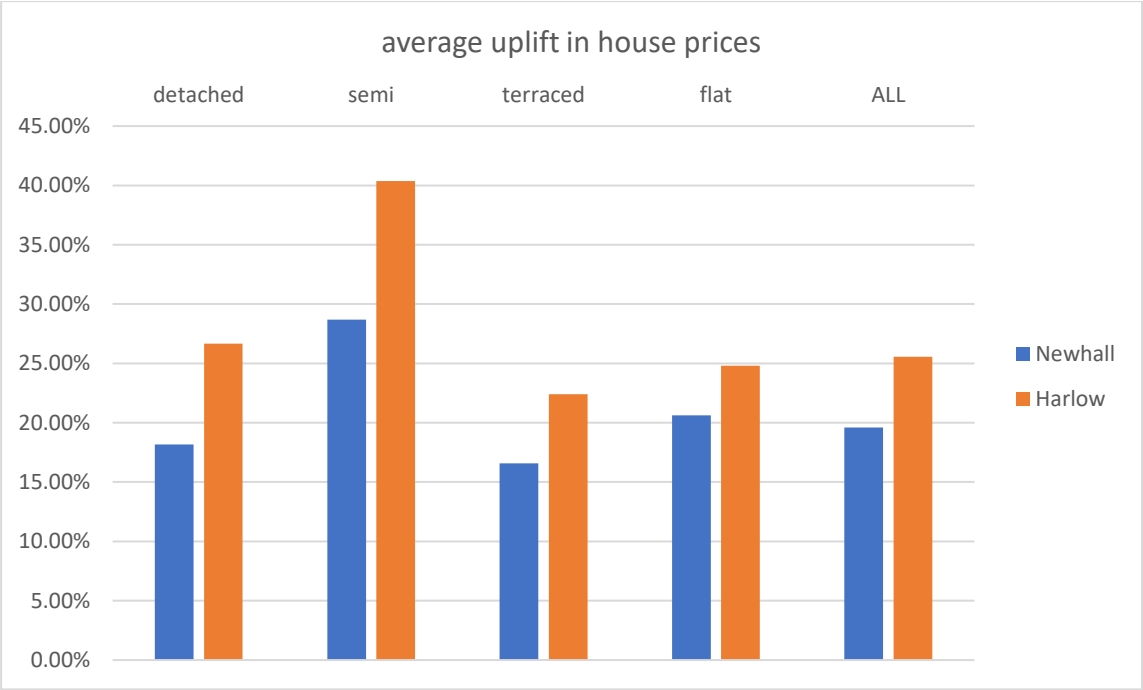


Figure 130: Average uplift in prices at Newhall and in Harlow (resale values only).

At Newhall Be there were only five properties that were sold three or more times and four of those increased in value more than the local house prices, which means that this part of the Newhall scheme actually outperformed the local market by 2.50% (see Table 22), though this is a very small data sample.

Table 22: Uplift in value at Newhall Be compared to the local market (resale values only).

Property type	No. of properties with multiple transactions	No. of properties that increased in value compared to local market		Average uplift in value	
				Newhall Be	Harlow
detached	**2**	1	50.00%	5.53%	4.00%
semi	**0**	-	-	-	-
terraced	**2**	2	100.00%	23.08%	19.33%
flat	**1**	1	100.00%	23.81%	21.88%
Total	**5**	**4**	**80.00%**	**16.21%**	**13.71%**

Based on the above analysis, both Tadley Acres and Newhall performed slightly worse than the local housing market (with Newhall doing a little bit better than Tadley Acres, see Figure 136). The differences in results between values including and excluding first sale confirm that there is a higher premium on new builds, which are driving up the average house prices. Also, it is worth reiterating that properties at Newhall Be were experiencing higher uplifts in value than the rest of the scheme.

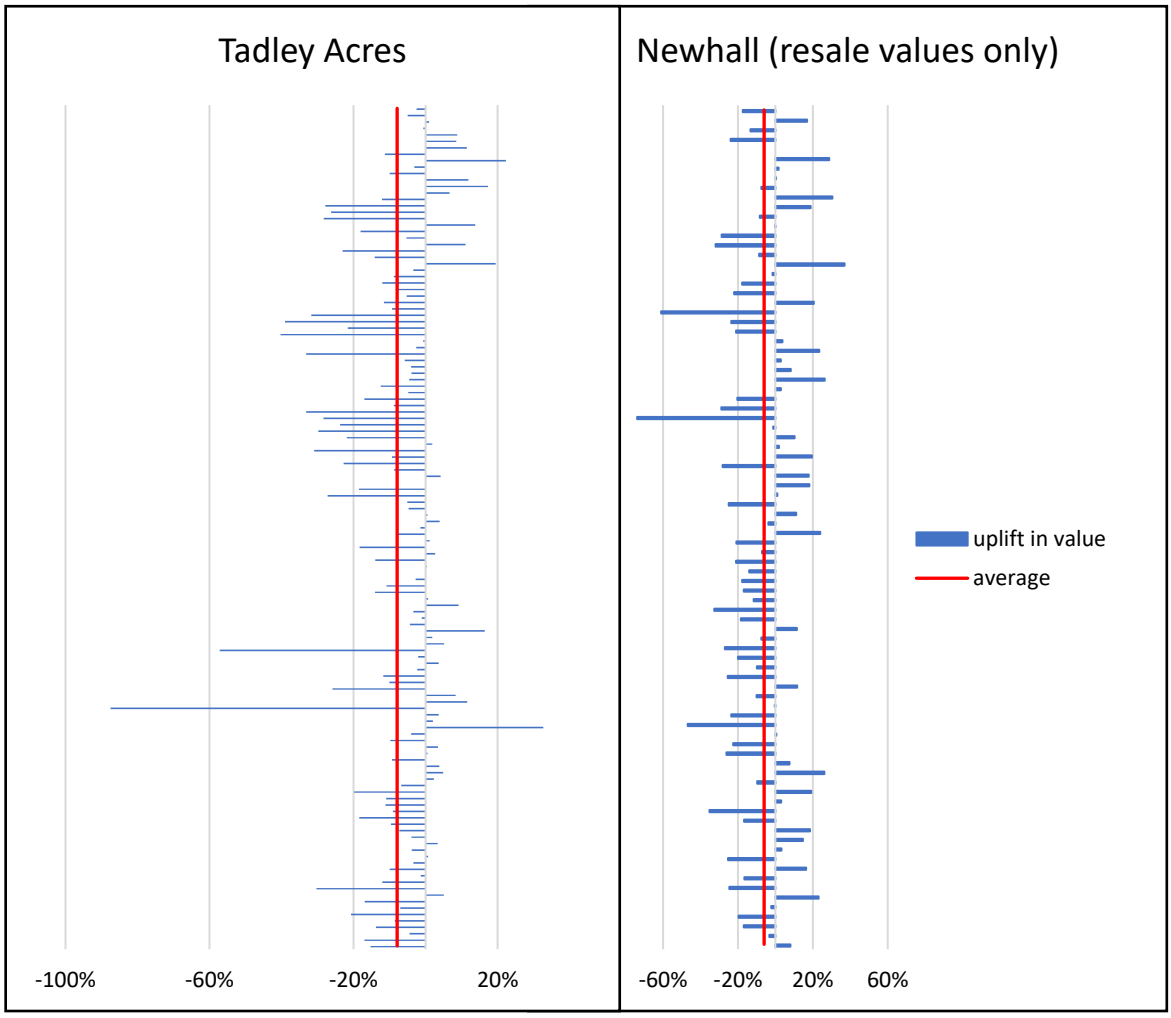


Figure 131: Uplift in value of properties at Tadley Acres and Newhall (compared to the local market, resale values only).

Appendix F: Average prices at Tadley Acres and in Shepton Mallet

(Based on Land Registry data)

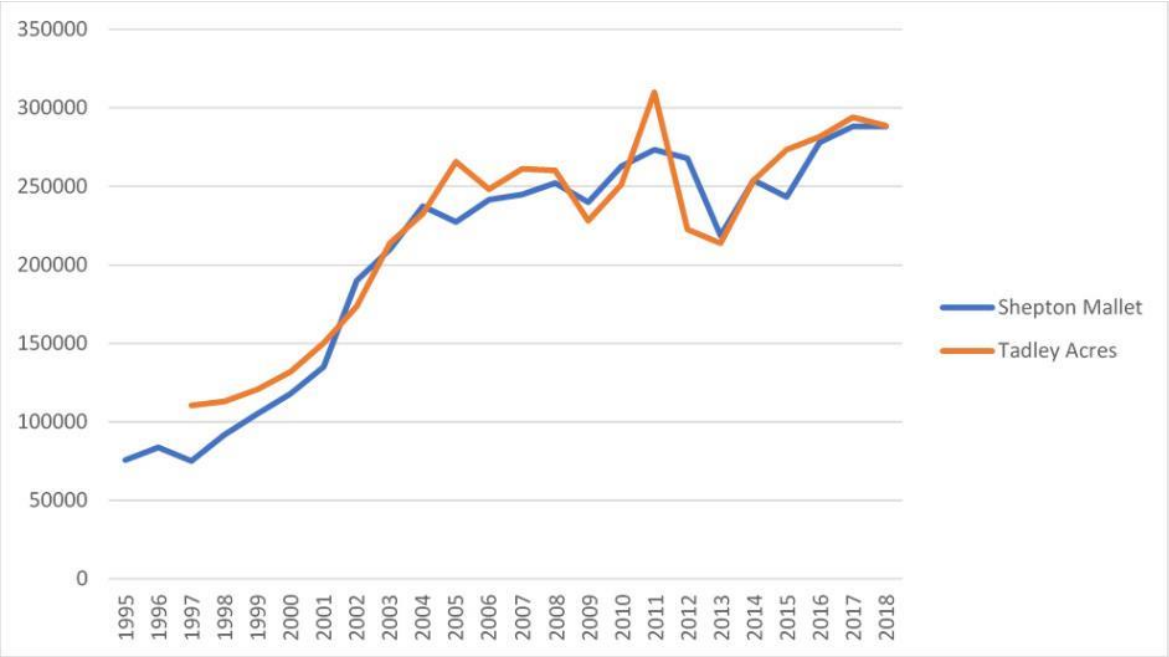


Figure 132: Average prices at Tadley Acres and in Shepton Mallet – detached properties (freehold only).

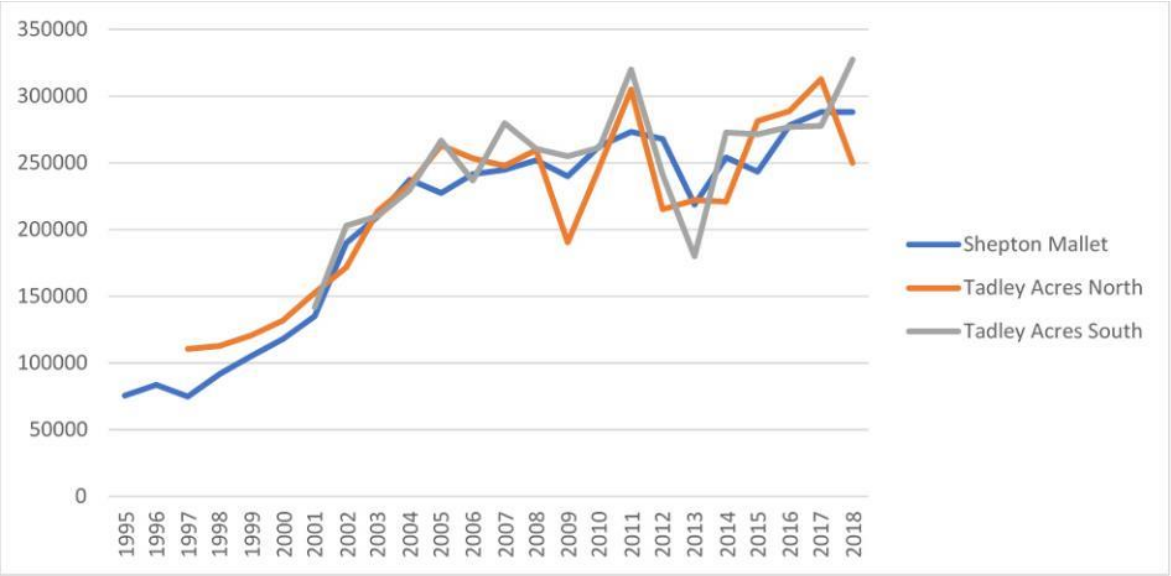


Figure 133: Average prices at Tadley Acres North, Tadley Acres South and in Shepton Mallet – detached properties (freehold only).

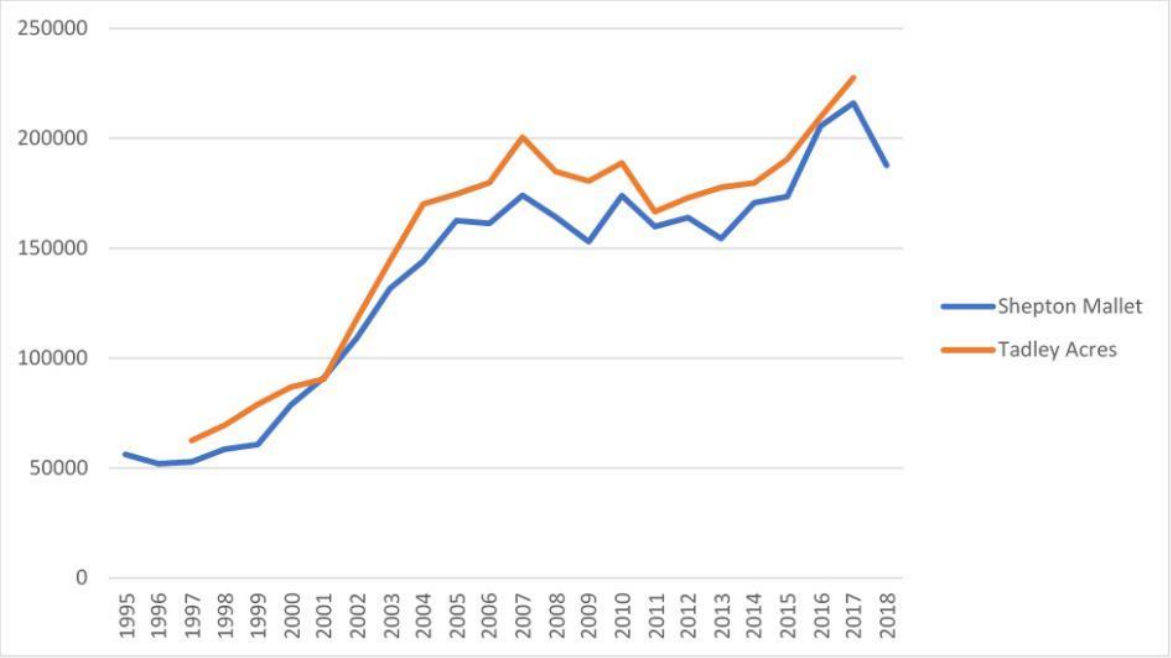


Figure 134: Average prices at Tadley Acres and in Shepton Mallet – semi-detached properties (freehold only).

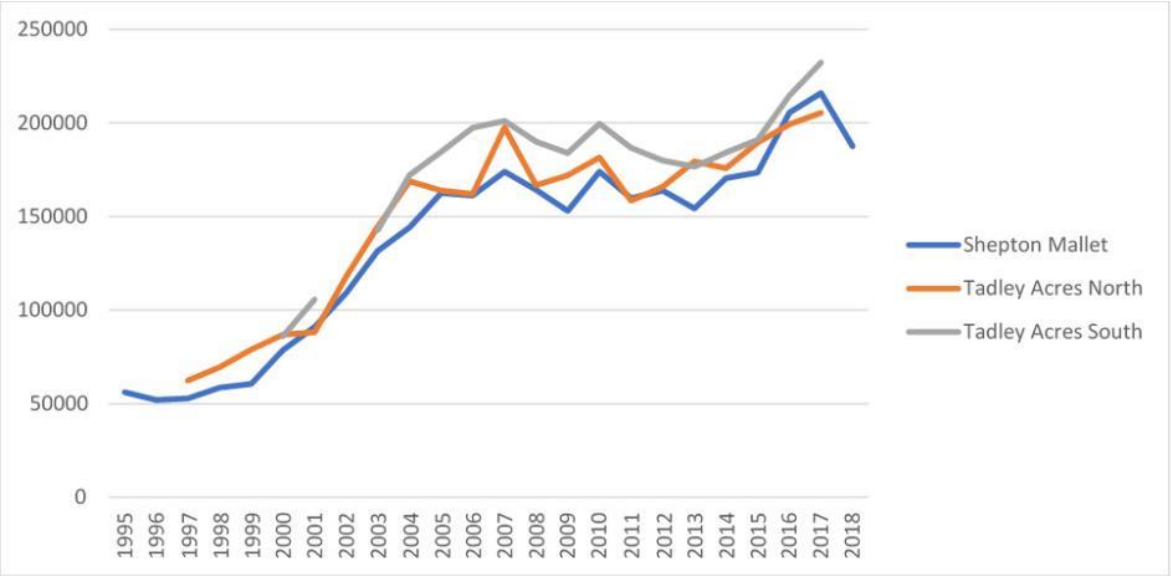


Figure 135: Average prices at Tadley Acres North, Tadley Acres South and in Shepton Mallet – semi-detached properties (freehold only).

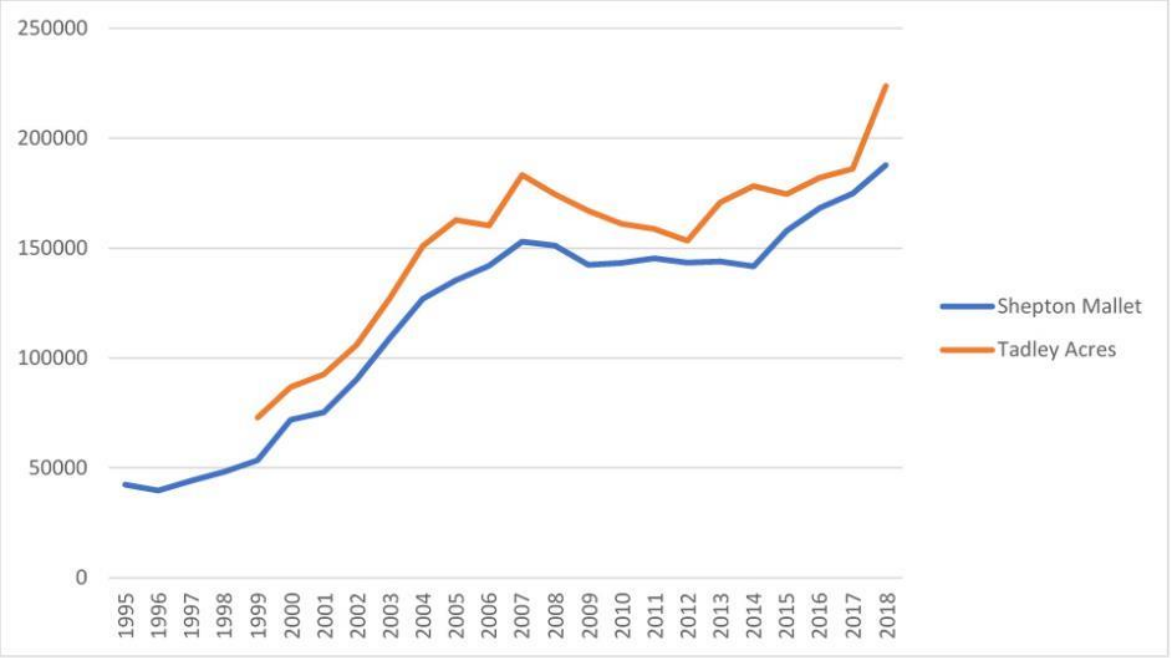


Figure 136: Average prices at Tadley Acres and in Shepton Mallet – terraced properties (freehold only).

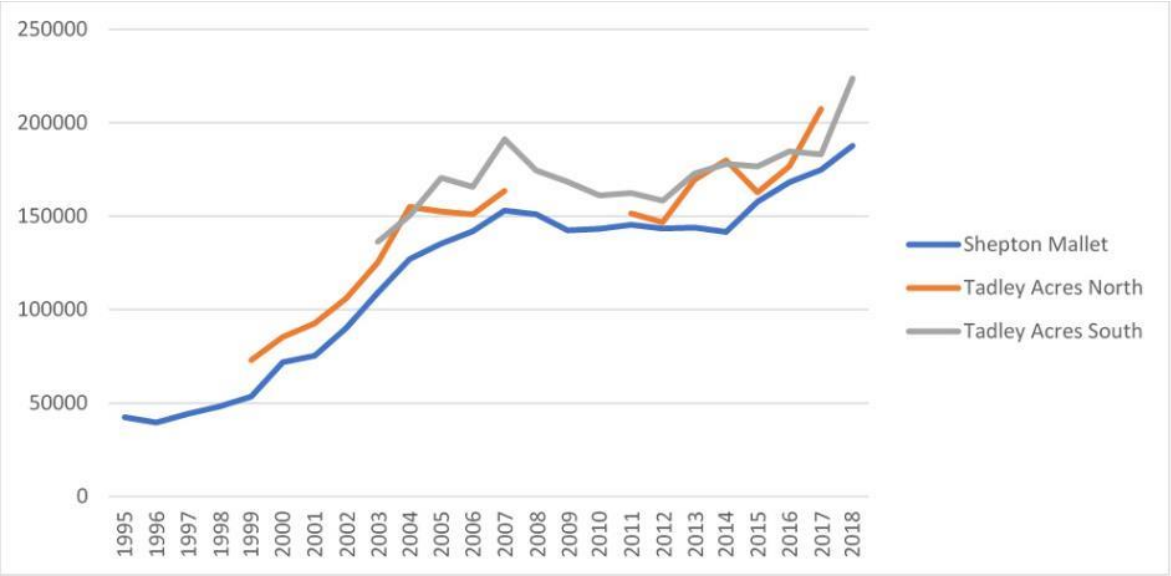


Figure 137: Average prices at Tadley Acres North, Tadley Acres South and in Shepton Mallet – terraced properties (freehold only).

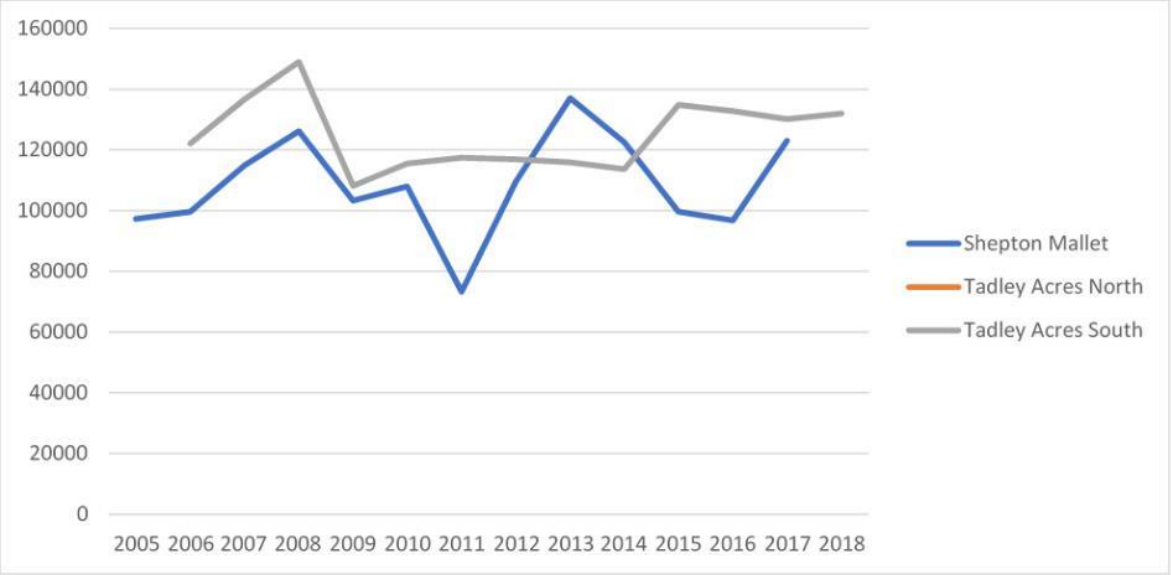


Figure 138: Average prices at Tadley Acres and in Shepton Mallet – flats (leasehold only).

Appendix G: Average prices at Newhall and in Harlow

(Based on Land Registry data)

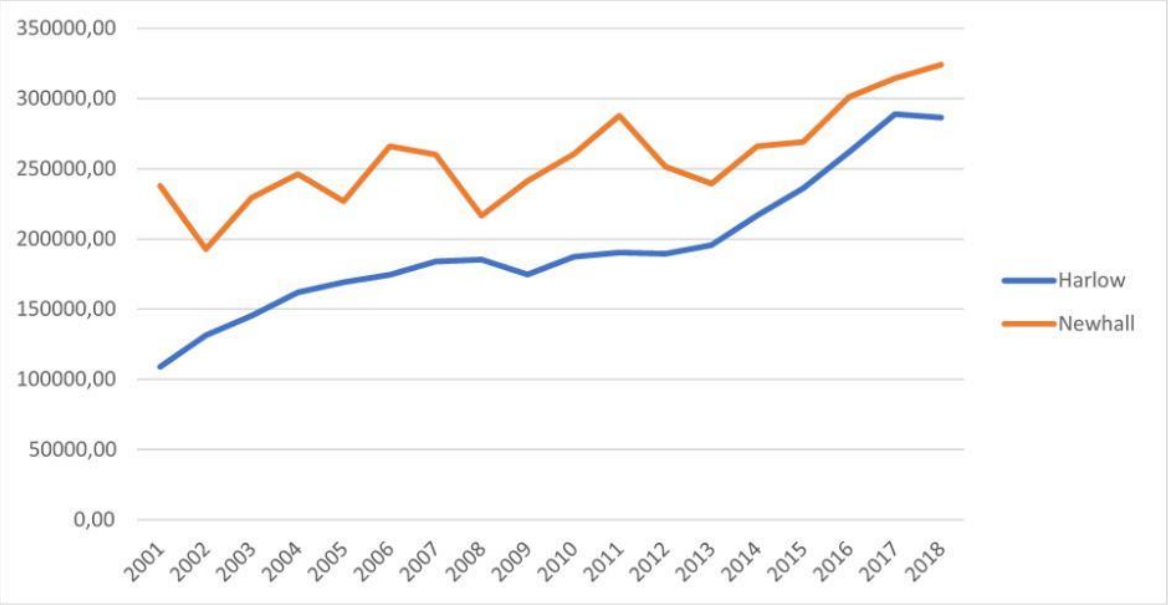


Figure 139: Average prices at Newhall and in Harlow – all property types.

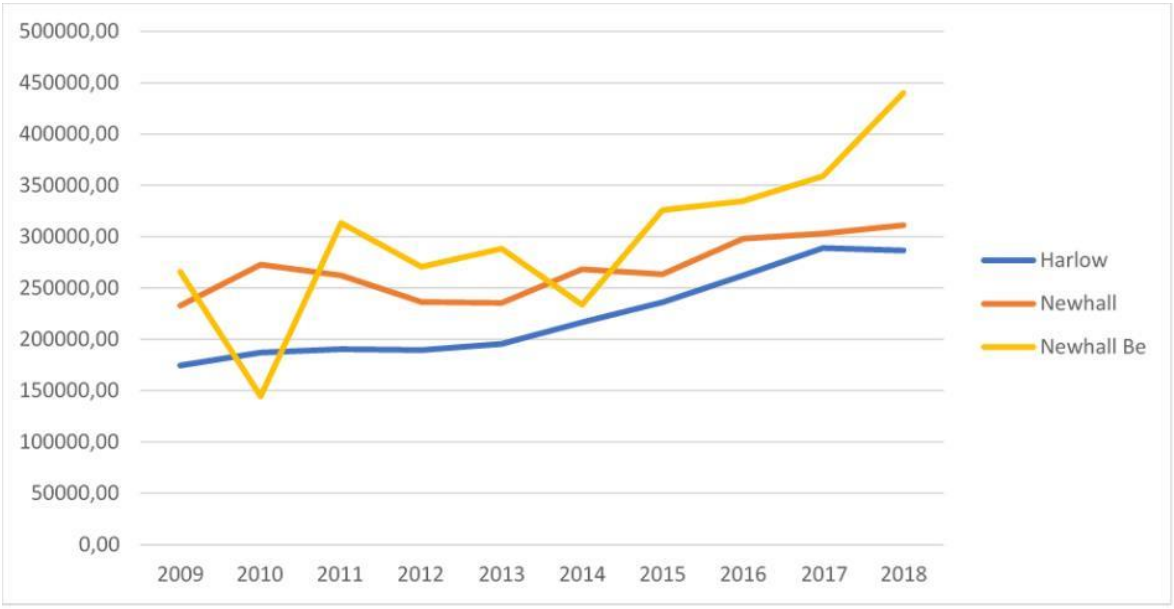


Figure 140: Average prices at Newhall, Newhall Be and in Harlow – all property types.

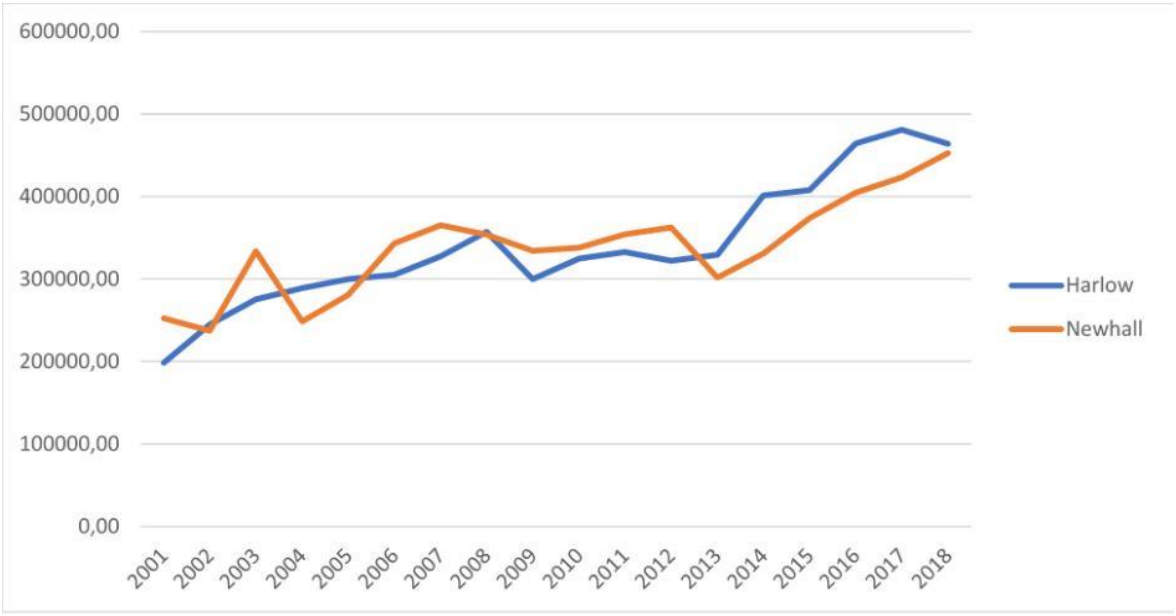


Figure 141: Average prices at Newhall and in Harlow – detached properties (freehold only).

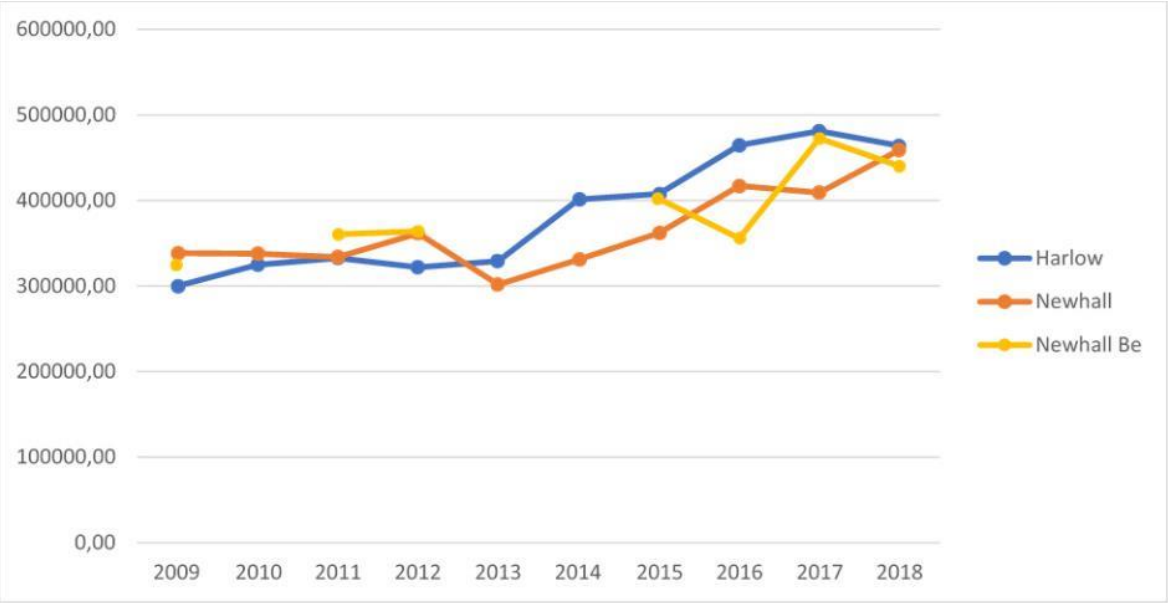


Figure 142: Average prices at Newhall, Newhall Be and in Harlow – detached properties (freehold only).

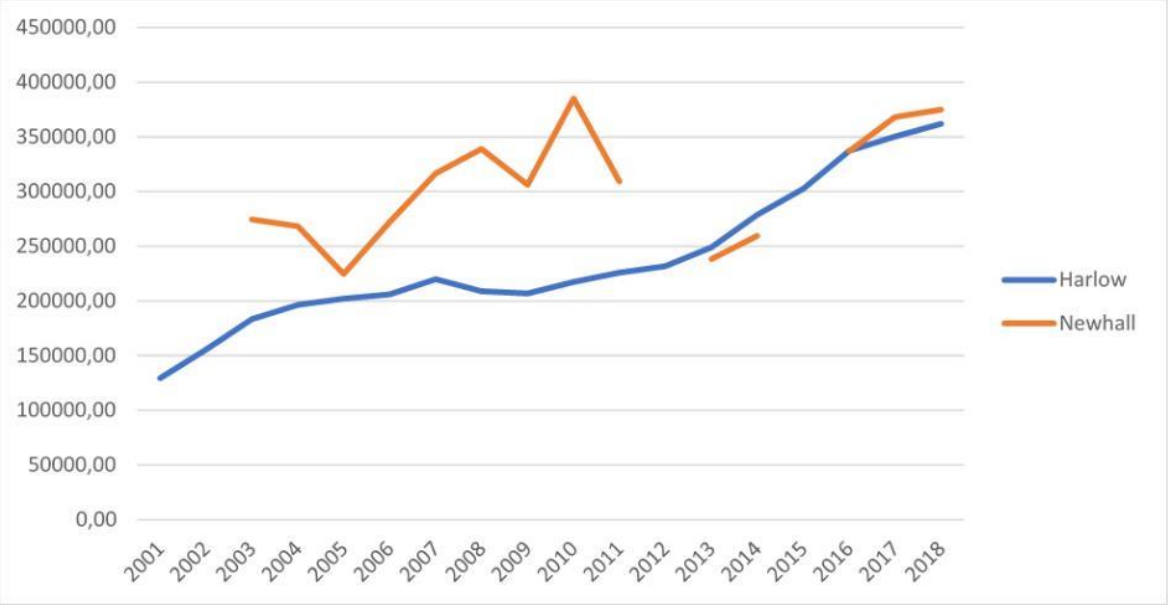


Figure 143: Average prices at Newhall and in Harlow – semi-detached properties (freehold only).

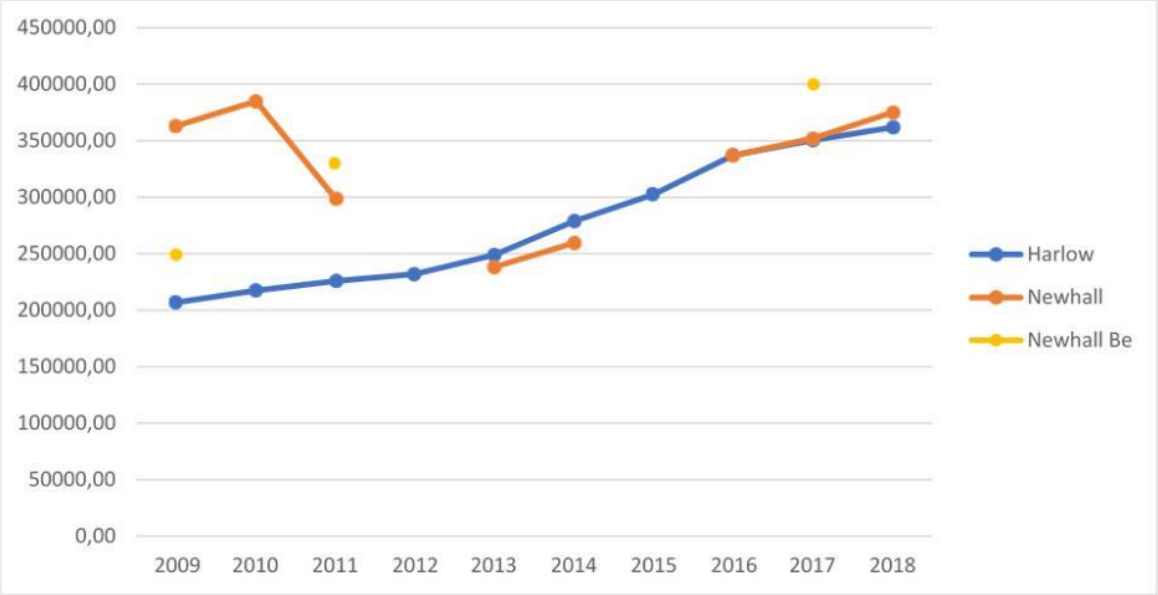


Figure 144: Average prices at Newhall, Newhall Be and in Harlow – semi-detached properties (freehold only).

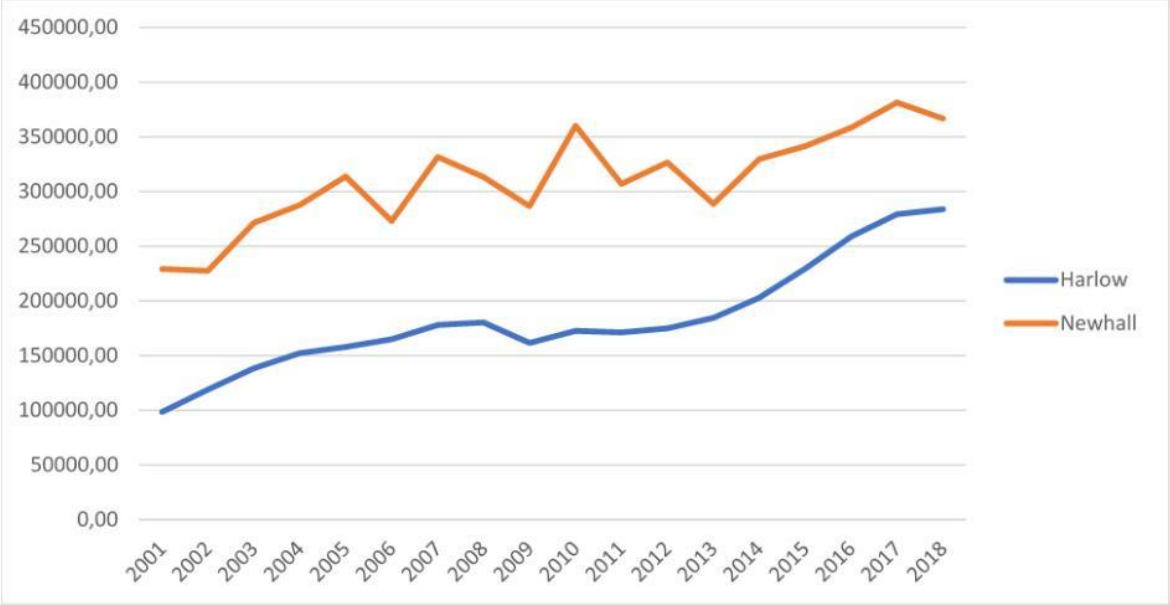


Figure 145: Average prices at Newhall and in Harlow – terraced properties (freehold only).

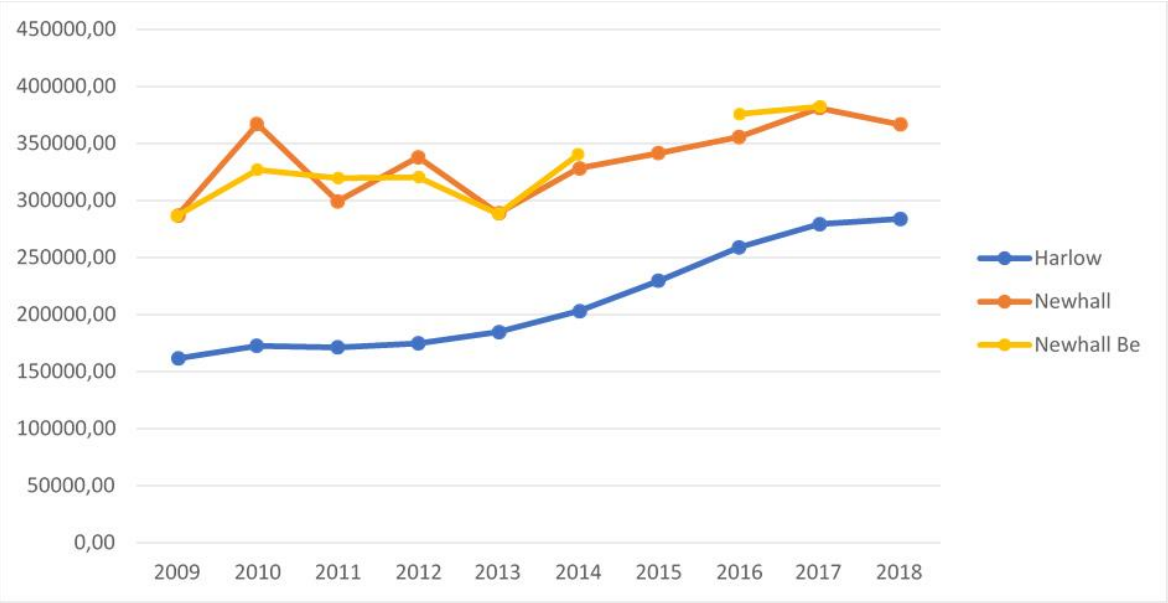


Figure 146: Average prices at Newhall, Newhall Be and in Harlow – terraced properties (freehold only).

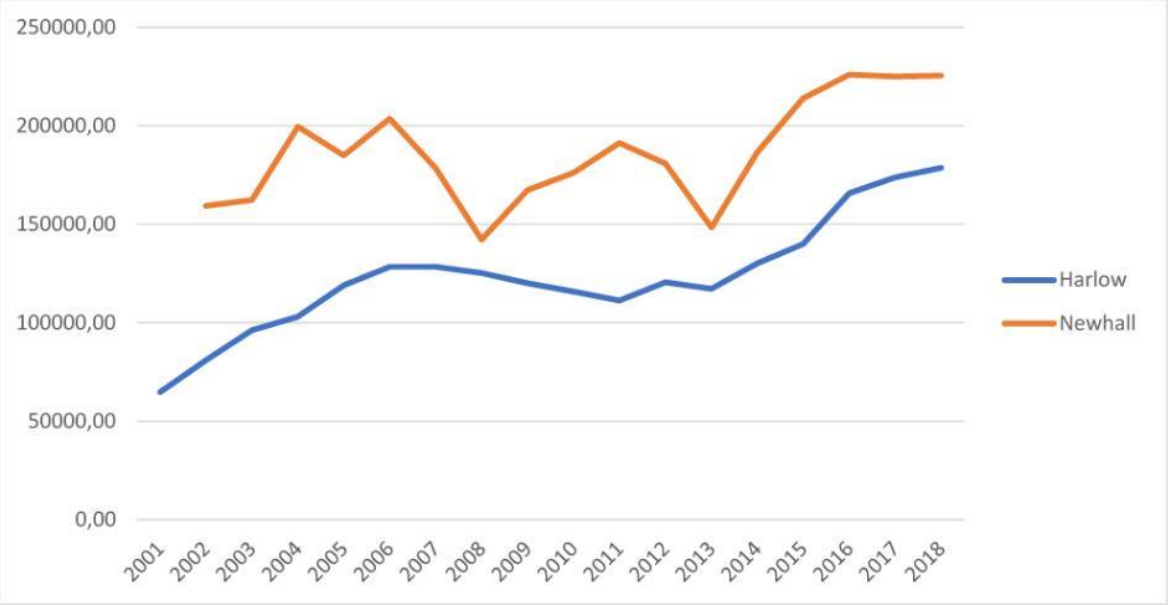


Figure 147: Average prices at Newhall and in Harlow – flats (leasehold only).

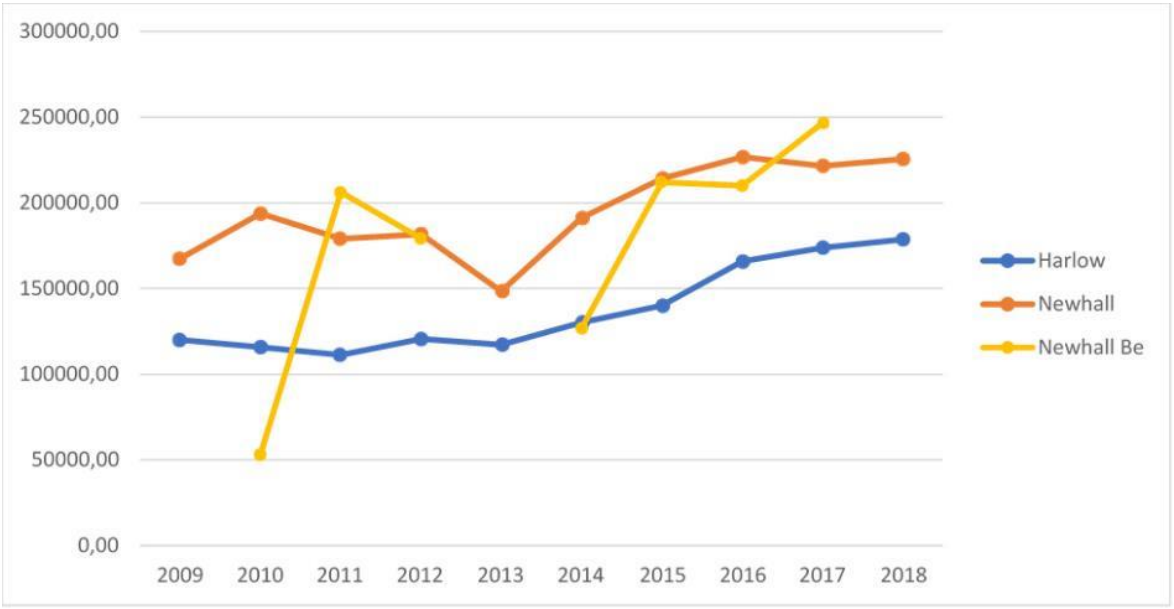


Figure 148: Average prices at Newhall, Newhall Be and in Harlow – flats (leasehold only).

Appendix H: Average prices per square foot at Tadley Acres and in Shepton Mallet

(Based on Land Insight data)

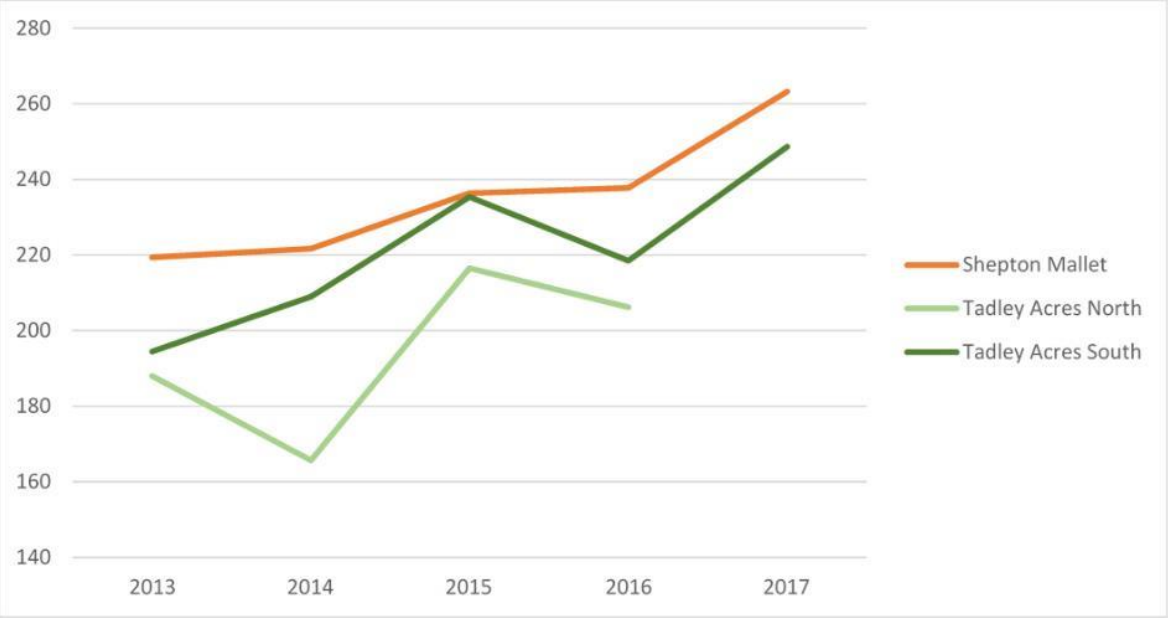


Figure 149: Average prices per square foot at Tadley Acres North, Tadley Acres South and in Shepton Mallet – detached properties (freehold only).



Figure 150: Average prices per square foot at Tadley Acres North, Tadley Acres South and in Shepton Mallet – semi-detached properties (freehold only).

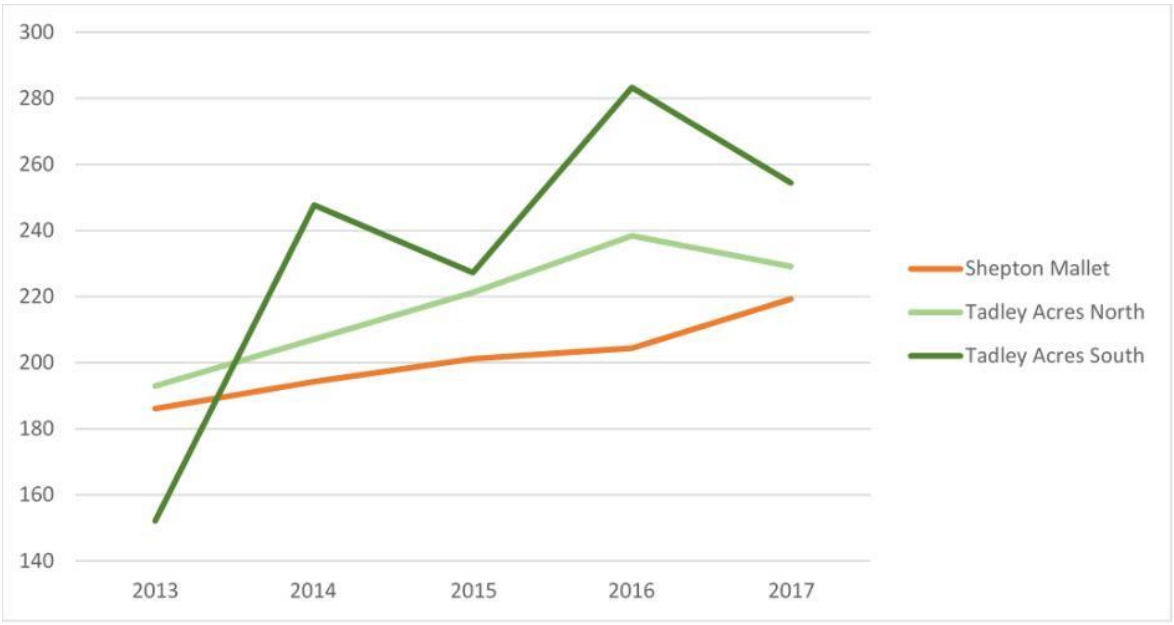


Figure 151: Average prices per square foot at Tadley Acres North, Tadley Acres South and in Shepton Mallet – terraced properties (freehold only).

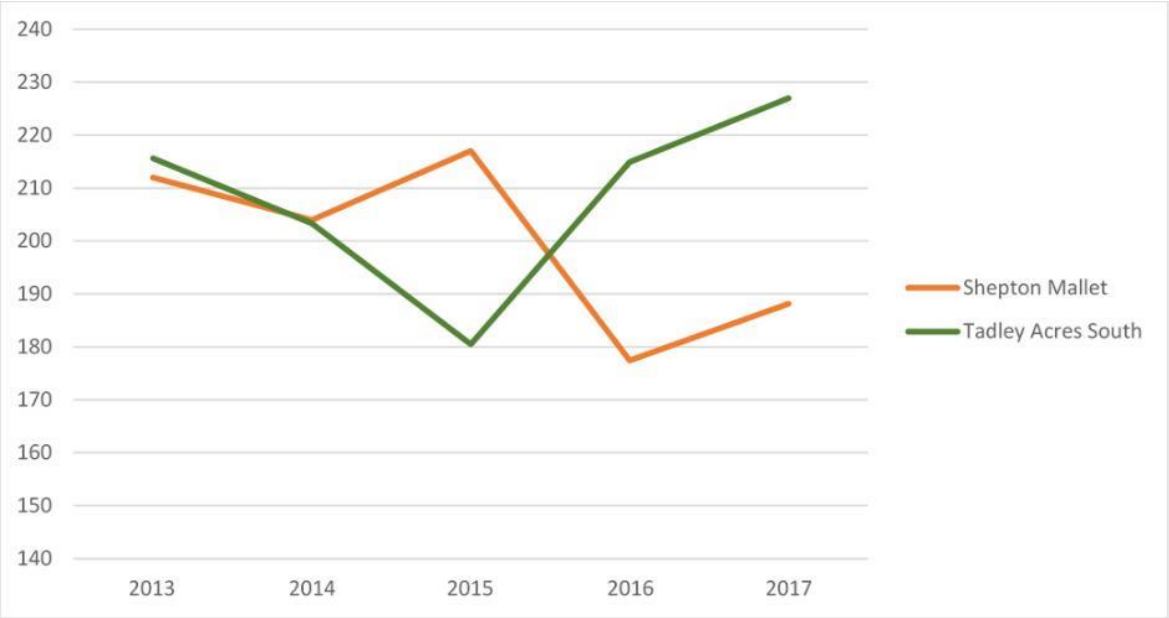


Figure 152: Average prices per square foot at Tadley Acres and in Shepton Mallet – flats (leasehold only).

Appendix I: Average prices per square foot at Newhall and in Harlow

(Based on Land Insight data)

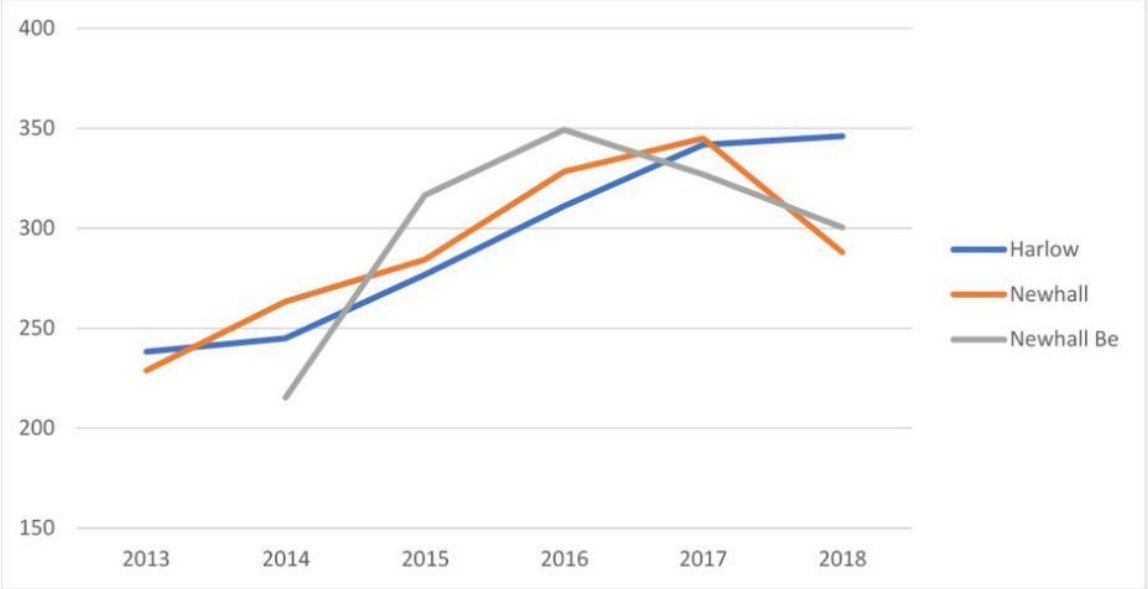


Figure 153: Average prices per square foot at Newhall and in Harlow – all property types.

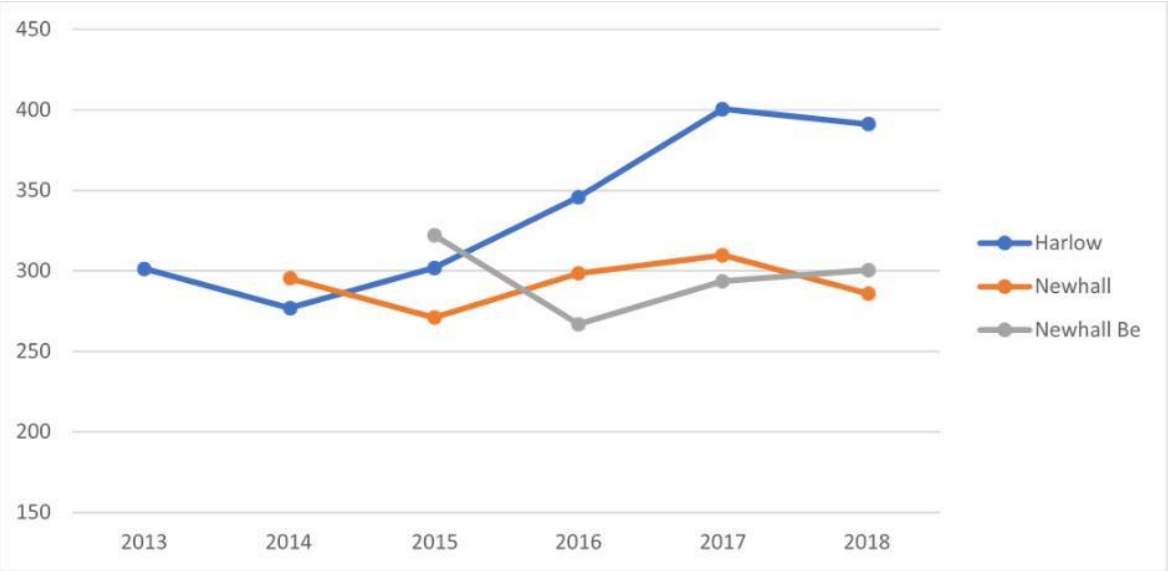


Figure 154: Average prices per square foot at Newhall and in Harlow – detached properties (freehold only).

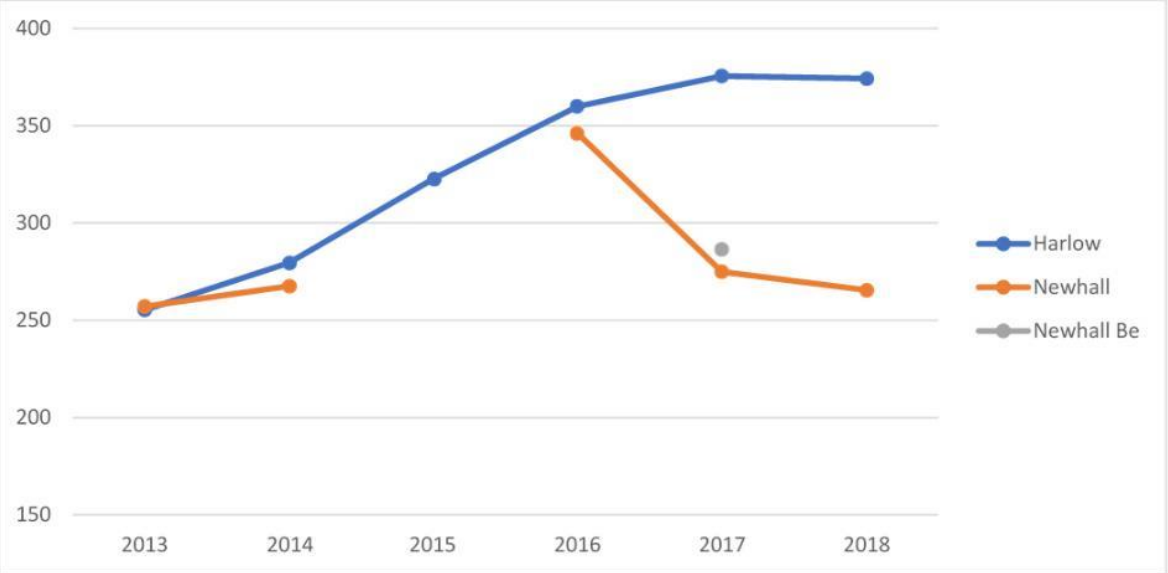


Figure 155: Average prices per square foot at Newhall and in Harlow – semi-detached properties (freehold only).

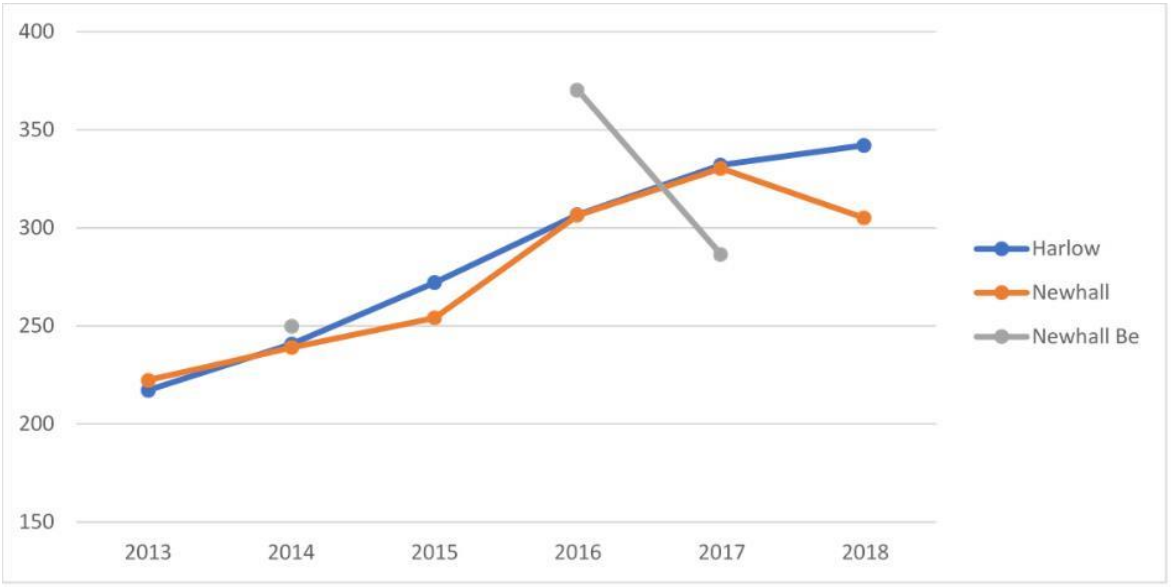


Figure 156: Average prices per square foot at Newhall and in Harlow – terraced properties (freehold only).

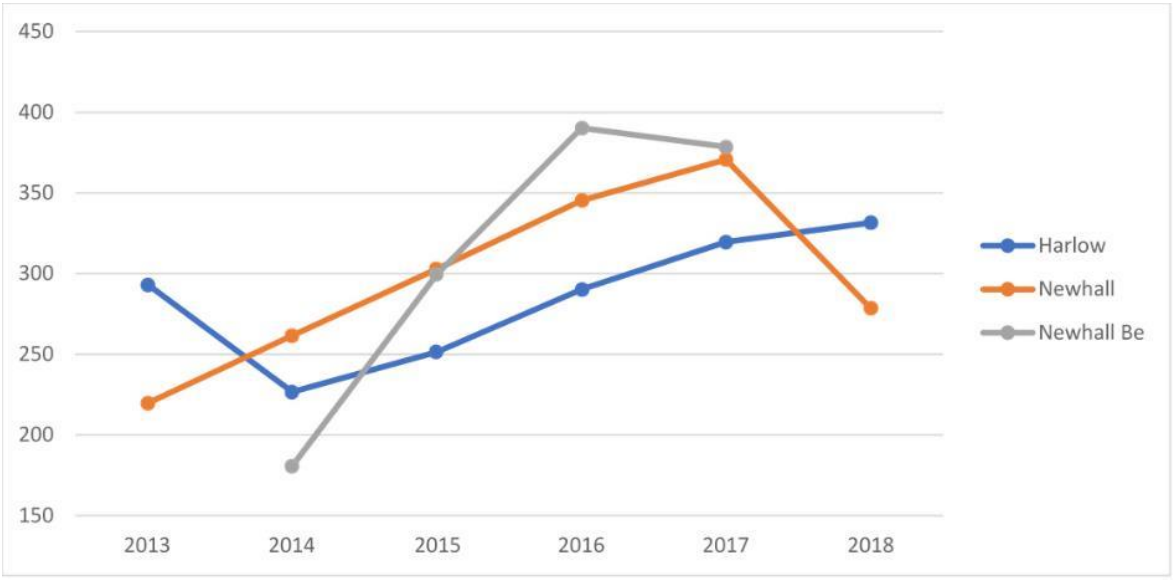


Figure 157: Average prices per square foot at Newhall and in Harlow – flats (leasehold only).